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SUPPLEMENT TO THE REVISION OF THE WORLD *DRYINIDAE*
(HYMENOPTERA CHRYSIDOIDEA)

SUPPLEMENTO ALLA REVISIONE DEI *DRYINIDAE* DEL MONDO
(HYMENOPTERA CHRYSIDOIDEA)

ABSTRACT

A supplement to the monography of the world *Dryinidae* previously published (OLMI, 1984) is proposed, with a further revision of all the subfamilies.

The following new genera are described: *Paraphelopus* (*Aphelopinae*); *Bocchopsis* (*Bocchinae*); *Gonadryinus* (*Dryininae*); *Transgonatopus* (*Transdryininae*); *Paraneodryinus* (*Gonatopodinae*); *Pseudodryinus* (*Gonatopodinae*); *Pareucamptonyx* (*Gonatopodinae*); *Australodryinus* (*Apodryininae*). The genus *Eucamptonyx* PERKINS, 1907 is revalued and considered valid.

A new subfamily, *Laberitinae*, is proposed for the fossil species *Laberites polonicus* PONOMARENKO, 1988.

Numerous new species are described, together with the previously unknown opposite sexes of many species.

After my revision of world *Dryinidae* (OLMI, 1984) further contributions to the knowledge of this family were published (OLMI, 1986, 1987a, 1987b, 1987c, 1987d, 1989a, 1989b, 1990; PAULY et OLMI, 1988).

In the last years an interesting lot of unidentified Dryinids was examined and new genera and species were proposed.

Those individuals and institutions from which material was borrowed are listed below together with the appropriate abbreviation used throughout the text:

- AD : South Australian Museum, Adelaide (South Australia)
- AL : Provincial Museum of Alberta, Edmonton (Alberta, Canada)
- AM : American Museum of Natural History, New York (N.Y., U.S.A.)
- B : Bernice P. Bishop Museum, Honolulu (Hawaii, U.S.A.)
- BA : Museo Argentino de Ciencias Naturales «B. Rivadavia», Buenos Aires (Argentina)
- BE : Department of Entomology, University of Wageningen (Holland)
- BM : British Museum (Natural History), London (England)
- BO : Istituto di Entomologia, University of Bologna (Italy)
- BT : J.T. Burn's collection, Doncaster (England)
- BU : National Museum of Natural History, Budapest (Hungary)
- CA : California Academy of Sciences, San Francisco (U.S.A.)
- CB : Australian National Collection of Insects, CSIRO, Canberra (Australia)
- CH : Department of Entomology, University of Georgia, Experiment (U.S.A.)
- CM : Museum of Comparative Zoology, Harvard University, Cambridge (Massachusetts, U.S.A.)

(*) Dipartimento di Protezione delle piante, Università della Tuscia, Viterbo (Italy).

- CO : Zoologisk Museum, Kobenhavn (Denmark)
CR : CIRAD, Montpellier (France)
DE : Florida State Collection of Arthropods, Florida Department of Agriculture,
Gainesville (Florida, U.S.A.)
DR : J de Rond's collection, Lelystad (Holland)
EN : Istituto di Entomologia agraria e apicoltura, University of Torino (Italy)
GC : National Biodiversity Institute, Costa Rica
GD : The Carnegie Museum of Natural History, Pittsburgh (Pennsylvania, U.S.A.)
GE : Museo Civico di Storia Naturale «G. Doria», Genova (Italy)
GL : Laboratorio Natural Las Joyas de la Sierra de Manantlan, University of
Gualajara (Jalisco, Mexico)
GV : Museum d'Histoire Naturelle, Genève (Switzerland)
GX : Faculté des Sciences Agronomiques de l'État, Gembloux (Belgium)
HA : Martin-Luther-Universität, Halle-Wittenberg (Germany)
HD : K.-J.-Hedqvist's collection, Stockholm (Sweden)
HE : Zoological Museum of the University, Helsinki (Finland)
HS : R.D. Haines's collection, Visalia (California, U.S.A.)
LE : Rijksmuseum van Natuurlijke Historie, Leiden (Holland)
MD : Instituto Español de Entomologia, Madrid (Spain)
ND : Indian Agricultural Research Institute, New Delhi (India)
NL : G. Nilsson's collection, Uppsala (Sweden)
OF : University College, Cardiff (Wales, United Kingdom)
OL : M. Olmi's collection, Department of Plant Protection, University of Tuscia,
Viterbo (Italy)
OT : Biosystematics Research Centre, Ottawa (Ontario, Canada)
P : Muséum National d'Histoire Naturelle, Paris (France)
PL : G. Pagliano's collection, Torino (Italy)
PN : N. Ponomarenko's collection, Moscow (U.S.S.R.)
QU : Queensland Museum, Fortitude Valley (Queensland, Australia)
SC : Department of Food and Agriculture, Sacramento (California, U.S.A.)
SO : Museu de Zoologia, University of Sao Paulo (Brazil)
SZ : P.L. Scaramozzino's collection, Torino (Italy)
TE : Department of Entomology, Texas A. & M. University, College Station
(Texas, U.S.A.)
TS : H. Tussac's collection, Cahors (France)
TW : American Entomological Institute, Gainesville (Florida, U.S.A.)
UQ : Department of Entomology, University of Queensland, St. Lucia (Queens-
land, Australia)
WA : National Museum of Natural History, Washington (D.C., U.S.A.)
WR : Museum Zlemi, Warszawa (Poland)
YA : K. Yasumatsu's collection, Japan
ZM : Instituut voor Taxonomische Zoölogie, Zoölogisch Museum, Amsterdam
(Holland)

For other abbreviations used throughout the text see the world revision (OLMI,
1984: pp. 2-4). Particularly I remember here the following abbreviations:

- ! = specimen seen by the Author;
F = female specimen
FF = female specimens
M = male specimen
MM = male specimens

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In the present paper the drawings of the male genitalia are always incomplete. Only the right or left half of the genitalia is in fact drawn.

SUBFAMILY APHELOPINAE
GENUS APHELOPUS: PALAEARCTIC REGION

Aphelopus quercus OLMI 1984

This species, described only from Nepal, was collected in Sweden by Mr. Göran Nilsson (Department of Zoophysiology, Uppsala). The material, composed of male and female specimens and collected at Solbacken, was sent to me for identification. To my great surprise (Nepal is very far from Sweden) I recognized *A. quercus*. This record persuaded me to revise other European specimens identified previously as *Aphelopus camus* Richards or *A. melaleucus* (Dalman) (species very near *A. melaleucus*). I recognized so as *A. quercus* few specimens from France, Holland and Italy.

Now the following distribution of *A. quercus* is so known: NEPAL: Bhurumche (Katmandu), OT! SWEDEN: Solbacken (Kärrobo, VS), NL! HOLLAND: St. Pietersberg, DR! FRANCE: Tulette (Drôme), OL! Lunel (Hérault), OL! EP! Castelmaurou (Haute-Garonne), TS! ITALY: Giaglione (Susa, Torino), OL! Mille Rose (Torino), OL!

Many thanks to Mr. Göran Nilsson from Uppsala (Sweden) for the loan of his material; to Mr. Hubert Tussac from Cahors (France) for the loan of his material from Castelmaurou; to Mr. Pier Luigi Scaramozzino and Mr. Graziano ~~Graziano~~ Bassi, from Torino (Italy), for their collections by malaise traps in Giaglione and Mille Rose; to Mr. F. Herard from Orgerus-Behoust (France) for the loan of his material from Lunel and Tulette.

In France, at Lunel and Tulette, *A. querceus* was reared from *Empoasca vitis* (Göthe) (*Typhlocybinae*).

A. querceus was known only on the basis of a male specimen. In the examined material there were some female specimens, described as follows:

Female: fully winged; length 1,81 mm; black; head with mandibles, clypeus, lower face and a U-shaped mark (embracing the bases of the antennae with arms shortly lying along the inner margins of the eyes) whitish; occasionally head only with lower face whitish, without U-shaped mark; legs whitish; antennae black, with segments 1-2 testaceous; antennae distally not thickened; antennal segments in following proportions: 6:4:5, 5:6:7:7:6:5:5:8; head dull, granulated; frontal line complete; occipital carina complete; POL = 5,5; OL = 3,5; OOL = 3; OPL = 5; TL = 5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,60-0,75 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

The female of *A. querceus* is very near the female of *A. melaleucus* (Dalman). The chief difference is the shape of the antennae: the females of *A. melaleucus* have antennae distally thickened, whereas the females of *A. querceus* have antennae not distally thickened. The head whitish spot is slightly different in the females of the two species: in *A. querceus* occasionally the lateral arms are lacking; if they are present usually the whitish spot posteriorly are almost reaching the

anterior ocellus (in *A. melaleucus* the lateral arms are always present and the frontal whitish spot is extended only to the anterior half of the frons).

GENUS *APHELOPUS*: ETHIOPIAN REGION

Aphelopus testaceus n. sp.

Female: fully winged; length 1,93 mm; head testaceous; antennae brown, with segments 1-2 testaceous; prothorax, scutum, scutellum, mesopleura and part of metapleura testaceous; metanotum brown; propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 5, 5:5:6:6:6:5:4:4:4:6; head dull, granulated; frontal line absent; occipital carina complete; POL = 6; OL = 4; OOL = 3,5; OPL = 3,5; TL = 3; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum dull, granulated; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area smooth, shiny; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

Male: fully winged; length 1,38 mm; head and scutum fully testaceous; antennae testaceous, with segments 5-10 darkened; scutellum, metanotum and propodeum reddish-brown; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 2,5:4:4:5:4,5:5:4,5:5:5:7; head dull, granulated; frontal line absent; occipital carina complete; POL = 4; OL = 3; OOL = 3; OPL = 2; TL = 2; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; metanotum and scutellum shiny, smooth, without sculpture; propodeum reticulate rugose; fore wing hyaline, without dark transversal bands; radial cell open; radial vein regularly curved; tibial spurs 1, 1, 2.

Locus typicus: Mbandaka (Zaire)

Typical material: holotype M! in LE; 1 paratype F! in AL

Distribution: Ethiopian region: ZAIRE: Mbandaka (= Coquilhatville), LE! SOUTH AFRICA: 25 Km W Pretoria (Transvaal), AL!

Notes: the holotype was collected by A.B. Stam in 1964; the paratype was collected by H. and A. Howden on November 29, 1984.

After the description of *A. testaceus* n. sp. the following new key to the Ethiopian species of *Aphelopus* can be proposed:

- 1 Head and scutum fully testaceous.....4. *testaceus* n. sp.
- Head and scutum fully or mostly black.....2
- 2 Notaulices invisible or slightly visible only near the anterior margin of the scutum.....1. *mediocarinatus* (Benoit)
- Notaulices distinct, reaching at least 0,5 length of scutum.....3
- 3 Notaulices reaching approximately 0,50-0,65 length of scutum.....
-2. *wittei* Benoit
- Notaulices reaching approximately the posterior margin of the scutum.....
-3. *incisus* Olmi

GENUS *APHELOPUS*: ORIENTAL REGION

***Aphelopus taiwanensis* n. sp.**

Female: fully winged; length 2,5 mm; head black, with anterior part of frons (more along orbits), clypeus, mandibles, genae and ventral part of head whitish; antennae black, with segments 1-2 testaceous; legs whitish; thorax, propodeum and abdomen black; antennae distally thickened; antennal segments in following proportions: 7:5:7:8:8:8:7:6,5:6:10; head dull, granulated; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 4; OPL = 6; TL = 4; scutum dull, granulated; notaulices incomplete, reaching approximately 0,75-0,80 length of scutum; scutellum shiny, weakly granulated; metanotum shiny, without sculpture; propodeum reticulate rugose with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth, not rugose; fore wing hyaline, without dark transversal bands; radial vein regularly curved; radial cell open; tibial spurs 1, 1, 2.

Male: fully winged; length 1,50-1,56 mm; fully brown or black, with mandibles and legs testaceous; head occasionally more or less whitish (mostly clypeus, genae and frons); antennae fully brown, opr with segments 1-2 testaceous; head flat, with frontal line incomplete (only visible in the anterior half of the frons) or complete; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 2; TL = 3; head dull, fully granulated; scutum granulated; notaulices incomplete, reaching approximately 0,75-0,80 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum dull, reticulate rugose; without longitudinal or transversal keels; fore wing hyaline, without dark transversal bands; genitalia in fig. 1 A; tibial spurs 1, 1, 2.

Locus typicus: Wushe (Taiwan)

Typical material: holotype M! and 16 paratypes (13 MM, 3 FF) 1! in TW; 5 paratypes MM! in B; 8 paratypes (6 MM, 2 FF) ! in OL; 1 paratype M! in AL; 1 paratype M! in TE.

Distribution: Oriental region: TAIWAN: Kwanzeling (m 250 Tainan Hsien), B! Wushe (m 1150), AL! TW! OL! Meifeng (Nantou Hsien), TE! THAILAND: Khaochang (Khaophappa Prov.), B! OL! LAOS: Ban Van Eue (Vientiane Prov.), B! OL!

Notes: the typical series from Wushe (Taiwan) was collected by Henry Townes (in part also by H. and M. Townes) in March, April and May, 1983; the paratype from Meifeng (Taiwan) was collected by R. Wharton on May 22, 1982; the paratype from Kwanzeling (Taiwan) was collected by C.M. Yoshimoto on April 6-7, 1965; the paratypes from Khaochang (Thailand) were collected by G.A. Samuelson on January 9-11, 1964 and 11-15, 1964; the paratypes from Ban Van Eue (Laos) were collected by malaise and light traps by native collectors on March 29, 1966; April 29, 1966; May 15, 1966; June 30, 1966; August 15, 1966; November 15, 1966.

***Aphelopus sabahnnus* n. sp.**

Female: fully winged; length 2,00-2,25 mm; head testaceous, with ocellar region darkened; antennae testaceous, with segments 5-10 darkened; thorax black, with propectus testaceous; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 6:5:6:6:5:4,5:4:4:3,5:6,5; head dull, granulated; frontal line absent; occipital carina complete; POL = 8; OL = 5; OOL

= 4; OPL = 6; TL = 5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area shiny, smooth, not reticulate rugose; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Tenempok (Sabah, Malaysia)

Typical material: holotype F! and 1 paratype F! in B; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by T.C. Maa on February 10-19, 1959.

***Aphelopus montanus* n. sp.**

Female: fully winged; length 2,12-2,50 mm; black, mandibles testaceous; legs brown, with fore coxae and stalks of femora testaceous; occasionally clypeus testaceous; antennae distally thickened; antennal segments in following proportions: 8:6:7:7:7:8:8:8:8:13; head dull, granulated; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 3,5; OPL = 3; TL = 4; occasionally OPL longer than TL (6:4); scutum dull, granulated; notaulices incomplete, reaching approximately 0,8 length of scutum; occasionally notaulices complete; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum reticulate rugose; fore wing with a dark transversal band; radial vein regularly curved; radial cell open; tibial spurs 1, 1, 2.

Male: fully winged; length 2,31 mm; black, mandibles testaceous; legs testaceous, with hind coxae partly black and with hind femora and hind tibiae brown; antennae not distally thickened; antennal segments in following proportions: 5:4:6:8:9:10:10:10:10:12; head dull, granulated; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 4; OPL = 4; TL = 5; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices broader than the breadth of the ocelli; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area rugose; fore wing with a dark transversal band; radial cell open; radial vein regularly curved; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan)

Typical material: holotype M! and 3 paratypes (1 M, 2 FF) in TW; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by Henry Townes on May 29, 1983 (holotype and 3 paratypes) and on May 22, 1983 (1 paratype).

***Aphelopus borneanus* OLM 1984**

This species was described on the basis of one only female specimen from Tenempok (Sabah, Malaysia). Recently I examined a male specimen from 8 mi. N Paring Hot Springs (Ranau, W Coast Residency, Sabah). This male specimen can be described as follows:

Male: fully winged; length 1,75 mm; fully testaceous, except for petiole black; antennae not distally thickened; antennal segments in following proportions:

5:5:4:5:6:6:6:5:6; head dull, granulated; frontal line complete; occipital margin complete; POL = 7; OL = 5; OOL = 3; OPL = 5; TL = 5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5-0,6 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

After the description of the above new species a new key to the Oriental species of *Aphelopus* can be proposed, as follows:

- 1 Species fully testaceous, with part of the antennae brown.....1. *borneanus* Olmi
- Species partly or fully black or brown.....2
- 2 Head testaceous, at most with ocellar region or vertex dark.....3
- Head mostly or fully black or brown.....6
- 3 Notaulices invisible.....2. *maculiceps* Bergman
- Notaulices distinct.....4
- 4 Notaulices reaching approximately 0,8 length of scutum.....
-4. *ochreus* Olmi
- Notaulices reaching at most 0,5 length of scutum.....5
- 5 Notaulices reaching approximately 0,5 length of scutum.....
-3. *malayanus* Olmi
- Notaulices reaching approximately 0,25 length of scutum.....
-10. *sabahnus* n. sp.
- 6 Notaulices invisible or short, reaching at most 0,5 length of scutum.....7
- Notaulices visible, longer.....8
- 7 Notaulices reaching approximately 0,5 length of scutum.....
-5. *orientalis* Olmi
- Notaulices almost invisible, reaching at most 0,3 length of scutum.....
-6. *penanganus* Olmi
- 8 Notaulices incomplete, reaching approximately 0,75-0,80 length of scutum.....9
- Notaulices complete.....10
- 9 Fore wing hyaline, without dark transversal bands.....
-9. *taiwanensis* n. sp.
- Fore wing with a dark transversal band.....
-11. *montanus* n. sp.
- 10 Fore wing with a dark transversal band.....
-11. *montanus* n. sp.
- Fore wing hyaline, without dark transversal bands.....11
- 11 Metapleura separated from the propodeum by a strong distinct longitudinal keel (Fig. 1 B).....7. *birmanus* Olmi
- Metapleura distinctly separated from the propodeum by a series of areolae (Fig. 1 C).....12
- 12 Body mostly black.....9. *taiwanensis* n. sp.
- Body mostly brown.....8. *philippinus* Olmi

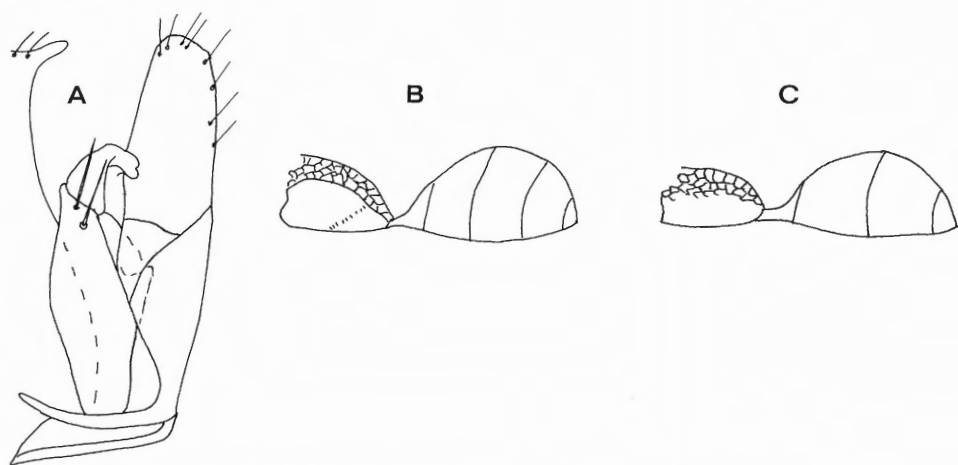


Fig. 1 - Male genitalia of *Aphelopus taiwanensis* n. sp. (holotype) (A); Metathorax + propodeum and abdomen of *Aphelopus birmanus* Olmi (B) and *Aphelopus philippinus* Olmi (C).

GENUS *APHELOPUS*: NEOTROPIC REGION

Aphelopus ocellaris n. sp.

Female: unknown

Male: fully winged; length 1,43 mm; head reddish-brown, with ventral side, anterior margin of frons, clypeus, malar space and mandibles testaceous; antennae testaceous, with segments 4-10 darkened; thorax, propodeum and abdomen reddish-brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 4:4:5:6:7:7:7:7:10; head dull, granulated; frontal line absent; occipital carina complete; ocelli very broad; POL = 5,5; OL = 3; OOL = 1,5; OPL = 1; TL = 1; breadth of the posterior ocelli: 3,5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum dull, granulated; metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area of posterior surface smooth, granulated; fore wing hyaline, without dark transversal bands; radial vein regularly curved; radial cell open; tibial spurs 1, 1, 2.

Locus typicus: Mangaratiba (Rio de Janeiro, Brazil)

Typical material: holotype M! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by M. Alvarenga in July, 1969.

Aphelopus surinamensis OLMI 1984

This species was described on the basis of one only male specimen from Billi-

ton (Suriname). After the original description I examined a female specimen from Peru and a series of male and female specimens from the Bahamas. The description of the female can be proposed as follows:

Female: fully winged; length 1,50-1,68 mm; head, scutum and scutellum testaceous; antennae fully testaceous or brown with segments 1-3 testaceous; metanotum and propodeum brown; occasionally metanotum testaceous and only dorsal surface of propodeum brown; legs testaceous; abdomen brown; mesopleura and metapleura testaceous; antennae distally thickened; antennal segments in following proportions: 4,5:3,5:4,5:5:5:3,5:4,5:4:5,5; head dull, granulated; frontal line only visible near clypeus; occipital carina complete; POL = 5,5; OL = 4; OOL = 3; OPL = 3; TL = 3; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum dull, granulated; propodeum dull, reticulate rugose; fore wing hyaline, without dark transversal bands; radial vein regularly curved; tibial spurs 1, 1, 2.

Now *A. surinamensis* is known from the following countries: SURINAME: Biliton, LE! PERU: Satipo (Junin Dept.), OL! BAHAMAS: Rainbow Bay (Eleuthera), DE! OL!

***Aphelopus leucopus* KIEFFER 1906**

A. leucopus was described on the basis of one only female specimen from Managua (Nicaragua) (Olm 1984). In recent years I examined a series of male and female specimens from the Dutch Antilles, Mexico, Peru, Costa Rica. The male can be described as follows:

Male: fully winged; length 1,62 mm; head black, with mandibles, clypeus and genae whitish; antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen brown; legs whitish, with clubs of hind femora and hind tibiae brown; antennae not distally thickened; antennal segments in following proportions: 4:3:4:4,5:4,5:5:5:5:7; head dull, granulated; frontal line incomplete, only visible near clypeus; occipital carina complete; POL = 5,5; OL = 3; OOL = 2,5; OPL = 3; TL = 2,5; scutum dull, granulated; notaulices incomplete, slightly visible near the anterior margin of the scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose; fore wing hyaline, only with a small spot beneath the pterostigma; tibial spurs 1, 1, 2.

A. leucopus is now known from the following countries: MEXICO: Tapachula (Chiapas), OL! Palenque (Chiapas), HS! Teapa (Tabasco), BM! NICARAGUA: Managua, CA! COSTA RICA: S. Rosa Park (Guanacaste Prov.), OL! TW! 7 Km SW Bribri (m 50, Limón Prov.), OL! DUTCH ANTILLES: Willemstad (Curaçao), HS! PERU: Tingo Maria (Huanuco), SC!

A. ocellaris n. sp. is near *A. diffusus* Olmi and *A. trinitatis* Olmi in the key to Neotropic *Aphelopus* published previously (Olm 1984: p. 76), with the following main differences:

- 8 Notaulices reaching approximately 0,65-0,75 length of scutum.....
.....7. *trinitatis* Olmi
— Notaulices reaching approximately 0,4-0,5 length of scutum.....9

- 9 Ocelli very broad; head with OOL and OPL much shorter than the breadth of the posterior ocelli.....10. *ocellaris* n. sp.
— Ocelli small; head with OOL and OPL as long as or longer than the breadth of the posterior ocelli.....6. *diffusus* Olmi

GENUS *APHELOPUS*: AUSTRALIAN REGION

***Aphelopus cardaleae* n. sp.**

Female: unknown

Male: fully winged; length 2,00-2,18 mm; head testaceous; antennae testaceous, with segments 7-10 darkened; thorax testaceous; propodeum black-brown; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 6:4,5:6:7:8:8:7:7:10; head dull, granulated; frontal line complete; occipital carina complete; POL = 8; OL = 4; OOL = 3; OPL = 4; TL = 3,5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong keel between dorsal and posterior surface; posterior surface with a median area smooth and shiny, not rugose; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

Locus typicus: 12°43'S 143°17'E (9 Km ENE Mt. Tozer, Queensland, Australia).

Typical material: holotype M! in CB; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, J.C. Cardale; the typical material was collected at MV light on July 7, 1986 (holotype) and on July 5-10, 1986 (paratype).

***Aphelopus hassani* OLM 1987**

A. hassani was described on the basis of one only female specimen from Lejo (New Guinea). After the original description I examined a series of male and female specimens from New Guinea. The male of *A. hassani* can be described as follows:

Male: fully winged; length 1,56 mm; testaceous, with abdomen and antennal segments 5-10 darkened; antennae not distally thickened; antennal segments in following proportions: 4:4:5:6:8:7:7:7:10; head dull, granulated; frontal line absent; occipital carina complete; POL = 4; OL = 2,5; OOL = 3; OPL = 2,5; TL = 2; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum dull, granulated; metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; posterior surface with two longitudinal keels; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

A. hassani is known from the following localities: NEW GUINEA: Lejo (Popon-

detta, Papua), BM! Markham R. (Papua), OL! Bodem (11 Km SE of Oerberfaren, Irian), B!

Aphelopus papuensis OLM1 1987

A. papuensis was described on the basis of one only male specimen from Kuk (New Guinea). After the original description I examined a male specimen from the New Hebrides. The male can be described as follows:

Male: fully winged; length 1,31 mm; head brown, with mandibles, clypeus and anterior region of frons testaceous; antennae brown, with segment 1 testaceous; thorax and propodeum brown; abdomen brown; legs yellow; antennae not distally thickened; antennal segments in following proportions: 4:3:4:4:4,5:4,5:4,5:4:4:7; head dull, granulated; frontal line absent; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 2; TL = 3,5; scutum dull, granulated; notaulices incomplete, slightly visible near the anterior margin of the scutum, reaching approximately 0,25 length of scutum; scutellum dull, granulated; metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; posterior surface with two longitudinal keels; fore wing hyaline, without dark transversal bands; tibial spurs 1, 1, 2.

A. papuensis is now known from the following localities: NEW GUINEA: Kuk (m 1700, Mt. Hagen, W Highl. Distr., Papua), OT! NEW HEBRIDES: Ranon to Mt. Toyo (Ambrym I.), B!

A. cardaleae n. sp. is near *A. townesi* Olmi and *A. hassani* Olmi in the key to Australian *Aphelopus* proposed by OLM1 (1984) and modified afterwards (OLM1 1987c). The key of 1987 can be modified as follows:

- 1b Propodeum testaceous.....6. *hassani* Olmi
- Propodeum black or brown-black.....1c
- 1c Notaulices reaching approximately 0,65 length of scutum.....
-1. *townesi* Olmi
- Notaulices reaching approximately 0,5 length of scutum.....
-8. *cardaleae* n. sp.

GENUS *CROVETTIA*: NEOTROPIC REGION

Crovettia finnamorei n. sp.

Female: fully winged; length 2,37 mm; black; mandibles and antennae testaceous; legs testaceous, with coxae black; antennae distally thickened; antennal segments in following proportions: 8:4,5:4,5:4,5:4:3,5:4:4:3:5; head dull, granulated, with vertex reticulate rugose and with frons sculptured by numerous longitudinal keels; occipital carina complete; frontal line visible, almost complete, curved in front of anterior ocellus, so that the line is not reaching the anterior ocellus; POL = 10; OL = 6; OOL = 6; OPL = 9; TL = 5; scutum, scutellum and metanotum reticulate rugose; notaulices invisible; propodeum dull, reticulate rugose; areolae of dorsal surface broader than the areolae of the posterior surface; propodeum

without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Foengoe Island (Ralleighvallen Natural Reserve, Saramacca Prov., Suriname)

Typical material: holotype F! in AL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, A.T. Finnamore; the holotype was collected on January 22-31, 1985.

After the description of *C. finnamorei* a new key to the Neotropic *Crovettia* can be proposed, as follows:

- 1 Fore wing with distal part of radial vein much shorter than proximal part.....2
- Fore wing distal part of radial vein as long as or longer than proximal part.....6
- 2 Scutellum reticulate rugose.....3
- Scutellum not reticulate rugose.....4
- 3 Head fully reticulate rugose.....3. *plaumanniana* Olmi
- Head with frons granulated and sculptured by strong longitudinal keels; vertex reticulate rugose.....6. *finnamorei* n. sp.
- 4 Head only granulated, without areolae or irregular keels; POL much longer than OL.....4. *brasiliiana* Olmi
- Head granulated and with irregular keels or reticulate rugose; POL shorter than OL or much longer than OL.....5
- 5 Head with POL shorter than OL.....5. *colombiana* Olmi
- Head with POL much longer than OL.....3. *plaumanniana* Olmi

The above key shows other changes not due only to the presence of *A. finnamorei*, but also to the study of other material of *A. plaumanniana*, *brasiliiana* and *colombiana*

PARAPHELOPUS N. GEN.

Type species: *Paraphelopus townesi* n. sp.

Female: maxillary palpi with 5 segments; labial palpi with 2 segments; mandibles quadridentate, with 3 large teeth and one rudimentary tooth; fore wing with a radial vein not curved, but straight; epistomal suture running close to the antennal sclerites; antennae distally thickened; fore tarsi not chelate.

Male (Figs. 2, 3): structurally resembles the female; antennae not distally thickened; maxillary palps in fig. 4 A; labial palps in fig. 4 B; mandible in fig. 4 C; head in fig. 4 D.

Distribution: Oriental, Neotropic, Australian

Hosts: unknown

Species: 3

The key to the genera of *Aphelopinae* published by OLMÍ (1984) can be modified as follows:

- 1 Labial palpi with 3 segments; mandibles tridentate, with teeth progressing larger from anterior one to posterior (Fig. 22A in Olmi 1984).....2. *Crovettia* Olmi
- Labial palpi with 2 segments; mandibles quadridentate, with 2-3 large teeth and 1-2 rudimentary teeth (Fig. 22B in Olmi 1984).....2
- 2 Clypeus less broad, with epistomal suture well separated from the antennal sclerites (Fig. 31A in Olmi 1984); fore wing with radial vein regularly curved (Fig. 30 in Olmi 1984).....1. *Aphelopus* Dalman
- Clypeus broader, with epistomal suture running close to the antennal sclerites (Fig. 4D); fore wing with radial vein fully straight, short, not curved (Figs. 2, 3).....3. *Paraphelopus* n. sp.

GENUS *PARAPHELOPUS*: ORIENTAL REGION

One species is known.

Paraphelopus townesi n. sp.

Female: fully winged; length 2,37 mm; black; mandibles whitish; antennae black, with segment 1 white and segment 2 testaceous; fore legs testaceous, with coxae, trochanters and femora white; mid legs testaceous, with a black spot on femora; hind legs testaceous, with a black spot on coxae and on femora; antennae distally thickened; antennal segments in following proportions: 7:5:5:6:7:7:6:5:5:7; head dull, granulated, with few areolae near the occipital carina, behind the ocellar triangle; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 3; OPL = 5; TL = 4; scutum dull, granulated, with numerous areolae near the anterior margin; notaulices almost complete, almost reaching the posterior margin of the scutum; scutellum dull, granulated and rugose; metanotum dull, granulated; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; radial vein straight, not curvilinear; tibial spurs 1, 1, 2.

Male (Figs. 2, 3): fully winged; length 2,00-2,12 mm; black; mandibles testaceous; antennae brown; legs brown, with fore coxae and fore tibiae and tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 5:4,5:5,5:6:6,5:7:8:8:7:11; head dull, granulated and weakly reticulate rugose; areolae more visible on vertex; frontal line complete; occipital carina complete; POL = 6; OL = 4; OOL = 4,5; OPL = 3,5; TL = 3,5; scutum dull, granulated and reticulate rugose; notaulices incomplete, reaching approximately 0,7 length of scutum; scutellum and metanotum reticulate rugose and granulated; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; radial vein straight, not curvilinear (Figs. 2, 3); genitalia in fig. 4 E; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan)

Typical material: holotype M! and 2 paratypes (1 M, 1 F) 1! in TW; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, Henry

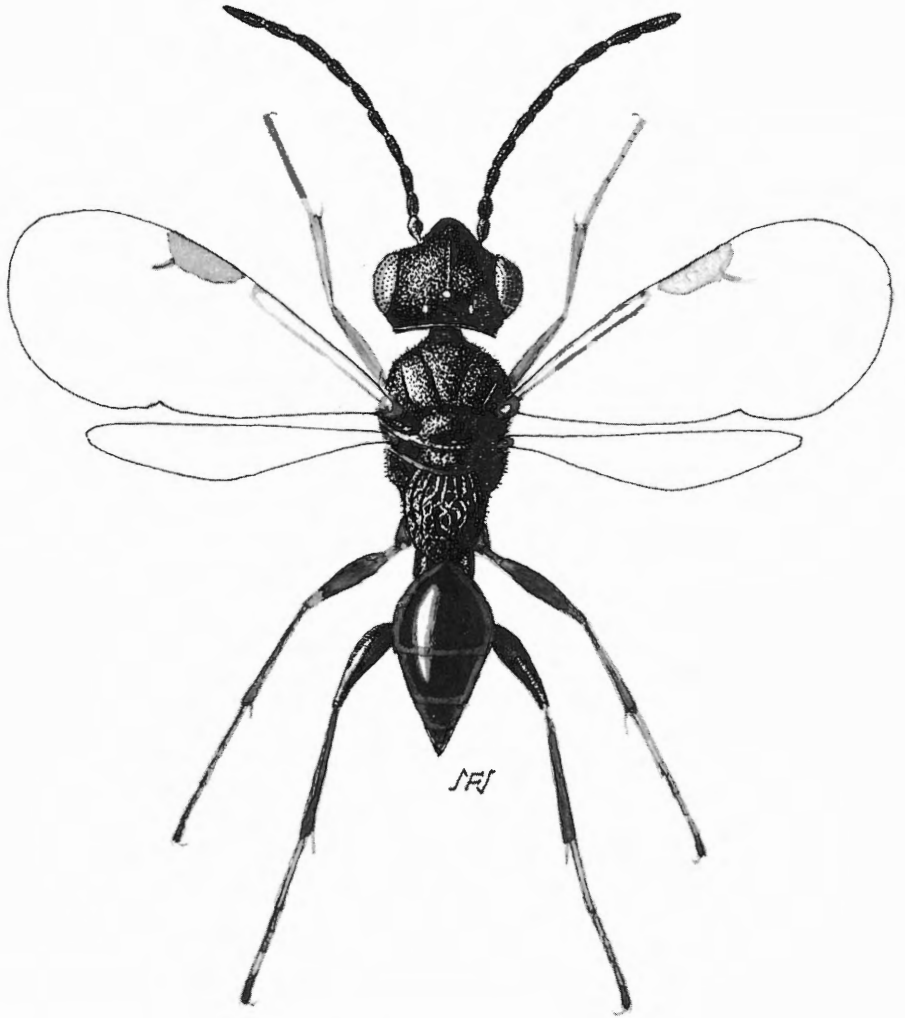


Fig. 2 - Male of *Paraphelopus townesi* n. sp. (holotype).

Townes; the holotype was collected on May 15, 1983; the paratypes were collected on May 10, 1983.

GENUS *PARAPHELOPUS*: NEOTROPIC REGION

One species is known.

***Paraphelopus neotropicus* n. sp.**

Female: unknown

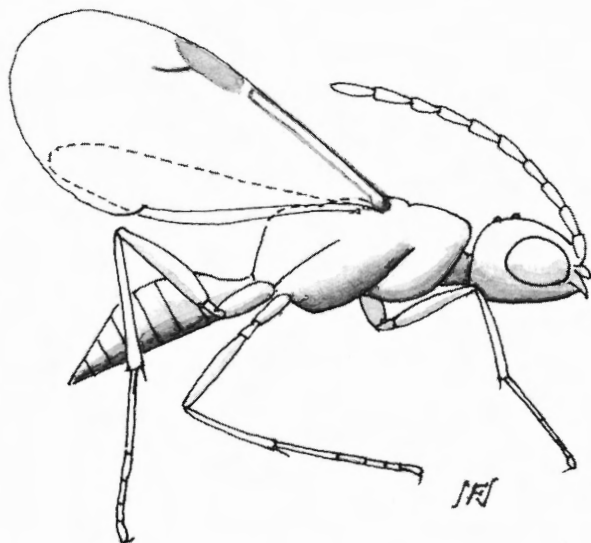


Fig. 3 - Male of *Paraphelopus townesi* n. sp. (holotype).

Male: fully winged; length 1,37 mm; fully reddish-brown; antennae not distally thickened; antennal segments in following proportions: 6:3:2,5:2:2:2:2,5:2,5:2:5; head dull, granulated; frontal line absent; occipital carina complete; POL = 4; OL = 2; OOL = 4; OPL = 0,5; TL = 1; scutum dull, granulated; notaulices invisible; scutellum dull, granulated; metanotum rugose; propodeum fully reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; radial vein short and straight, not curved; genitalia in fig. 4 F; tibial spurs 1, 1, 2.

Locus typicus: Central de Anchicaya (Valle Dept., Colombia)

Typical material: holotype M! in DE.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by R. Wilkerson on January 28, 1975.

GENUS *PARAPHELOPUS*: AUSTRALIAN REGION

One species is known.

***Paraphelopus cardaleae* n. sp.**

Female: unknown

Male: fully winged; length 1,81 mm; head black, with mandibles testaceous; antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen brown; fore and mid legs testaceous; hind legs brown; with trochanters, articulations and tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 3:3,5:3:3,5:4:4:4:4:5,5; head dull, alutaceous, swollen; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL

= 3; OPL = 2; TL = 2,5; scutum dull, without sculpture, except for two reticulate rugose regions corresponding to the notaulices; notaulices not well distinct, marked by the above reticulate rugose regions, reaching approximately 0,5 length of scutum; scutellum shiny, smooth, without sculpture; metanotum rugose; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; radial vein short and straight, not curved; genitalia in fig. 4 G; tibial spurs 1, 1, 2.

Locus typicus: 15°47'S 145°14'E (Shiptons Flat, Queensland, Australia).

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, J.C. Cardale; the holotype was collected at light on October 17-19, 1980.

SUBFAMILY BIAPHELOPINAE
GENUS BIAPHELOPUS: NEOTROPIC REGION

One only species of *Biaphelopus* Olmi was known: *B. masneri* Olmi, from Nepal (OLMI 1984).

Recently I examined another interesting new species from Costa Rica, described as follows.

***Biaphelopus hansonii* n. sp.**

Female: fully winged; length 2,62 mm; head black, with mandibles testaceous; antennae brown with segments 1, 2 and part of 3 testaceous; thorax and propodeum black; abdomen brown; legs yellow, with mid and hind coxae and mid and hind clubs of femora brown; antennae weakly distally thickened; antennal segments in following proportions: 7:5:5:6:6:6:6:5:5:5:8; antennae with no rhinaria; head dull, swollen, granulated and reticulate rugose; frontal line thin and complete; occipital carina complete; POL = 3; OL = 2; OOL = 6; OPL = 4; TL = 4,5; mandibles with three teeth; scutum, scutellum and metanotum dull, granulated and reticulate rugose; notaulices absent; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing with a dark transversal spot beneath the pterostigma; distal part of radial vein shorter than proximal part (3:7,5); radial vein forming an angle between distal and proximal part; fore tarsi not chelate; maxillary palpi with 5 segments; labial palpi with 3 segments; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: C. Nara (NE Quepos, San José Prov., Costa Rica)

Typical material: holotype F! in HS.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, W.J. Hanson; the holotype was collected by a malaise trap on July 16, 1975.

SUBFAMILY CONGANTEONINAE
GENUS CONGANTEON: ETHIOPIAN REGION

***Conganteon transvaalense* n. sp.**

Female: fully winged; length 3,0 mm; head black, with mandibles, clypeus and

anterior margin of the frons testaceous; antennae testaceous with segments 7-10 brown; thorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 10:6:13:8:7:6:6:5:8; head fully reticulate rugose; frontal line complete; occipital carina complete; frons without lateral keels; POL = 8; OL = 4; OOL = 7; OPL = 10; TL = 9; pronotum very short, reticulate rugose; pronotal tubercles reaching tegulae; scutum with anterior half reticulate rugose and with posterior half punctate and without sculpture among punctures; notaulices invisible; scutellum finely punctate, without sculpture among the punctures; metanotum reticulate rugose; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (13:9); fore tarsal segments in following proportions: 16:3:4:4:9; enlarged claw (Fig. 4 H) without subapical tooth and without hairs, bristles and lamellae; segment 5

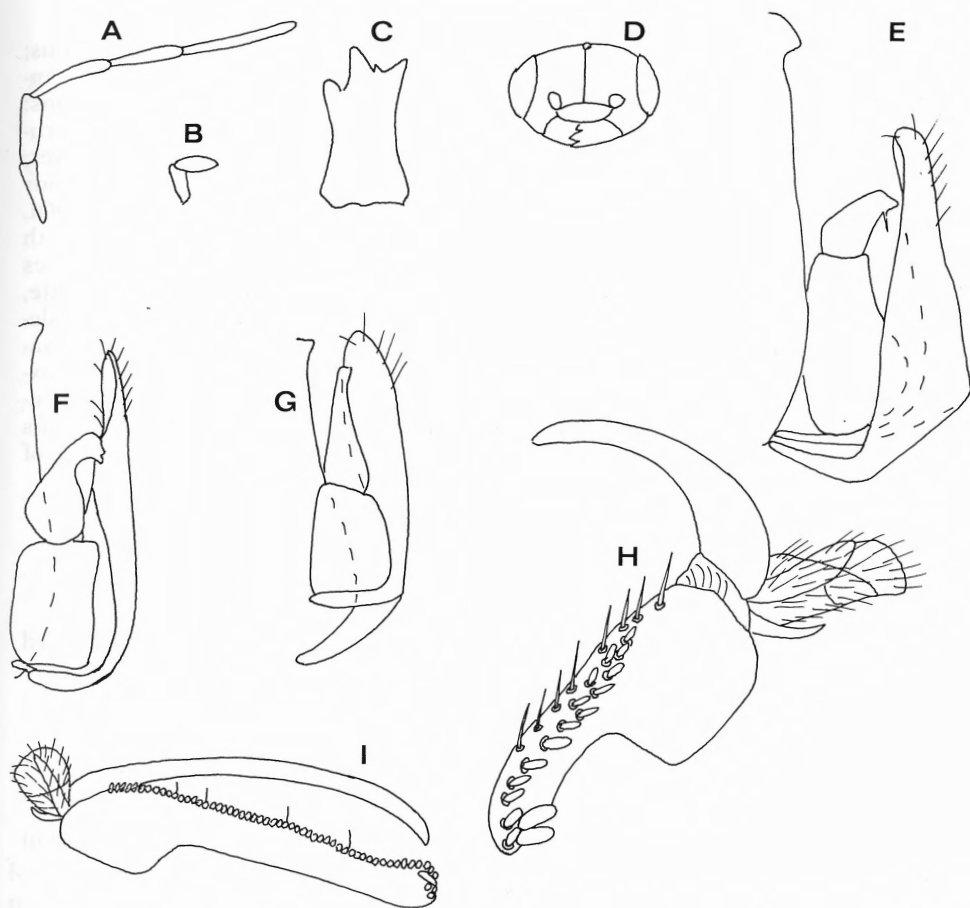


Fig. 4 - Maxillary palp (A), labial palp (B), mandible (C), head (D) and male genitalia (E) of *Paraphelopus townesi* n. sp. (holotype); male genitalia of *Paraphelopus neotropicus* n. sp. (holotype) (F) and *Paraphelopus cardaleae* n. sp. (holotype) (G); chela of *Conganteon transvaalense* n. sp. (holotype) (H) and *taiwanense* n. sp. (holotype) (I).

of front tarsus (Fig. 4 H) with two rows of 13 lamellae; apex with a group of 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 30 Km E Nylstroom (Transvaal, South Africa)

Typical material: holotype F! in AL;

Distribution: only known from the typical locality.

Notes: the holotype was collected by H. and A. Howden on November 15 - December 17, 1984. In the key to Ethiopian *Conganteon* (Olmí 1984: p. 99) *C. Transvaalense* is near *C. vulcanicum* Benoit; in *C. vulcanicum* however the scutum is fully reticulate rugose (in *C. transvaalense* only the anterior half); the scutellum is smooth in *C. transvaalense* (reticulate rugose in *C. vulcanicum*).

GENUS *CONGANTEON*: ORIENTAL REGION

Conganteon taiwanense n. sp.

Female: fully winged; length 3,12 mm; black, mandibles and clypeus testaceous; antennae testaceous; legs testaceous, with mid and hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 13:7:21:16:14:10:8:8:7,5:10; head shiny, with anterior half of frons reticulate rugose; posterior half of frons punctate, without sculpture among the punctures; vertex reticulate rugose, with some transversal keels on the sides of the posterior ocelli; frontal line complete; occipital carina complete; POL = 9; OL = 4; OOL = 10; OPL = 9; TL = 10; scutum with anterior half reticulate rugose and with posterior half punctate and without sculpture among the punctures; notaulices incomplete; reaching approximately 0,5 length of scutum; scutellum punctate, without sculpture among the punctures; metanotum reticulate rugose; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (18:13); fore tarsal segments in following proportions: 22:5:5:13:23; enlarged claw (Fig. 4 I) without teeth, bristles and hairs; segment 5 of front tarsus (Fig. 4 I) with a row of approximately 50 short lamellae; apex with a group of approximately 10 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Meifeng (m 2150, Taiwan).

Typical material: holotype F! in TW.

Distribution: only known from the typical locality.

Notes: the holotype was collected by Henry Townes on May 22, 1983.

After the above description of *C. taiwanense* n. sp. and the previous record of *C. nepalense* Olmí from India (Olmí 1987a) the following key to oriental *Conganteon* can be proposed:

FEMALES

- 1 Head and scutum fully reticulate rugose; antennal segment 3 as long as 1; segment 1 of front tarsus approximately three times as long as segment 4.....1. *nepalense* Olmí
- Head with frons punctate and without sculpture among the punctures; vertex and anterior half of frons reticulate rugose; scutum punctate, without sculpture among the punctures, except for anterior half reticulate rugose; antennal segment 3 more than 1,5 times as long as 1; segment 1 of front tarsus less than twice as long as segment 4.....2. *taiwanense* n. sp.

MALES

Only the male of *C. nepalense* Olmi is known.

GENUS *FIORIANTEON*: ORIENTAL REGION

Fiorianteon rugosum n. sp.

Female (Figs. 5, 6): fully winged; length 2,87 mm; black; mandibles, clypeus and anterior region of frons whitish; antennae brown, with segments 1-2 testaceous;

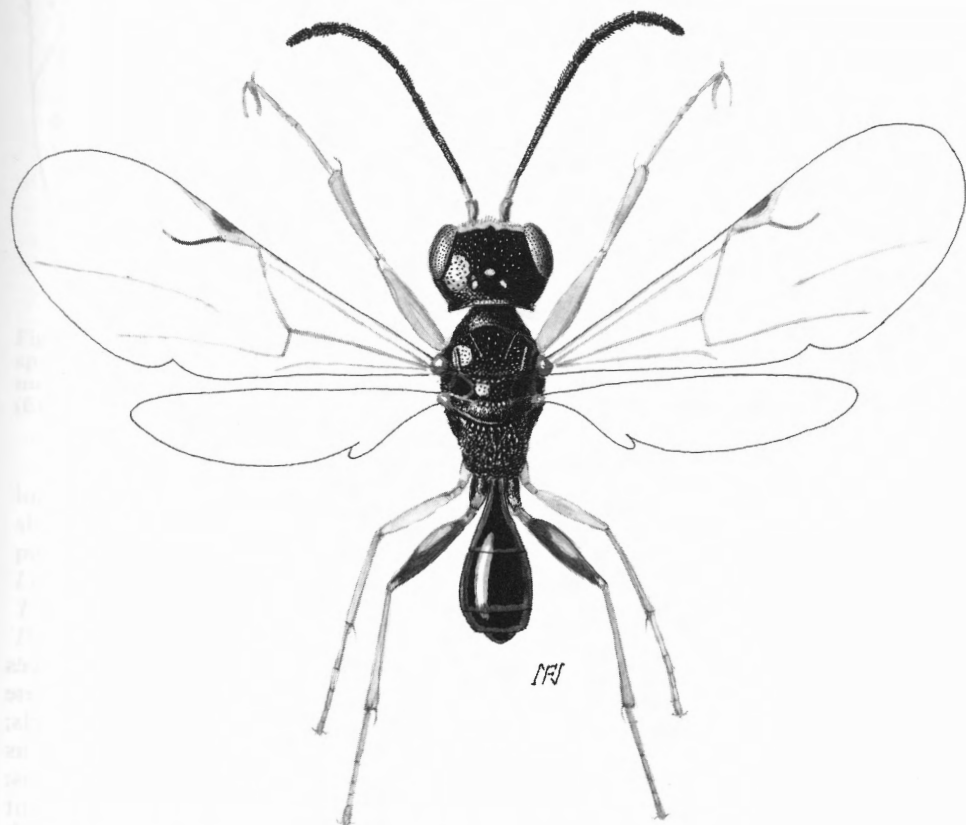


Fig. 5 - Female of *Fiorianteon rugosum* n. sp. (holotype).

legs testaceous, with hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 8:6:17:13:10:8:8:7:8:10; head shiny, punctate, without sculpture among the punctures; frontal line absent; frons with a small hollow in front of the anterior ocellus, in the center of the frons; occipital carina complete; POL = 5; OL = 2; OOL = 10; OPL = 6; TL = 11; scutum

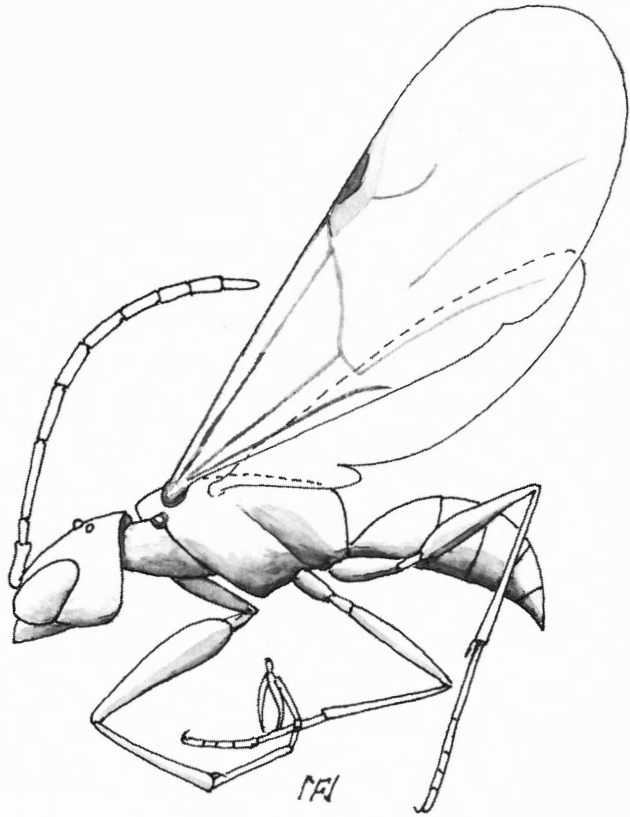


Fig. 6 - Female of *Fiorianteon rugosum* n. sp. (holotype).

and scutellum shiny, punctate, without sculpture among the punctures; notaulices incomplete; reaching approximately 0,5 length of scutum; metanotum reticulate rugose; propodeum reticulate rugose, without longitudinal or transversal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein as long as proximal part (8:8); fore tarsal segments in following proportions: 18:3:4:7:13; enlarged claw (Fig. 7 A) without teeth, hairs and bristles; segment 5 of front tarsus (Fig. 7 A) with a row of approximately 37 lamellae; apex with a group of approximately 7 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 2,87 mm; black; mandibles testaceous, antennae brown, with segments 1-2 testaceous; legs testaceous, with basal part of coxae and hind clubs of femora black; antennae distally thickened; antennal segments in following proportions: 8:4:16:13:11:10:9:8:7,5:10; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 7; OPL = 7; TL = 10; scutum dull, fully reticulate rugose; notaulices almost complete, weakly visible near posterior margin of scutum; scutellum shiny, smooth, without sculpture; metanotum reticulate rugose; propodeum reticulate rugose, without

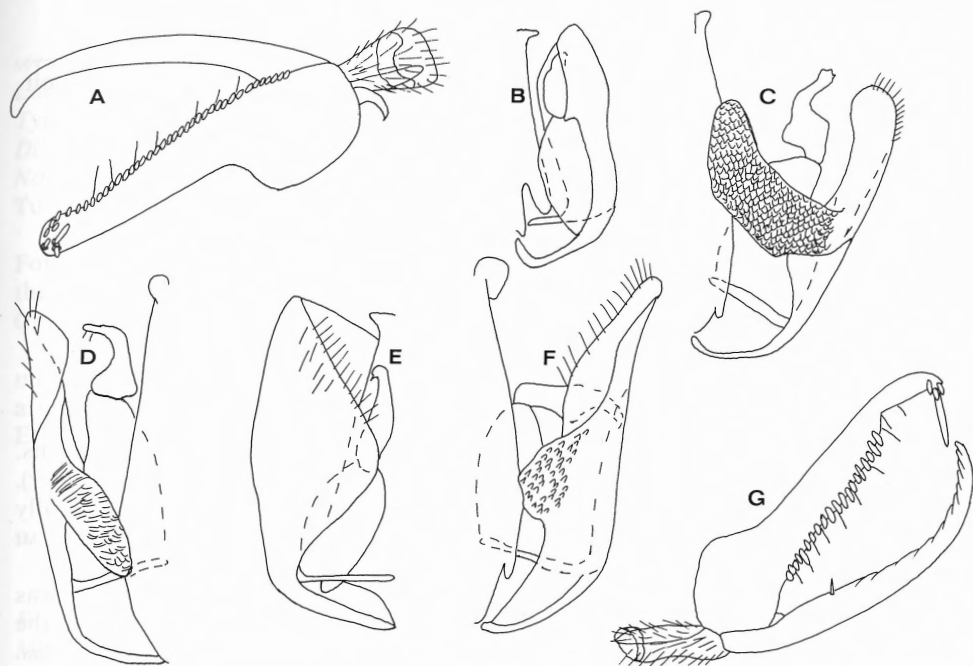


Fig. 7 - Chela of *Fiorianteon rugosum* n. sp. (holotype) (A) and *Deinodryinus pluvialis* n. sp. (holotype) (G); male genitalia of *Fiorianteon rugosum* n. sp. (paratype) (B) and *Deinodryinus tussaci* n. sp. (holotype) (C), *nigerensis* n. sp. (holotype) (D), *philippinus* n. sp. (holotype) (E), *whartoni* n. sp. (holotype) (F).

longitudinal or transversal keels; distal part of radial vein as long as (9:9) or shorter than proximal part (6:8); gonoforceps (Fig. 7 B) with an inner apical expansion; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan).

Typical material: holotype ♀ and 1 paratype ♀ in TW.

Distribution: only known from the typical locality.

Notes: the typical series was collected by Henry Townes on May 10, 1983 (holotype) and on May 3, 1983 (paratype).

The female of *F. rugosum* is the first *Fiorianteon* female known. The following new key to the genera of *Conganteoninae* can be proposed:

KEY TO THE GENERA OF *CONGANTEONINAE*

FEMALES

- 1 Distal part of radial vein as long as or shorter than proximal part (Figs. 5, 6).....3. *Fiorianteon* Olmi
- Distal part of radial vein longer than proximal part (Fig. 55 in Olmi 1984).....2
- 2 Enlarged claw with subapical tooth (Fig. 59 in Olmi 1984).....2. *Chelanteon* Olmi

- Enlarged claw without subapical tooth (Fig. 56 in Olmi 1984).....
.....1. *Conganteon* Benoit

MALES

The key proposed by OLMÍ (1984, p. 97) is always valid.

SUBFAMILY ANTEONINAE GENUS *METANTEON*: NEOTROPIC REGION

Metanteon aeries WALKER 1839

= *Metanteon fuscum* Olmi 1984, n. syn.

M. fuscum was described by OLMÍ (1984) on the basis of female specimens. The different colour of the body was the only difference with *M. aeries* (Walker). Head and pronotum in *M. fuscum* were partly black; in *M. aeries* they were fully testaceous-reddish. The male of *M. fuscum* was described afterwards by OLMÍ (1987a).

Recently a series of male and female specimens of *M. aeries* from Chile was examined. No difference was observed between the male of *M. aeries* and the male of *M. fuscum*. *M. fuscum* so can be considered junior synonym of *M. aeries*.

The examined material of *M. aeries* was coming from the following localities: CHILE: Trancas (near Termas de Chillán, 72 Km SE Chillán, Nuble Prov.), OT! Cobquecura (Nuble Prov.), OT! Las Cabras (Volcano Chillán, Nuble Prov.), OT! TW! OL! El Coigo (Curicó Prov.), OT! OL! Pichinahuel (Cordillera de Nahuelbuta, Arauco Prov.), OT! Butamalal (Arauco Prov.), OL! Princesa (20 Km W Curacautín, Malleco Prov.), OT! Fundo Malcho (Cord. Parral), OT! Altos de Vilches (Talca Prov.), CM! OL! ARGENTINA: Llaollao (Rio Negro), CM! OL!

In Chile *M. aeries* was collected in *Nothofagus* forests at 1000-1700 m.

GENUS *DEINODRYINUS*: PALAEARCTIC REGION

Deinodryinus tussaci n. sp.

Female: unknown

Male: fully winged; length 2,56 mm; black; mandibles, fore tibiae and tarsi brown-testaceous; antennae not distally thickened; antennal segments in following proportions: 7:6:11:10:10:10:10:10:9:10; antennal hairs shorter or as long as the breadth of the segments; head shiny, smooth, punctate, without sculpture among the punctures; occipital carina complete; frontal line absent; frons with a median longitudinal furrow, only visible in the central area; POL = 6; OL = 4; OOL = 6; OPL = 3; TL = 5; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture, very swollen; propodeum very rugose, without transversal and longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein very short, weakly visible, much shorter than proximal part (1:8); pterostigma less than four times as long as broad; gonoforceps (Fig. 7 C) with a distal rounded process and with a medial branch

wrapping the penis; tibial spurs 1, 1, 2.

Locus typicus: 06° 06' W 34° 03' N (Kenitra, Morocco)

Typical material: holotype M! in P

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Hubert Tussac; the holotype was collected on April 30, 1989.

D. tussaci n. sp. is an intermediate species between *Anteon* and *Deinodryinus*. For the presence of a medial branch wrapping the penis it's a *Deinodryinus*; for the short distal part of radial vein and for the short pterostigma it's an *Anteon*. Only the description of the female will clear the problem.

If it will be confirmed it's a *Deinodryinus*, it's will be the first living *Deinodryinus* of the Palaearctic region. Other Palaearctic *Deinodryinus* are known, but they are fossil. In this case *D. tussaci* can be considered of Ethiopian origin. In the Ethiopian region in fact six species of *Deinodryinus* are known.

GENUS *DEINODRYINUS*: ETHIOPIAN REGION

Deinodryinus nigerensis n. sp.

Female: unknown

Male: fully winged; length 1,87-2,18 mm; black, mandibles testaceous; antennae brown; legs brown, with tarsi and fore tibiae testaceous; antennae not distally thickened, with hairs shorter than the breadth of the segments; antennal segments in following proportions: 6:4:7:7:7:6:6:6:7; head shiny, smooth, punctate, without sculpture among the punctures; frontal line absent; frons with a longitudinal median furrow; occipital carina complete; POL = 4; OL = 2,5; OOL = 6; OPL = 5; TL = 5,5; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum shiny; smooth, finely punctate, without sculpture among the punctures; propodeum fully reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); pterostigma less than four times as long as broad (12:5); gonoforceps (Fig. 7 D) with an inner proximal branch wrapping the penis; tibial spurs 1, 1, 2.

Locus typicus: Tarna goulbin (Maradi, Niger).

Typical material: holotype M! and 1 paratype M! in TE; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by G.J. Steck on September 2-6, 1985 (holotype) and on September 10-13, 1985 (paratypes).

D. nigerensis is near *D. tussaci* of Morocco (Palaearctic region) for the presence of a proximal inner branch wrapping the penis. The distal part of radial vein is however shorter in *D. tussaci*.

The key to the males of the Ethiopian *Deinodryinus* proposed by OLM (1984) can be modified as follows:

- 1 Head reticulate rugose.....5. *monticolus* Olmi
- Head punctate, without sculpture among the punctures.....2
- 2 Gonoforceps with an inner apical branch wrapping penis (Fig. 74 in Olmi 1984).....2. *madecassus* (Benoit)

- Gonoforceps with an inner proximal branch wrapping penis (Fig. 7 D).....
.....6. *nigerensis* n. sp.

GENUS *DEINODRYINUS*: ORIENTAL REGION

***Deinodryinus philippinus* n. sp.**

Female: unknown

Male: fully winged; length 2,5 mm; black; mandibles testaceous; antennae brown, with segments 1-3 testaceous; legs testaceous, with coxae partly darkened and clubs of femora darkened; antennae distally thickened; antennal segments in following proportions: 10:7:6:4:4:5:5:5:8,5; head shiny, with vertex reticulate rugose; frontal line complete; frons not reticulate rugose, but with transversal folds on the sides of the frontal line; two strong keels are visible around the orbits; vertex with two strong oblique keels connecting posterior ocelli to occipital carina; occipital carina complete; POL = 5; OL = 2; OOL = 8; OPL = 7; TL = 7; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum very swollen; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; dorsal surface very short; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); gonoforceps (Fig. 7 E) approximately as long as penis, with a large inner branch wrapping penis; tibial spurs 1, 1, 2.

Locus typicus: Mt. Pomalihi (m 800-1000, 21 Km W Gingoog City, Misamis Oriental, Mindanao I., Philippines), B!

Typical material: holotype M! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a light trap by H.M. Torrevillas on September 15, 1965.

***Deinodryinus whartoni* n. sp.**

Female: unknown

Male: fully winged; length 3,68 mm; black; mandibles testaceous; antennae brown, with proximal half of segment 1 reddish; legs testaceous, with basal region of kind coxae black; antennae not distally thickened, with hair shorter than the breadth of the segments; antennal segments in following proportions: 12:7:14:15:15:13:13:13:12:15; head shiny, smooth, punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 6; OL = 4; OOL = 9; OPL = 8; TL = 8; scutum, scutellum and metanotum punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein as long as proximal part (11,5:11,5); pterostigma four times as long as broad (28:7); gonoforceps (Fig. 7 F) with a proximal inner branch; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (Nantou Hsien, Taiwan).

Typical material: holotype M! in TE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, R. Wharton; the holotype was collected on May 22, 1982.

After the description of the above new species the following new key to the males of the Oriental *Deinodryinus* can be proposed:

MALES

- 1 Vertex of the head with two oblique keels connecting posterior ocelli to occipital carina.....3. *philippinus* n. sp.
— Vertex of the head without two oblique keels connecting posterior ocelli to occipital carina.....2
2 Head reticulate rugose.....2. *keralensis* Olmi
— Head punctate, without sculpture among the punctures.....
.....4. *whartoni* n. sp.

GENUS *DEINODRYINUS*: NEOTROPIC REGION

Deinodryinus pluvialis n. sp.

Female: fully winged; length 4,0 mm; head black, with mandibles, clypeus, malar space and anterior margin of frons testaceous; antennae and legs fully yellow; thorax and propodeum black, except for pronotal tubercles and sides of pronotum reddish; abdomen brown-reddish; antennae distally thickened; antennal segments in following proportions: 11:4:14:8:6,5:6,5:7:6:6:8; head dull, granulated, with frontal line complete and with few irregular keels on the sides of the frontal line; occipital carina complete; region behind the ocelli with two incomplete oblique keels directed from posterior ocelli to occipital carina, but not reaching the occipital carina; POL = 3; OL = 3; OOL = 6; OPL = 6,5; TL = 6,5; pronotum dull, hairy, with posterior surface flat, approximately as broad as long; pronotal tubercles reaching tegulae; posterior surface of pronotum dull, rugose; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum dull, hairy, reticulate rugose; posterior surface without longitudinal or transversal keels; fore wing with two small dark spots beneath the pterostigma and on the basal cells; distal part of radial vein shorter than proximal part (5:8); fore tarsal segments in following proportions: 8:2:3:12:19; enlarged claw (Fig. 7 G) with 1 bristle located further distally than the proximal prominence; segment 5 of front tarsus (Fig. 7 G) with 2 rows of approximately 41 lamellae; apex with a group of approximately 5 lamellae, of which a lamella very long; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: El Tucuco (m 200, Zulia, Venezuela)

Typical material: holotype F! in AL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by Townes in a primary rain forest on April 23-26, 1981.

Deinodryinus finnamorei n. sp.

Female: fully winged; length 4,18 mm; head black, with mandibles, clypeus and malar space testaceous; antennae yellow, with segments 7-10 brown; thorax and propodeum black, with sides of pronotum reddish; abdomen brown-reddish; legs brown, with fore legs partly testaceous; antennae distally thickened; antennal segments in following proportions: 14:7:19:9:8:8:6:5:5:8; head shiny, with frons reticulate rugose and with some areolae; frontal line complete; occipital carina complete; region behind the ocelli almost fully smooth, punctate and without sculpture among the punctures, except for few short keels and two incomplete oblique keels directed from posterior ocelli to occipital carina, but not reaching the occipital carina; POL = 4; OL = 3; OOL = 14; OPL = 10; TL = 12; pronotum hairy, with posterior surface approximately as broad as long; pronotal tubercles reaching tegulae; posterior surface of pronotum smooth, finely punctate, without sculpture among the punctures; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, almost reaching the posterior margin of the scutum; propodeum reticulate rugose; posterior surface almost fully reticulate rugose, except for a small central area punctate and without sculpture among the punctures; posterior surface without longitudinal or transversal keels; fore wing with two dark transversal bands beneath the pterostigma and on the basal cells; distal part of radial vein longer than proximal part (16:14); fore tarsal segments in following proportions: 8:2,5:7:14:28; enlarged claw (Fig. 8 A) with a bristle located further distally than the proximal prominence; segment 5 of front tarsus (Fig. 8 A) with 3 rows of at least 30 lamellae; apex with a group of approximately 15 lamellae; tibial spurs 1, 1, 2.

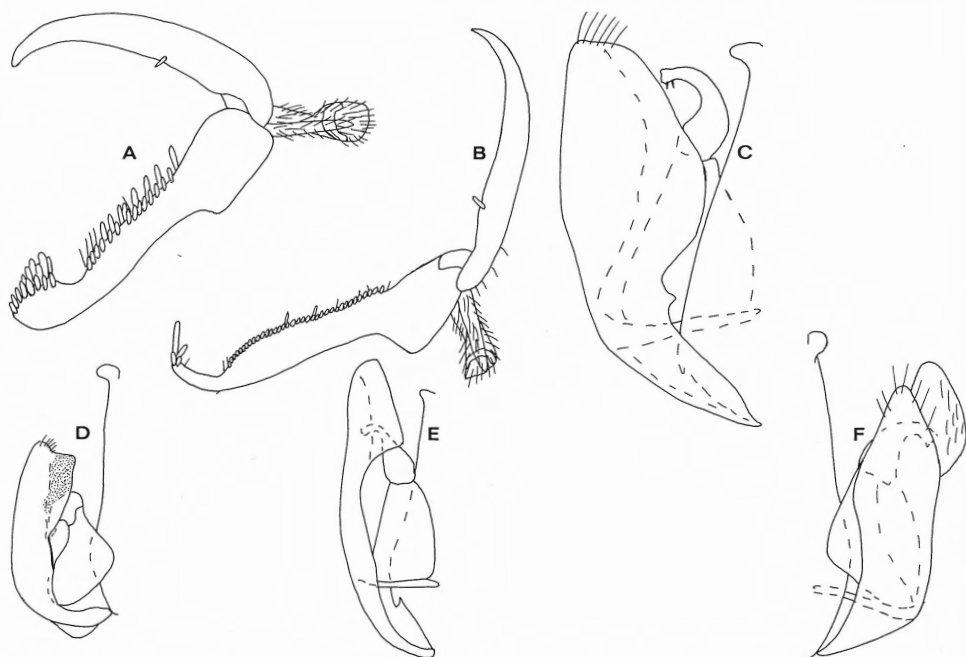


Fig. 8 - Chela of *Deinodryinus finnamorei* n. sp. (holotype) (A) and *insanus* n. sp. (holotype) (B); male genitalia of *Deinodryinus iphis* n. sp. (holotype) (C), *rufopilosus* n. sp. (holotype) (D), *latens* n. sp. (holotype) (E), *huggerti* n. sp. (holotype) (F).

Male: unknown

Locus typicus: Tambopata Reserve (50 Km S Puerto Maldonado, on Rio Tambopata, Madre de Dios Dept., Peru).

Typical material: holotype F! in AL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, A.T. Finnamore; the holotype was collected on January 3-8, 1984.

Deinodryinus insanus n. sp.

Female: fully winged; length 4,06 mm; head black, with anterior region of frons, clypeus and mandibles testaceous; antennae testaceous; thorax and propodeum black, except for sides of pronotum, posterior margin of pronotum and pronotal tubercles testaceous; abdomen brown; legs testaceous, with basal region of hind coxae black; antennae distally thickened; antennal segments in following proportions: 13:8:18:11:9:9:8:8:8:10; head dull, granulated, with some irregular keels on anterior half of frons; frontal line incomplete, only visible near clypeus; occipital carina complete; POL = 3; OL = 2,5; OOL = 7; OPL = 7; TL = 9; vertex behind ocelli without oblique keels connecting posterior ocelli to occipital carina; pronotum shiny, alutaceous, with numerous transversal keels; pronotal tubercles reaching tegulae; posterior surface of pronotum flat, shorter than scutum (15:20); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (18:10); fore tarsal segments in following proportions: 10:3:6:18:27; enlarged claw (Fig. 8 B) with a bristle located further distally than the proximal prominence; segment 5 of front tarsus (Fig. 8 B) with 2 rows of approximately 33 lamellae; apex with a group of approximately 4 lamellae, among which a lamella very long; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Quillabamba (Cuzco Dept., Peru).

Typical material: holotype F! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by L. Huggert on December 26, 1983.

Deinodryinus iphis n. sp.

Female: unknown

Male: fully winged; length 3,06-3,75 mm; black; mandibles and antennae testaceous; legs brown, with articulations, trochanters, tarsi and fore tibiae testaceous; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 13:9:16:10:11:12:12:11:11:13; head shiny, strongly punctate, frons with two median longitudinal keels; area between the two frontal keels and sides not reticulate rugose, but strongly punctate and with transversal folds; a keel is also visible around the eyes; occipital carina complete; vertex punctate and without sculpture among the punctures; vertex with two oblique keels connecting posterior ocelli to occipital carina; POL

= 5; OL = 3; OOL = 8; OPL = 9; TL = 10; scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,8 length of scutum; propodeum reticulate rugose, without transversal or longitudinal keels; posterior surface with a median smooth and shiny area; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than the proximal part (12:14); gonoforceps (Fig. 8 C) with a large branch wrapping the penis; this branch is located along the full length of the gonoforceps; tibial spurs 1, 1, 2.

Locus typicus: Minas Gerais (Brazil).

Typical material: holotype M! and 1 paratype M! in AL; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by M. Alvarenga in November, 1972.

Deinodryinus rufopilosus n. sp.

Female: unknown

Male: fully winged; length 3-4 mm; black; mandibles and clypeus testaceous; a small frontal reddish spot is visible near clypeus; antennae and legs testaceous, with hind coxae partly black; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 15:7:18:14:13:13:12:12:11:15; head shiny, almost fully reticulate rugose, except for temples punctate and without sculpture among the punctures; frons with three median longitudinal keels; occipital carina complete; POL = 5; OL = 4; OOL = 11; OPL = 10; TL = 11; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, almost reaching the posterior margin of the scutum; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing with distal half darkened; distal part of radial vein shorter than proximal part (12:15); gonoforceps (Fig. 8 D) much shorter than penis and with a wide inner branch located in the apical region; tibial spurs 1, 1, 2.

Locus typicus: San Cristobal de las Casas (7087', Chiapas, Mexico).

Typical material: holotype M! and 4 paratypes MM! in AL; 2 paratypes MM! in OL; 1 paratype M! in GD.

Distribution: San Cristobal de las Casas (7087', Chiapas), AL! OL! COSTA RICA: 4 mi. W Villa Neily (Puntarenas), GD!.

Notes: the typical series from Mexico was collected by B.V. Peterson on June 12, 1969 (holotype and 3 paratypes), on June 11, 1969 (1 paratype) and on June 18-25, 1969. The paratype from Costa Rica was collected by Herman G. Real on July 5, 1965 (Carn. Mus. Acc. 23130).

D. rufopilosus is probably the male of *D. actuosus* Olmi or *D. cascus* Olmi, known only on the basis of female specimens. Also *D. petersoni* Olmi can be the male of one of these species.

Deinodryinus latens n. sp.

Female: unknown

Male: fully winged; length 4,5 mm; black; mandibles, clypeus and antennae testaceous; legs testaceous, with mid and hind coxae partly brown; antennae not distal-

ly thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 17:9:21:12:14:14:14:14:12:15; head shiny, punctate, without sculpture among the punctures; anterior half of frons reticulate rugose; frontal line absent; frons without longitudinal keels; occipital carina complete; POL = 7; OL = 4; OOL = 13; OPL = 12; TL = 10; scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices almost complete, almost reaching the posterior margin of the scutum; propodeum dull, reticulate rugose, without longitudinal or transversal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (20:15); gonoforceps (Fig. 8 E) with an apical inner branch well developed; tibial spurs 1, 1, 2.

Locus typicus: Fazenda Campinina (Mosi Guacu, Sao Paulo, Brazil).

Typical material: holotype M! in AL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.M. and G.A. Campbell on December 29, 1969 - January 3, 1970.

Deinodryinus huggerti n. sp.

Female: unknown

Male: fully winged; length 1,81-2,06 mm; black; mandibles and antennae testaceous; legs brown, with tarsi and fore tibiae light; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 8:5:7:5:5,5:6:6:5:7,5; head shiny, finely punctate and weakly granulated; occipital carina complete, deeply excavated behind posterior ocelli; frontal line absent; frons with a deep longitudinal median furrow; POL = 4; OL = 2; OOL = 4; OPL = 4; TL = 3; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein slightly shorter than proximal part (6:7); gonoforceps (Fig. 8 F) with a small inner apical band; tibial spurs 1, 1, 2.

Locus typicus: Quillabamba (Cuzco Dept., Peru).

Typical material: holotype M! in AL; 1 paratype M! in OL.

Distribution: PERU: Quillabamba (Cuzco Dept.), AL! BRAZIL: Serrada Araripe (Crato, Ceará State), OL!

Notes: the species is named in honor of the collector of the holotype, L. Huggert; the holotype was collected by M. Alvarenga in May, 1969.

D. huggerti is near *D. costaricanus* Olmi: it however has notaulices shorter and inner apical band of gonoforceps reduced.

Deinodryinus tinianus n. sp.

Female: unknown

Male: fully winged; length 3,12-3,87 mm; black; antennae and mandibles testaceous; legs brown, with tibiae and tarsi testaceous; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 13:8:13:11:9:10:11:10:9:12; head fully reticulate rugose; occipital carina complete; vertex behind ocelli with two strong oblique keels direct-

ed from posterior ocelli towards the occipital carina; frons without longitudinal keels, with a deep median longitudinal furrow; POL = 5; OL = 3; OOL = 8; OPL = 10; TL = 10; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices almost complete, almost reaching the posterior margin of the scutum; propodeum reticulate rugose; posterior surface with two longitudinal keels; median area smooth, shiny, without sculpture or dull and reticulate rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (15:12); gonoforceps (Fig. 9 A) with a proximal transverse inner branch wrapping penis; tibial spurs 1, 1, 2.

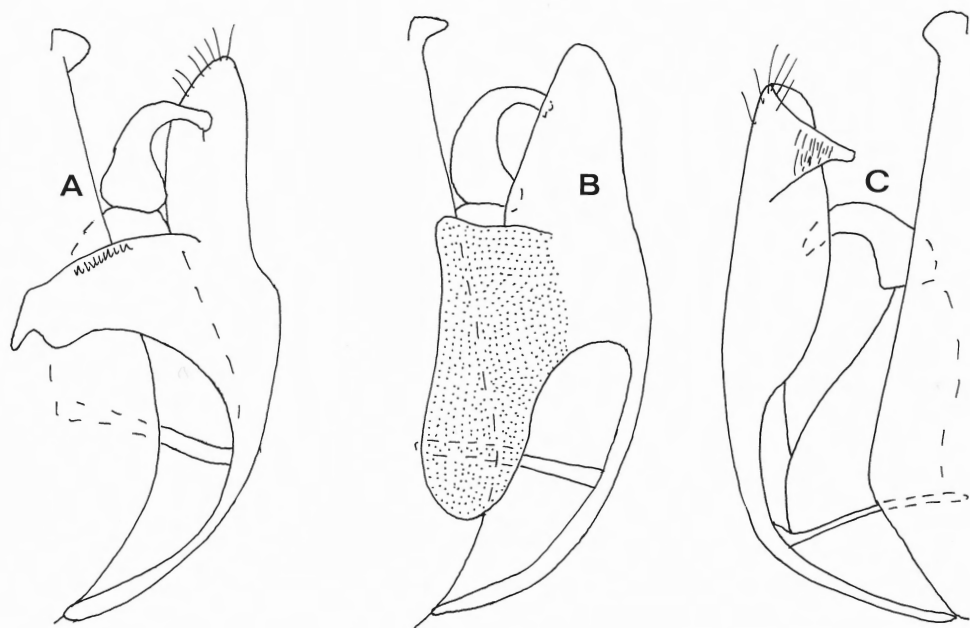


Fig. 9 - Male genitalia of *Deinodryinus tinianus* n. sp. (holotype) (A), *roridus* n. sp. (holotype) (B), *irwini* n. sp. (holotype) (C).

Locus typicus: Tinalandia (15 Km SE Santo Domingo de los Colorados, Pichincha Prov., Ecuador).

Typical material: holotype M! and 3 paratypes MM! in AL; 2 paratypes MM! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by S. and J. Peck on June 14, 1976.

***Deinodryinus roridus* n. sp.**

Female: unknown

Male: fully winged; length 4,12 mm; head black, with mandibles testaceous; antennae testaceous; thorax and propodeum black, abdomen brown; legs testaceous,

with hind coxae brown; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 15:7:17:11:12:12:12:12:11:13; head shiny, with frons reticulate rugose and with vertex strongly punctate and without sculpture among the punctures; occipital carina complete; vertex without two oblique keels from posterior ocelli to occipital carina; frontal line almost complete, interrupted in front of anterior ocellus; POL = 6; OL = 3; OOL = 10; OPL = 9; TL = 8; scutum, scutellum and metanotum shiny, smooth, without sculpture; notaulices incomplete, almost reaching the posterior margin of the scutum; propodeum reticulate rugose; posterior surface reticulate rugose, except for the central area, which is shiny and smooth; posterior surface without longitudinal keels; fore wing hyaline, with a small and weak dark band beneath the pterostigma; distal part of radial vein as long as proximal part (17:17); gonoforceps (Fig. 9 B) with a large internal proximal band; tibial spurs 1, 1, 2.

Locus typicus: Sinop (m 350, Mato Grosso, Brazil).

Typical material: holotype M! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by M. Alvarenga in October, 1974.

Deinodryinus irwini n. sp.

Female: unknown

Male: fully winged; length 3,81 mm; fully black; antennae not distally thickened, with hairs shorter than the breadth of the segments; antennal segments in following proportions: 12:7:11:11:11:10:10:9:8:10; head shiny, with frons reticulate rugose and vertex finely punctate and without sculpture among the punctures; frontal line almost complete, invisible only in front of the anterior ocellus; occipital carina complete; POL = 9; OL = 4; OOL = 8; OPL = 8; TL = 10; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices almost reaching posterior margin of the scutum, almost complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (10:4); propodeum dull, reticulate rugose, without transversal or longitudinal keels, with a small smooth and shiny area in centre of the posterior surface; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (15:12); gonoforceps (Fig. 9 C) with an apical inner pointed branch; tibial spurs 1, 1, 2.

Locus typicus: 35° 01' S 70° 48' W (Fundo La Montaña, Estero de la Palma at Rio Teno, 6 Km E Los Queñes, Curicó Prov., Chile).

Typical material: holotype M! in CA.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, M.E. Irwin; the holotype was collected on January 4, 1967.

Deinodryinus rugifrons n. sp.

Female: unknown

Male: fully winged; length 2,18-2,31 mm; head black, with mandibles testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs testa-

ceous, with hind coxae partly black and with hind femora and hind tarsi darkened; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 9:5:9:5,5:6:6:6:6:8; head dull, with frons granulated and reticulate rugose; vertex punctate and weakly granulated; frontal line complete; occipital carina complete, excavated behind the posterior ocelli; two tracks of oblique keels are visible behind the posterior ocelli from posterior ocelli to occipital carina; these keels are limiting a median furrow; POL = 5; OL = 3; OOL = 5; OPL = 4; TL = 4; scutum shiny, punctate, without sculpture among the punctures; lateral areas weakly granulated; notaulices incomplete, thin, reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein approximately as long as proximal part (7:8); gonoforceps (Fig. 10 A) with a large subapical branch wrapping penis; tibial spurs 1, 1, 2.

Locus typicus: 24 Km W Piedras Blancas (m 200, Golfo Dulce Forest Reserve, Puntarenas Prov., Costa Rica).

Typical material: holotype M! and 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by a malaise trap by Paul Hanson in March - May, 1989 (holotype) and in June - August, 1989 (paratype).

Deinodryinus hansonii n. sp.

Female: unknown

Male: fully winged; length 3,25 mm; head black, with mandibles testaceous; antennae testaceous; thorax, propodeum and abdomen black; legs testaceous, with fore and hind coxae partly black; antennae not distally thickened, with hairs shorter than the breadth of the segments; antennal segments in following proportions: 11:7:11:10:10:10:9:8:10; head shiny, smooth, punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 5; OL = 3; OOL = 8; OPL = 7; TL = 5; scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5-0,6 length of scutum; propodeum reticulate rugose, without transversal or longitudinal keels; posterior surface with a small central smooth area; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (13:9); gonoforceps (Fig. 10 B) with a distal inner pointed process, without a branch wrapping penis; tibial spurs 1, 1, 2.

Locus typicus: Cerro Pedregal (m 1000, Volcán Cacao, Guanacaste Prov., Costa Rica).

Typical material: holotype M! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Paul Hanson; the holotype was collected by a malaise trap in February - April, 1989.

Deinodryinus gauldi n. sp.

Female: unknown

Male: fully winged; length 2,50-3,00 mm; head black; with mandibles testaceous;

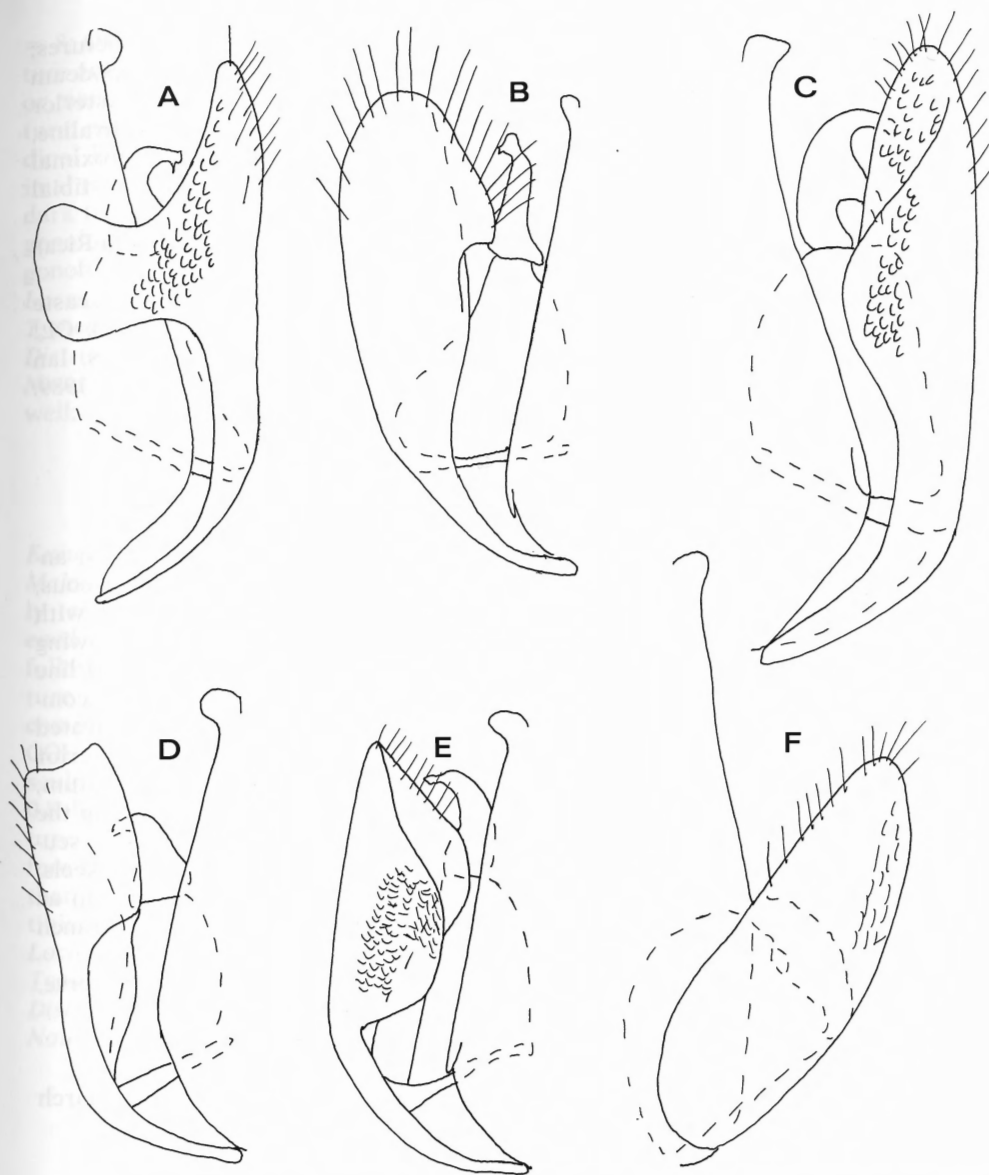


Fig. 10 - Male genitalia of *Deinodryinus rugifrons* n. sp. (holotype) (A), *hansoni* n. sp. (holotype) (B), *gauldi* n. sp. (holotype) (C), *politifrons* n. sp. (holotype) (D), *tidwelli* n. sp. (holotype) (E), *paulensis* n. sp. (holotype) (F).

antennae testaceous; thorax, propodeum and abdomen black; legs testaceous, with hind coxae black; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 12:6:13:8:9:10:10:9:9:11; head shiny, smooth, granulated; frontal line incomplete, only visible in the anterior third of the frons; occipital carina complete; POL = 6; OL = 2,5; OOL = 6; OPL = 4,5; TL = 5,5; scutum, scutellum and metano-

tum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface dull, without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein as long as proximal part (10:10); gonoforceps (Fig. 10 C) with a reduced inner medial branch; tibial spurs 1, 1, 2.

Locus typicus: Cerro Pedregal (m 1000, Volcán Cacao, Guanacaste Prov., Costa Rica).

Typical material: holotype M! and 5 paratypes MM! in OL.

Distribution: COSTA RICA: Cerro Pedregal (m 1000, Volcán Cacao, Guanacaste Prov.), OL! Sotobosque (m 1100, W side Volcán Cacao, Guanacaste Prov.), OL!

Notes: the species is named in honor of the collector of the typical series, Ian Gauld; the typical material was collected by malaise traps in February - April, 1989.

Deinodryinus politifrons n. sp.

Female: unknown

Male: fully winged; length 1,93 mm; head black; with mandibles testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs testaceous, with hind femora and hind tibiae darkened; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 9:4,5:7:5:5:5,5:5:5:5:7; head shiny, with frons granulated; frontal line absent; frons with a median incomplete longitudinal furrow; occipital carina complete; POL = 4; OL = 2; OOL = 4; OPL = 2; TL = 2,5; occipital carina excavated behind the posterior ocelli; tracks of two oblique keels are visible from posterior ocelli to occipital carina; a furrow is visible between the two tracks; scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, thin, reaching approximately 0,6 length of scutum; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein as long as proximal part (6:6); gonoforceps (Fig. 10 D) with a large apical inner branch wrapping penis; tibial spurs 1, 1, 2.

Locus typicus: 24 Km W Piedras Blancas (m 200, Golfo Dulce Forest Reserve, Puntarenas Prov., Costa Rica).

Typical material: holotype M! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in March - May, 1989.

Deinodryinus tidwelli n. sp.

Female: unknown

Male: fully winged; length 3,25 mm; black; antennae, mandibles and legs testaceous; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 10:8:12:9:10:10:10:9:9:12; head strongly reticulate rugose; frons with two median longitudinal keels; region between these keels strongly reticulate rugose; frons also with two keels around the eyes; occipital carina complete; frontal line absent; POL = 4; OL = 2,5; OOL

= 8; OPL = 8,5; TL = 11; scutum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices almost complete, almost reaching the posterior margin of the scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose; posterior surface with two complete longitudinal keels; median area smooth, without sculpture, shiny, delimited by a proximal transversal keel and by the two longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (9:11); gonoforceps (Fig. 10 E) with an inner branch located on the full length of the gonoforceps; tibial spurs 1, 1, 2.

Locus typicus: Anchicaya (Valle Dept., Colombia).

Typical material: holotype M! in DE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, M.A. Tidwell; the holotype was collected by a malaise trap on December 8, 1977.

Deinodryinus paulensis n. sp.

Female: unknown

Male: fully winged; length 2,43-3,56 mm; black; antennae, mandibles and legs fully testaceous, except for hind coxae partly brown; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 16:7:21:10:11:13:13:13:13:16; head punctate, without sculpture among the punctures, smooth, shiny; frontal line absent; occipital carina complete, with a deep furrow behind the ocellar triangle; POL = 6; OL = 3; OOL = 8; OPL = 8; TL = 7; scutum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,8 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (13:16); gonoforceps (Fig. 10 F) with an inner reduced branch; tibial spurs 1, 1, 2.

Locus typicus: Casa Grande (Boraceia Field Station, Sao Paulo State, Brazil).

Typical material: holotype M! in DE; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by T. Rogers on February 12, 1976.

Deinodryinus chiapasi OLM I 1984

D. chiapasi was described on the basis of female specimens. Recently a series of male and female specimens from S. Cristobal de las Casas (Mexico) was examined. The following description of the male can be proposed:

Male: fully winged; length 3,87-4,25 mm; head black, with mandibles and clypeus testaceous; antennae testaceous; thorax, propodeum and abdomen black; legs testaceous, with hind coxae partly black and hind clubs of femora partly brown; antennae not distally thickened, with hairs longer than the breadth of the segments; antennal segments in following proportions: 12:7:18:13:13:13:13:12:13:15; head reticulate rugose; frons with two median keels; region between these two keels sculptured by transversal folds; around each eye is visible a keel; region behind the

ocelli with two oblique keels connecting posterior ocelli to occipital carina; occipital carina complete; POL = 6; OL = 3; OOL = 11; OPL = 9; TL = 12; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, almost reaching the posterior margin of the scutum; propodeum reticulate rugose; posterior surface fully reticulate rugose, with two longitudinal keels; fore wing with distal part of radial vein shorter than proximal part (12:14); gonoforceps (Fig. 11 A) with an apical branch wrapping penis; tibial spurs 1, 1, 2.

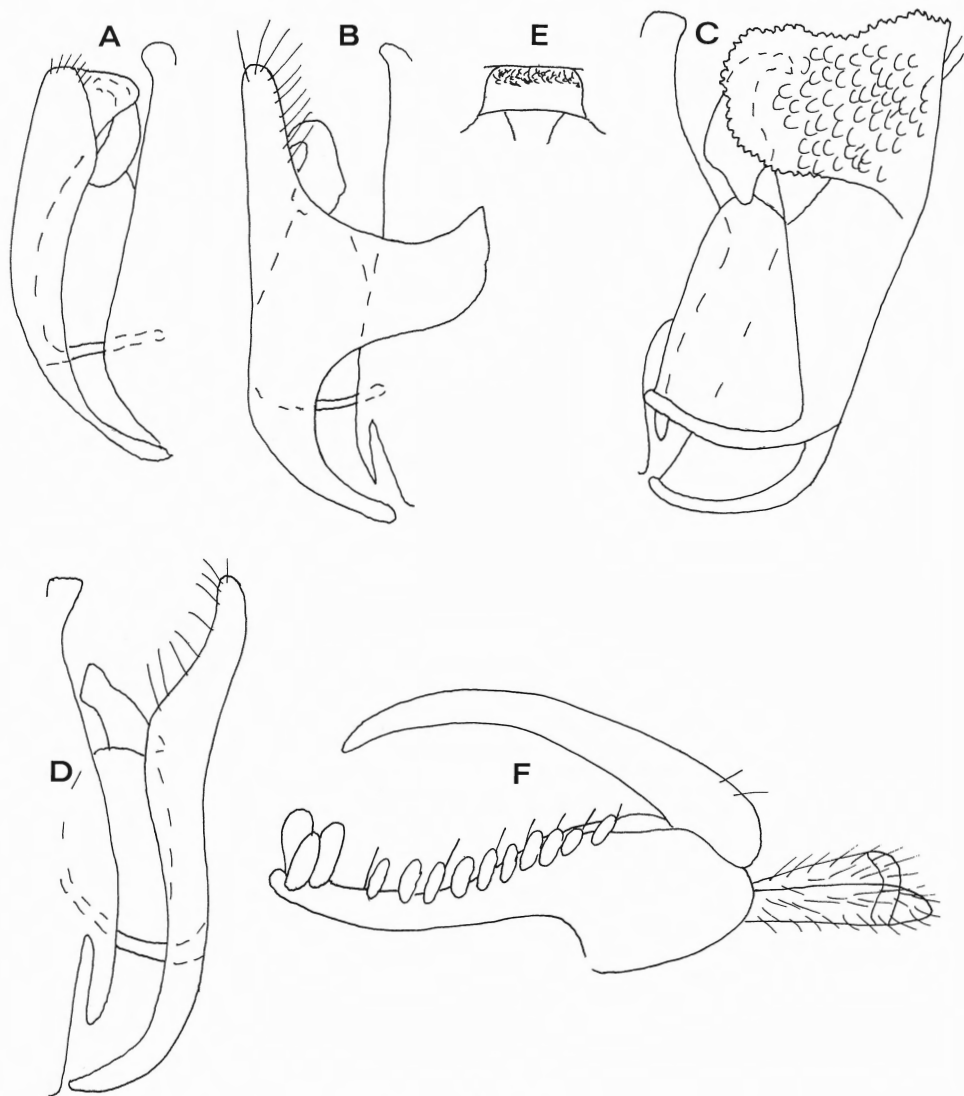


Fig. 11 - Male genitalia of *Deinodryinus chiapasi* Olmi from S. Cristobal de las Casas (A), *australianus* n. sp. (holotype) (B), *naumanni* n. sp. (holotype) (C) and *Lonchodryinus neotropicus* n. sp. (holotype) (D); pronotum (in dorsal view) (E) and chela (F) of female of *Anteon exiguum* (Haupt) from St. Gery.

D. chiapasi Olmi is known from the following localities: MEXICO: Yerba Buena (20 mi. N Bochil, Chiapas), OT! S. Cristobal de las Casas (Chiapas), AL! BRAZIL: Teodoro Sampaio (Sao Paulo), AL!

After the description of the above new species a new key to the Neotropic species of *Deinodryinus* can be proposed, as follows:

FEMALES

- 1 Head fully smooth, without sculpture or granulated, not rugose, without areolae or keels, except for the frontal line.....2
- Head more or less rugose, with areolae or keels, never smooth.....6
- 2 Notaulices reaching approximately 0,5-0,7 length of scutum.....3
- Notaulices reaching approximately the posterior margin of the scutum...4
- 3 Propodeum with a strong transversal keel between dorsal and posterior surface.....1. *elegans* Olmi
- Propodeum without a strong transversal keel between dorsal and posterior surface.....2. *speciosus* Olmi
- 4 Body fully testaceous, at most with petiole black.....3. *diaphanus* Olmi
- Body at least with propodeum black.....5
- 5 Head, pronotum and scutum fully or almost fully reddish-testaceous.....4. *nigrorufus* Olmi
- Head, pronotum and scutum fully or almost fully black.....5. *iphias* Olmi
- 6 Fore wing without dark transversal bands, fully hyaline or fully darkened.....7
- Fore wing with 1-2 distinct dark transversal bands.....11
- 7 Head without two strong oblique keels connecting posterior ocelli to occipital carina.....8
- Head with two strong oblique keels connecting posterior ocelli to occipital carina.....9
- 8 Notaulices almost reaching the posterior margin of the scutum.....49. *minor* Olmi
- Notaulices reaching approximately 0,6 length of scutum.....71. *insanus* n. sp.
- 9 Frons with three median longitudinal keels; notaulices longer, almost reaching the posterior margin of the scutum.....7. *maximus* Olmi
- Frons with two median longitudinal keels; notaulices shorter, reaching approximately 0,5-0,7 length of scutum.....10
- 10 Notaulices reaching approximately 0,7 length of scutum; vertex of head with some irregular keels in addition to the two oblique keels.....66. *pecki* Olmi
- Notaulices reaching at most 0,5 length of scutum; vertex of head smooth, without keels in addition to the two oblique keels.....6. *bicolor* (Olmi and Currado)
- 11 Antennal segment 3 slightly shorter than segment 1.....12
- Antennal segment 3 as long as, or longer than segment 1.....13
- 12 Vertex of head behind ocelli reticulate rugose.....8. *melanocephalus* (Cameron)

- Vertex of head behind ocelli smooth, punctate and with short furrows, not reticulate rugose.....59. *fiorii* Olmi
- 13 Posterior surface of propodeum almost fully smooth or with a smooth median area finely punctate and without keels or areolae.....14
- Posterior surface of propodeum rugose, dull, sculptured by keels or areolae.....32
- 14 Vertex of head with two strong oblique keels connecting posterior ocelli to occipital carina (the keels may be complete or almost complete).....15
- Vertex of head without two oblique keels connecting posterior ocelli to occipital carina or with two incomplete keels (they are considered incomplete if they are less than 0,5 length of OPL).....23
- 15 Posterior surface of pronotum rugose, with numerous irregular transversal keels.....16
- Posterior surface of pronotum smooth, without keels, without sculpture, or finely punctate.....17
- 16 Thorax and propodeum black.....9. *noyesi* Olmi
- Thorax and propodeum fully or partly reddish-testaceous.....10. *atlanticus* Olmi
- 17 Posterior surface of propodeum with two strong longitudinal keels and with a strong transversal keel surrounding a smooth and shiny median area....11. *achterbergi* Olmi
- Posterior surface of propodeum without longitudinal keels; occasionally with two longitudinal keels, but in this case the area surrounded by the keels is not fully smooth, but it's rugose, except for a central area smooth.....18
- 18 Head mainly black.....19
- Head fully or mainly reddish-testaceous.....22
- 19 Thorax and propodeum fully black.....12. *peruvianus* Olmi
- Thorax and propodeum at least partly testaceous.....20
- 20 Pronotum with two strong dorsal transverse lobes.....53. *fluviatilis* Olmi
- Pronotum without two strong transverse dorsal lobes.....21
- 21 Vertex of head (behind and on the sides of the ocelli) fully reticulate rugose.....10. *atlanticus* Olmi
- Vertex of head (behind and on the sides of the ocelli) punctate, not reticulate rugose.....13. *hymenaeus* Olmi
- 22 Pronotum, scutum, scutellum and metanotum fully black.....14. *colombianus* Olmi
- Pronotum, scutum, scutellum and metanotum mainly reddish-testaceous....15. *cascus* Olmi
- 23 Region of head behind ocelli smooth, punctate, without sculpture among the punctures and without keels.....24
- Region of head behind ocelli at least partly rugose, sculptured by few or numerous longitudinal keels.....29
- 24 Prothorax fully or mainly black.....25
- Prothorax fully testaceous.....28
- 25 Frons without areolae, with only few longitudinal keels; pronotum with two very prominent dorsal transverse lobes; pronotum black, with dorsal lobes and pronotal tubercles whitish.....16. *albopictus* Olmi
- Frons reticulate rugose, occasionally with longitudinal keels; pronotum without dorsal lobes or with only slightly prominent dorsal transverse lobes; pronotum fully black.....26

- 26 Frons without longitudinal keels, strongly punctate; punctures very broad, like areolae; enlarged claw with 2 peg-like hairs (Fig. 111 in Olmi 1984)...
.....18. *pegnai* Olmi
- Frons reticulate rugose and with longitudinal keels; enlarged claw with 1 peg-like hair (Fig. 110 in Olmi 1984).....27
- 27 Vertex of head smooth, finely punctate, without sculpture among the punctures; segment 4 of front tarsus more than twice as long as segment 1; posterior surface of propodeum with anterior half smooth and posterior half rugose
.....58. *goiasensis* Olmi
- Vertex of head partly reticulate rugose and strongly punctate, not smooth; segment 4 or front tarsus less than twice as long as segment 1; posterior surface of propodeum almost fully smooth.....17. *amoenus* Olmi
- 28 Mesothorax, metathorax and propodeum black.....19. *pseudoamoenus* Olmi
- Mesothorax, metathorax and propodeum testaceous.....20. *townesi* Olmi
- 29 Notaulices thin, reaching approximately 0,50-0,75 length; pronotal dorsal lobes more prominent.....30
- Notaulices deep, almost reaching the posterior margin of the scutum; pronotal dorsal lobes less prominent.....31
- 30 Pronotum almost fully reddish; notaulices reaching approximately 0,75 length of scutum.....21. *bilobus* (Fenton)
- Pronotum mostly black; notaulices reaching approximately 0,5 length of scutum.....52. *biloboides* Olmi
- 31 Frons with 3 median longitudinal keels; region of head behind the ocelli sculptured by numerous longitudinal keels; posterior surface of propodeum smooth, not reticulate rugose, without sculpture.....22. *insignis* Olmi
- Frons only with a frontal line; region of head behind the ocelli almost fully punctate and without sculpture among the punctures, except for few short keels and two incomplete oblique keels directed from posterior ocelli to occipital carina, but not reaching the occipital carina; propodeum almost fully reticulate rugose, only with a small smooth area finely punctate.....
.....70. *finnamorei* n. sp.
- 32 Head with a deep transversal furrow joining posterior edges of posterior ocelli.....23. *pseudobilobus* Olmi
- Head without a deep transversal furrow joining posterior edges of posterior ocelli.....33
- 33 Posterior surface of pronotum approximately twice as broad as long (breadth measurements refer to the anterior margin of the posterior surface) and with two strong transverse dorsal lobes.....34
- Posterior surface of pronotum approximately as broad as long (breadth measurements refer to the anterior margin of the posterior surface) or less than twice as long as broad, and without dorsal lobes or with weak parallel (not transverse) lobes.....36
- 34 Region of head behind the posterior ocelli with numerous longitudinal keels; pronotum fully reddish-testaceous.....24. *rubrolobatus* Olmi
- Region of head behind the posterior ocelli punctate or reticulate rugose, without longitudinal keels.....35
- 35 Prothorax fully or mainly black; notaulices reaching approximately 0,5 length of scutum.....25. *nigrolobatus* Olmi
- Prothorax fully reddish or part reddish and part black; notaulices reaching approximately 0,65-0,80 length of scutum.....26. *vagans* Olmi

- 36 Posterior surface of pronotum fully rugose or granulated or reticulate rugose or with transversal or longitudinal keels.....37
 — Posterior surface of pronotum fully or almost fully smooth, punctate, without sculpture among the punctures.....45
- 37 Head with OOL approximately twice as long as POL.....38
 — Head with OOL more than twice as long as POL.....41
- 38 Head reticulate rugose, with two strong oblique keels connecting posterior ocelli to occipital carina..... 27. *pilosifrons* Fenton
 — Head granulated, almost smooth, weakly rugose, not reticulate rugose, without two oblique keels connecting posterior ocelli to occipital carina or with two incomplete keels.....39
- 39 Frontal line absent.....56. *costaricanus* Olmi
 — Frontal line distinct and complete.....40
- 40 Scutum granulated; notaulices almost reaching the posterior margin of the scutum; region of head behind the ocelli without two oblique keels connecting posterior ocelli to occipital carina.....28. *politus* Olmi
 — Scutum punctate, without sculpture among the punctures; notaulices reaching approximately 0,5 length of scutum; region of head behind the ocelli with two incomplete oblique keels directed towards the occipital carina, but not reaching the occipital carina.....69. *pluvialis* n. sp.
- 41 Head almost smooth, with a frontal line and two weak lateral keels on frons, not reticulate rugose.....42
 — Head more or less reticulate rugose or sculptured by numerous longitudinal keels.....43
- 42 Posterior surface of pronotum slightly broader than long, smooth, with numerous short longitudinal keels near posterior margin, without transversal keels.....29. *claripes* Olmi
 — Posterior surface of pronotum approximately 1,5 times as broad as long, with numerous short longitudinal keels near posterior margin and with some strong transversal keels.....47. *rivularis* Olmi
- 43 Scutum granulated.....31. *nigricans* (Cameron)
 — Scutum punctate, without sculpture among the punctures.....44
- 44 Body mostly reddish or testaceous.....32. *actuosus* Olmi
 — Body almost fully black.....30. *chiapasi* Olmi
- 45 Region of head behind posterior ocelli without two oblique keels connecting posterior ocelli to occipital carina; segment 5 of front tarsus with a very long lamella at the apex (Fig. 129 in Olmi 1984).....33. *incaicus* Olmi
 — Region of head behind posterior ocelli with two oblique keels connecting posterior ocelli to occipital carina; segment 5 of front tarsus without a very long lamella at the apex (Figs. 131, 132 in Olmi 1984).....46
- 46 Head sculptured by numerous longitudinal keels, not reticulate rugose.....
34. *bolivianus* Olmi
 — Head fully or mainly or partly reticulate rugose, occasionally with few longitudinal keels.....47
- 47 Vertex of head behind the ocelli fully or mostly reticulate rugose.....48
 — Vertex of head behind the ocelli not reticulate rugose.....52
- 48 Prothorax reddish.....35. *eminens* Olmi
 — Prothorax black.....49
- 49 Head fully or mainly testaceous or reddish.....50
 — Head mainly black.....51

50	Notaulices almost reaching the posterior margin of the scutum (Fig. 17 in Olmi 1987a).....	60. <i>porteri</i> Olmi
—	Notaulices shorter (Fig. 157A in Olmi 1984).....	36. <i>trinidadii</i> Olmi
51	Frons fully black, with a distinct longitudinal median keel.....	56. <i>guanacastei</i> Olmi
—	Frons partly black, with 3 distinct median longitudinal keels.....	37. <i>rapax</i> Olmi
52	Vertex of head behind the ocelli punctate, without sculpture among the punctures.....	53
—	Vertex of head behind the ocelli strongly sculptured by longitudinal keels.....	55
53	Head fully reddish-testaceous.....	38. <i>croceus</i> Olmi
—	Head mostly black.....	54
54	Mesothorax and metathorax black.....	65. <i>saltensis</i> Olmi
—	Mesothorax and metathorax reddish-testaceous.....	39. <i>asper</i> Olmi
55	Prothorax black.....	40. <i>schlingeri</i> Olmi
—	Prothorax reddish-testaceous.....	41. <i>alexandrae</i> Olmi

MALES

1	Antennal hairs shorter than the breadth of the segments.....	2
—	Antennal hairs as long as or longer than the breadth of the segments (Fig. 79 in Olmi 1984).....	8
2	Head smooth, not rugose, without areolae or keels.....	3
—	Head at least partly rugose, reticulate rugose or with keels.....	4
3	Notaulices complete, posteriorly separated; gonoforceps with a large internal branch wrapping penis (Fig. 92 in Olmi 1984).....	4. <i>nigrorufus</i> Olmi
—	Notaulices incomplete, reaching approximately 0,5-0,6 length of scutum; gonoforceps with a distal inner pointed process, without a large branch wrapping penis (Fig. 10 B).....	80. <i>hansoni</i> n. sp.
4	Gonoforceps with reduced inner branch (Fig. 122 in Olmi 1984).....	5
—	Gonoforceps with a large inner branch wrapping penis (Figs. 117, 141, 142 in Olmi 1984).....	6
5	Head with frons sculptured by numerous longitudinal keels.....	26. <i>vagans</i> Olmi
—	Head with frons reticulate rugose.....	78. <i>irwini</i> n. sp.
6	Inner branch of gonoforceps subapical (Fig. 141 in Olmi 1984).....	42. <i>carpens</i> Olmi
—	Inner branch of gonoforceps apical (Figs. 117, 142 in Olmi 1984).....	7
7	Posterior surface of propodeum smooth and shiny.....	43. <i>perlucens</i> Olmi
—	Posterior surface of propodeum rugose and dull.....	23. <i>pseudobilobus</i> Olmi
8	Gonoforceps much shorter than penis (Figs. 96, 137, 156 in Olmi 1984).....	9
—	Gonoforceps slightly shorter, as long as, or slightly longer than penis (Figs. 94, 143 in Olmi 1984).....	15
9	Head more or less smooth, fully punctate and without sculpture among the punctures, at most with longitudinal keels, not reticulate rugose.....	10
—	Head fully reticulate rugose.....	11

- 10 Head with two oblique keels connecting posterior ocelli to occipital carina; frons with longitudinal keels; gonoforceps with a broad inner branch wrapping penis (Fig. 96 in Olmi 1984).....6. *bicolor* (Olmi and Currado)
- Head without oblique keels connecting posterior ocelli to occipital carina; frons without longitudinal keels, fully smooth; gonoforceps with a reduced inner branch (Fig. 10 F).....84. *paulensis* n. sp.
- 11 Gonoforceps without inner branch wrapping penis (Fig. 137 in Olmi 1984).....38. *croceus* Olmi
- Gonoforceps with an inner branch wrapping penis (Fig. 156 in Olmi 1984).....12
- 12 Branch of gonoforceps located in the proximal region (Fig. 5 in Olmi 1987d).....68. *cocanus* Olmi
- Branch of gonoforceps located in the apical region or in the whole inner side (Fig. 6B in Olmi 1987b).....13
- 13 Fore wing hyaline; propodeum with a median smooth area in the posterior region.....64. *wasbaueri* Olmi
- Fore wing crossed by 1-2 dark transversal bands; propodeum fully reticulate rugose.....14
- 14 Posterior surface of propodeum without longitudinal keels; head with frons without two median longitudinal keels.....55. *panamensis* Olmi
- Posterior surface of propodeum with two longitudinal keels; head with frons sculptured by two median longitudinal keels.....73. *rufopilosus* n. sp.
- 15 Gonoforceps without inner branch or with very reduced branch (Figs. 94, 143 in Olmi 1984).....16
- Gonoforceps with a large inner branch wrapping penis (Figs. 130, 144 in Olmi 1984).....25
- 16 Head smooth, fully granulated or punctate, without areolae or keels, except, occasionally, for few short keels near antennal sockets.....17
- Head rugose, with areolae and keels.....20
- 17 Occipital carina deeply excavated behind the posterior ocelli.....18
- Occipital carina not excavated behind the posterior ocelli.....19
- 18 Gonoforceps with an apical reduced branch (Fig. 8 F).....75. *huggerti* n. sp.
- Gonoforceps with a medial reduced branch (Fig. 10 C).....81. *gauldi* n. sp.
- 19 Head granulated.....5. *iphias* Olmi
- Head punctate without sculpture among the punctures.....61. *tucumanensis* Olmi
- 20 Notaulices reaching approximately 0,75-0,80 length of scutum.....21
- Notaulices reaching at most 0,5 length of scutum.....23
- 21 Head mostly punctate, without sculpture among the punctures, with two oblique keels in the anterior half of the frons limiting an area sculptured by a single transversal keel or by few areolae.....62. *horcanus* Olmi
- Head fully or partly reticulate rugose; at least the anterior half of the frons is reticulate rugose.....22
- 22 Inner branch of gonoforceps located in the proximal region (Fig. 4 in Olmi 1987d).....67. *petersoni* Olmi
- Gonoforceps without inner branch or with an inner branch located in the apical or subapical region (Fig. 143 in Olmi 1984).....44. *inermis* Olmi

23	Posterior surface of propodeum without longitudinal keels.....	1. <i>elegans</i> Olmi
—	Posterior surface of propodeum with strong longitudinal keels.....	24
24	Gonoforceps with distal inner pointed process (Fig. 155 in Olmi 1984).....	54. <i>cuzcanus</i> Olmi
—	Gonoforceps without distal inner pointed process (Fig. 152 in Olmi 1984).	51. <i>itenezi</i> Olmi
25	Head without two oblique keels connecting posterior ocelli to occipital carina; vertex of head behind the ocelli never reticulate rugose.....	26
—	Head with two strong (rarely weak or reduced to tracks) oblique keels connecting posterior ocelli to occipital carina.....	29
26	Head fully smooth, granulated or finely punctate and without sculpture among the punctures, not reticulate rugose.....	27
—	Head with anterior region of the frons strongly reticulate rugose; posterior region and vertex smooth, granulated or without sculpture.....	28
27	Notaulices almost reaching the posterior margin of the scutum; occipital carina without deep furrow behind the ocellar triangle.....	45. <i>paranus</i> Olmi
—	Notaulices shorter, reaching approximately 0,65-0,75 length of scutum; occipital carina with a deep furrow behind the ocellar triangle.....	57. <i>costaricanus</i> Olmi
28	Scutum granulated.....	63. <i>setosus</i> Olmi
—	Scutum punctate, without sculpture among the punctures.....	33. <i>incaicus</i> Olmi
29	Gonoforceps with inner branch in the proximal region (Fig. 120 in Olmi 1984).....	30
—	Gonoforceps with inner branch in the apical or subapical region (Figs. 104, 145 in Olmi 1984) or extended to the full length of the gonoforceps.....	34
30	Head with POL approximately twice as long as OL.....	31
—	Head with POL slightly longer than OL.....	32
31	Posterior surface of propodeum fully reticulate rugose, dull.....	25. <i>nigrolobatus</i> Olmi
—	Posterior surface of propodeum with median area shiny and smooth and with surrounding areas reticulate rugose.....	77. <i>roridus</i> n. sp.
32	Inner branch of gonoforceps very long and longitudinal (Fig. 2 in Olmi 1987d).....	65. <i>saltensis</i> Olmi
—	Inner branch of gonoforceps shorter and transverse (Fig. 9 A).....	33
33	Posterior surface of propodeum with two longitudinal keels.....	76. <i>tinianus</i> n. sp.
—	Posterior surface of propodeum without longitudinal keels.....	56. <i>guanacastei</i> Olmi
34	Frons with two median longitudinal keels; region between these two keels with some transversal folds, not reticulate rugose.....	35
—	Frons with or without two distinct median longitudinal keels; if with two median longitudinal keels, the median region of the frons is always reticulate rugose.....	37
35	Fore wing with distal third darkened; posterior surface of propodeum fully reticulate rugose.....	30. <i>chiapasi</i> Olmi
—	Fore wing hyaline, without dark transversal bands; posterior surface of propodeum with median region smooth, punctate, without sculpture among the punctures.....	36

- 36 Gonoforceps with a long and narrow subapical branch (Fig. 104 in Olmi 1984)12. *peruvianus* Olmi
— Gonoforceps with an inner branch extended to the full length of the gonoforceps (Fig. 8 C).....72. *iphis* n. sp.
- 37 Antennal segment 3 approximately as long as, or shorter than segment 1.38
— Antennal segment 3 longer than segment 1.....40
- 38 Notaulices very long, almost reaching the posterior margin of the scutum; head strongly reticulate rugose.....46. *hirticornis* (Kieffer)
— Notaulices shorter, reaching approximately 0,5-0,6 length of scutum; head not reticulate rugose or weakly reticulate rugose.....39
- 39 Frons reticulate rugose; inner branch of the gonoforceps subapical (Fig. 10 A)79. *rugifrons* n. sp.
— Frons granulated, not reticulate rugose; inner branch of the gonoforceps apical (Fig. 10 D).....82. *politifrons* n. sp.
- 40 Posterior surface of propodeum with median area more deeply excavated than lateral areas.....41
— Posterior surface of propodeum with median area not more deeply excavated than lateral areas.....42
- 41 Head with POL twice or almost twice as long as OL.....14. *colombianus* Olmi
— Head with POL slightly longer than OL.....56. *guanacastei* Olmi
- 42 Frons without longitudinal keels and without frontal line.....74. *latens* n. sp.
— Frons at least with a complete frontal line; in some species with 2-3 longitudinal and median keels.....43
- 43 Gonoforceps with an inner branch extended to the full length of the gonoforceps (Fig. 10 E).....83. *tidwelli* n. sp.
— Gonoforceps with an apical or subapical inner branch (Figs. 100, 134, 149, 151 in Olmi 1984).....44
- 44 Distal part of radial vein shorter or at most as long as proximal part.....45
— Distal part of radial vein longer than proximal part.....46
- 45 Notaulices reaching approximately the posterior margin of the scutum (Fig. 157B in Olmi 1984).....9. *noyesi* Olmi
— Notaulices shorter (Fig. 157A in Olmi 1984).....36. *trinidadii* Olmi
- 46 Posterior surface of propodeum without longitudinal keels.....50. *benianus* Olmi
— Posterior surface of propodeum with two longitudinal keels.....48. *aequalis* Olmi

GENUS *DEINODRYINUS*: AUSTRALIAN REGION

Deinodryinus australianus n. sp.

Female: unknown

Male: fully winged; length 2,62 mm; black; mandibles testaceous; antennae brown, with segments 1-2 testaceous; legs testaceous; antennae not distally thickened, hairy, with hairs not longer than the breadth of the segments; antennal segments in following proportions: 11:4:9:6:7:7:7:7:10; head shiny, reticulate rugose, with frons sculptured by strong and numerous longitudinal keels; frontal line complete;

occipital carina complete; POL = 8; OL = 5; OOL = 6; OPL = 6; TL = 5; scutum, scutellum and metanotum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4-0,5 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth, shiny, without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:8); pterostigma more than four times as long as broad (17:4); gonoforceps with a subapical branch wrapping penis (Fig. 11 B); tibial spurs 1, 1, 2.

Locus typicus: Bamaga (N Queensland, Australia).

Typical material: holotype M! in TW.

Distribution: only known from the typical locality.

Notes: the holotype was collected by J. Sedlacek in a rain forest on February 3, 1984.

***Deinodryinus naumanni* n. sp.**

Female: unknown

Male: fully winged; length 2,18 mm; black; mandibles testaceous; antennae and legs black, with fore tibiae and fore tarsi testaceous; antennae not distally thickened, with hairs as long as or shorter than the breadth of the segments; antennal segments in following proportions: 8:4:4:5:5:5:5:6:6:6:9; head shiny, weakly granulated, with irregular keels or folds on frons and vertex; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 4,5; OPL = 2; TL = 3; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; dorsal and posterior surface reticulate rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:6); pterostigma less than four times as long as broad (17:5); gonoforceps (Fig. 11 C) with an apical branch wrapping penis; tibial spurs 1, 1, 2.

Locus typicus: 36°26'S 141°46'E (8 Km SSW Kiata, Victoria, Australia)

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of one of the collectors of the holotype, I.D. Naumann; the holotype was collected also by J.C. Cardale on October 23, 1983.

D. australianus and *D. naumanni* are the first Australian *Deinodryinus*. The following key to the males (the females are unknown) can be proposed:

MALES

- 1 Posterior surface of propodeum with two longitudinal keels; gonoforceps with a subapical branch wrapping penis (Fig. 11 B).....1. *australianus* n. sp.
- Posterior surface of propodeum without longitudinal keels; gonoforceps with an apical branch wrapping penis (Fig. 11 C).....2. *naumanni* n. sp.

GENUS *Lonchodryinus*: NEOTROPIC REGION

Lonchodryinus neotropicus n. sp.

Female: unknown

Male: fully winged; length 2,06 mm; black; antennae and abdomen brown; legs brown, with tarsi and articulations light; antennae not distally thickened; antennal segments in following proportions: 7:5:9:11:10:9:8:8:8:10; head shiny, smooth, finely punctate, without sculpture among the punctures; occipital carina complete; frontal line absent; frons with a median longitudinal furrow; POL = 4; OL = 3; OOL = 5; OPL = 3,5; TL = 5; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (7:6); gonoforceps (Fig. 11 D) without distal inner pointed process, with numerous hairs on the internal face; tibial spurs 1, 1, 2.

Locus typicus: Estrella Valley (Pandora, Limón Prov., Costa Rica).

Typical material: holotype M! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by H. and A. Howden on November 20, 1984.

L. neotropicus is the only known male of Neotropic *Lonchodryinus*.

GENUS *Anteon*: PALAEARCTIC REGION

Anteon exiguum (Haupt 1941)

- = *Anteon subarcticus* Hellén 1935: 7 (*nomen nudum*); n. syn.
- = *Chelogyne exiguus* Haupt 1941: 52.
- = *Anteon flaviscapus* Jansson 1950: 221 (syn. proposed by Olmi 1984).
- = *Anteon subarcticus* Hellén 1953: 96 (syn. proposed by Olmi 1984).
- = *Anteon pubicorne* (Dalman) *partim*: Olmi 1984: 316.
- = *Anteon pubicorne* (Dalman) *var. exiguus* (Haupt.): Nilsson 1986: 86.

In the northern countries of Scandinavia there is a dominant population of *Anteon* named in the past *subarcticus* by Hellén, *flaviscapus* by Jansson and *exiguus* by Haupt. This population is living also in central and southern Europe, where it's not dominant.

The females of this population are usually small, with antennae black, except for segment 1-2 testaceous; they have a very short and transverse pronotum. In the past (Olmi 1984) I considered this population only as a case of variability of *Anteon pubicorne* (Dalman), mostly because I had difficulties to find male specimens certainly belonging to this population.

In the last years I examined an interesting series of male and female specimens collected by Hubert Tussac at Les Massaries (St. Gery, Lot, France). This locality was well known by Mr. Tussac; so I had not difficulties to separate the male and the female specimens of a population with the morphologic characters of *A. exiguum*. The study of the male specimens allowed to find good characters and to consider *A. exiguum* a good species.

Many thanks to Mr. Hubert Tussac for his valuable help.

The following description of the opposite sexes can be proposed:

Female: fully winged; length 1,68-2,31 mm; head black, with mandibles testaceous; antennae black, with segments 1-2 testaceous; thorax and propodeum black; abdomen black; legs testaceous; antennae distally thickened; antennal segments in a specimen from Les Massaries (France) in following proportions: 9:4,5:5:4:3,5:3,5:3,5:3,5:4:6; the proportions of the antennal segments are however variable (see notes on page 322 in Olmi 1984); head shiny, smooth, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 5; OPL = 3; TL = 3; pronotum with anterior surface rugose and dull; posterior surface smooth, shiny, without sculpture, much broader than long (Fig. 11 E), much shorter than scutum (4:10); pronotal tubercles reaching tegulae; scutum shiny punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); fore tarsal segments in following proportions: 5:2:2:5:11; segment 2 of front tarsus produced into a hook; enlarged claw (Fig. 11 F) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 11 F) with a row of approximately 11 lamellae; apex with a group of approximately 2 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 1,62-2,18 mm; black; mandibles testaceous-reddish; antennae brown; with segment 1 reddish-testaceous; legs reddish-testaceous, with stalk of hind femora dark; antennae not distally thickened; antennal segments in following proportions: 7:5:6:6:6:6:6:6:5:5:8; head shiny, finely punctate, with region behind the ocelli and temples weakly rugose and granulated; frons with a weak longitudinal furrow in front of the anterior ocellus; in this furrow an incomplete frontal line is visible; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 3; TL = 3; scutum shiny, finely punctate, without sculpture among the punctures; a narrow anterior region of the scutum is weakly rugose; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); genitalia (Fig. 12 A) with a dorsal membranous process reaching approximately 0,5 length of gonoforceps; gonoforceps with a distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Bellinchen (Oder, Germany).

Typical material: holotype F! of *Ch. exiguus* in HA; holotype of *A. flaviscapus* not found; lectotype F! and 2 paralectotypes FF! (designated by Olmi 1984) of *A. subarcticus* in HE.

Distribution: FINLAND: Lojo (Uudenmaan), OL! Helsinge (Uudenmaan), OL! Ivalo (Lapin), HE! SWEDEN: Åhus (Skåne), HD! Hamnen (Aggarön, Mälaren, Västmanland), NL! Solbacken (Kärrobo, 15 Km SO Västerås, Västmanland), NL! Aholmen (Rytterne, Västmanland), NL! Långflon (Värmland), HD! Alkvättern (Värmland), HD! Stöllet (Värmland), HD! By (Värmland), HD! Vallentuna (Uppland), HD! Oja (Enslöv, Ha.), HD! Kinnekulle (Västergötland), HD! Skåne (Jansson 1950); Södermanland (Jansson 1950); Närke (Jansson 1950); Värmland (Jansson 1950); Dalarna (Jansson 1950); Hälsingland (Jansson 1950); GERMANY: Bellinchen (Oder), HA! AUSTRIA: Hubern (O.

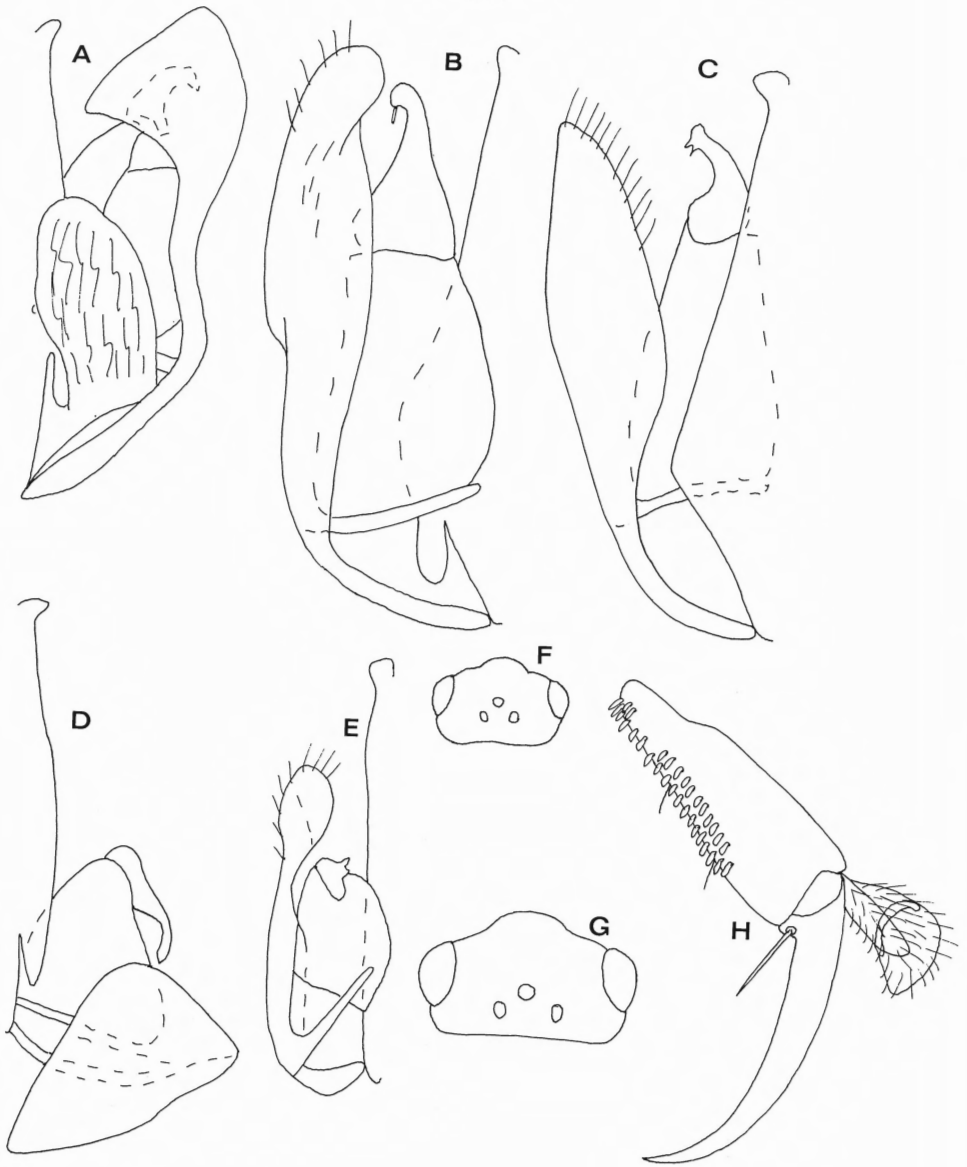


Fig. 12 - Male genitalia of *Anteon exiguum* (Haupt) from St. Gery (A), *reticulatum* Kieffer from Giaglione (B), *harteni* n. sp. (holotype) (C), *boharti* n. sp. (holotype) (E); head of male of *Anteon boharti* n. sp. (holotype) (F) and *mosseli* Olmi (paratype from Jonkershoek) (G); chela of *Anteon maai* n. sp. (holotype) (H).

Tirol, HU! FRANCE: Cavaniés (Cahors, Lot), TS! Le Peyrat (Cahors, Lot), OL! Les Massaries (St. Gery, Lot), TS! OL!

Notes: after the above descriptions of the male and the female of *A. exiguum* the key to the Palaearctic *Anteon* must be modified. The female of *A. exiguum* is belonging to the group *pubicorne*, with *tripartitum*, *crassifrons*, *gaullei*, *fulvi-*

ventre, hilare and *ephippiger*. In the key to the females of Palaearctic *Anteon* proposed by Olmi (1984, pp. 291-292) *A. exiguum* must be inserted before the number 12, as follows:

- 12 Pronotum with posterior surface transverse, much broader than long (Fig. 11 E).....23. *exiguum* (Haupt)
- Pronotum not transverse, with posterior surface approximately as long as broad (Fig. 178 in Olmi 1984).....12'
- 12' Ocellar triangle delimited by keels joining the ocelli; lateral keels occasionally slightly visible; posterior keel always visible; head and thorax black.11. *tripartitum* Kieffer
- Ocellar triangle not delimited by keels; head and thorax black or differently coloured.....13

In the key to the males of Palaearctic *Anteon* proposed by Olmi (1984, pp. 293-294) *A. exiguum* must be inserted near *A. fulviventre*, as follows:

- 13 Head not punctate, strongly granulated; proximal dorsal membranous process of gonoforceps usually very short (Fig. 206 in Olmi 1984).....14. *fulviventre* (Haliday)
- Head strongly or finely punctate, without sculpture among the punctures or occasionally weakly granulated or alutaceous; proximal dorsal membranous process of gonoforceps very long (Figs. 192, 203 in Olmi 1984) or short (Fig. 12 A).....13'
- 13' Head in part weakly granulated, in part rugose, in part punctate, occasionally alutaceous, with sculpture usually weakly distinct; proximal dorsal membranous process short (Fig. 12 A).....23. *exiguum* (Haupt)
- Head punctate, without sculpture among the punctures; sculpture of the head distinct; head never alutaceous; proximal dorsal membranous process longer (Figs. 192, 203 in Olmi 1984).....14

***Anteon reticulatum* KIEFFER 1905**

A. reticulatum Kieffer was described on the basis of one only female specimen. Afterwards other female specimens were collected (Olmi, 1984), but no males.

In the last years I have seen other female specimens and few male specimens. The male specimens were collected in Holland and in Italy. The Dutch material was sent by Mr. Jeroen de Rond of Lelystad, that I thank. The Italian material, from Giaglione and Refrancore, was collected by malaise traps by Mr. Pierluigi Scaramozzino and Mr. Graziano Bassi, that I thank.

The identification of the male specimens is not certain, because no females were collected together. The morphologic characters of the male specimens and mainly the sculpture of the head (reticulate rugose as in the female specimens) however suggest that the identification should be correct. On the other hand *A. reticulatum* is the only European *Anteon* with unknown male and the morphologic characters of the examined males are different from all the other European males. A new species is very improbable.

The following description of the male of *A. reticulatum* can be proposed:
Male: fully winged; length 2,5-3,0 mm; black; mandibles testaceous; antennae brown;

legs brown, with tibiae and tarsi light; antennae distally not thickened; antennal segments in following proportions: 13:7:7:8:8:8:8,5:8:10; head shiny, almost fully reticulate rugose, except for a smooth area in front of the anterior ocellus; frontal line complete; occipital carina complete; POL = 9; OL = 4; OOL = 7; OPL = 5,5; TL = 5; scutum shiny, finely punctate without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum reticulate rugose, dull, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); gonoforceps (Fig. 12 B) without distal inner pointed process; tibial spurs 1, 1, 2.

A. reticulatum Kieffer is known from the following localities: HOLLAND: Harde (Gld.), LE! FRANCE: Maisons-Laffitte (Seine-et-Oise), P! ENGLAND: Oxford, TW! ITALY: Giaglione (Susa, Torino), OL! Refrancore (Asti), OL! M. Peglia (Terni), OL!

After the description of the male of *A. reticulatum* the key to the males of the Palaearctic *Anteon* must be modified. *A. reticulatum* must be inserted in the key proposed by Olmi (1984, pp. 293-294) near *A. corax* Olmi, as follows:

- 7 Scutum finely punctate, without sculpture among the punctures, without areolae, not granulated.....7'
- Scutum differently sculptured, granulated or with anterior half strongly reticulate rugose and with posterior half strongly punctate.....8
- 7' Head shiny, punctate, without sculpture among the punctures.....17. *corax* Olmi
- Head almost fully reticulate rugose, except for a smooth area in front of the anterior ocellus.....3. *reticulatum* Kieffer

GENUS ANTEON: ETHIOPIAN REGION

Anteon harteni n. sp.

Female: unknown

Male: fully winged; length 2,50-2,81 mm; black; mandibles testaceous, with teeth brown; clypeus partly brown; antennae brown, with segments 1-3 testaceous; legs testaceous, with coxae black and clubs of femora partly brown; antennae not distally thickened; antennal segments in following proportions: 6,5:4,5:9:8:8:8:7,5:7,5:7:9; head shiny, strongly punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 5; OL = 2,5; OOL = 7; OPL = 5; TL = 8; frons with a short narrow and median furrow in front of the anterior ocellus; scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum without transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; propodeum reticulate rugose, with posterior surface partly granulated; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:6); gonoforceps (Fig. 12 C) approximately as long as penis, without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Sao Jorge dos Orgaos (Fogo I., Cabo Verde Islands).

Typical material: holotype M! and 3 paratypes MM! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, A. van Harten.

***Anteon kenyanum* n. sp.**

Female: unknown

Male: fully winged; length 2 mm; black; mandibles testaceous; legs brown, with tibiae and tarsi testaceous; abdomen brown; antennae not distally thickened; antennal segments in following proportions: 12:6:5:5:5,5:6:6:6:9; head dull, reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 6; OPL = 2,5; TL = 3; scutum shiny, with region near prothorax rugose; scutum almost fully sculptured by weak irregular striae, without sculpture among the striae; notaulices incomplete, only visible near anterior margin of the scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); gonoforceps (Fig. 12 D) much shorter than penis, without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Kaimosi Mission (m 1650, 27 mi. NE Kisumu, Kenya).

Typical material: holotype M! in CA

Distribution: only known from the typical locality.

Notes: the holotype was collected by E.S. Ross and R.E. Leech on November 29, 1957.

***Anteon boharti* n. sp.**

Female: unknown

Male: fully winged; length 1,68 mm; head black, with mandibles testaceous; antennae brown; thorax and propodeum black; abdomen and legs brown; antennae not distally thickened; antennal segments in following proportions: 5:4:7:7:6:7:6:6:7; head shiny, smooth, swollen, punctate, without sculpture among the punctures; frontal line absent; frons with a median longitudinal furrow; occipital carina complete; POL = 4; OL = 2; OOL = 6; OPL = 4; TL = 6; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete; reaching approximately 0,3 length of scutum; propodeum reticulate rugose, dull, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:6); gonoforceps (Fig. 12 E) much shorter than penis; tibial spurs 1, 1, 2.

Locus typicus: Serengeti Nat. Park East Entrance (Tanzania).

Typical material: holotype M! in HS.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, G.E. Bohart; the holotype was collected on February 24, 1976. This species is very near *A. mosseli* Olmi; the differences concern mainly the shape of the head (less convex

in *A. mosseli*) and the greater distance from posterior ocelli to occipital carina (OPL) (Figs. 12 F, G).

Anteon dayi OLMI 1984

Anteon dayi Olmi was described on the basis of only female specimens. In the last years male and female specimens from Botswana were examined. Many thanks to Dr. Karl V. Krombein of Washington (D.C.) for the loan of this interesting material.

The following description of the male of *A. dayi* can be proposed:

Male: fully winged; length 1,06 mm; black, mandibles testaceous; antennae brown, with segment 1 testaceous; legs brown, with tarsi and fore tibiae testaceous; antennae not distally thickened, almost moniliform; antennal segments in following proportions: 6:3:3:3:3:3:3:3:4; head dull, fully granulated; frontal line complete; occipital carina complete; POL = 5,5; OL = 3; OOL = 3; OPL = 1; TL = 2; scutum dull, granulated; notaulices incomplete, only visible near the anterior margin of the scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface strongly reticulate rugose; posterior surface without longitudinal keels, reticulate rugose, with areolae smaller than the areolae of the dorsal surface; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (1:5); gonoforceps (Fig. 25 E) without distal inner pointed process; tibial spurs 1, 1, 2.

Anteon dayi Olmi is now known from the following localities: NAMIBIA: Regenstein (15 mls. SSW Windhoek), BM! Okahandja, BM! BOTSWANA: Farmer's Brigade (Serowe), WA!

After the description of the above species a new key to the males of the Ethiopian *Anteon* can be proposed. The key published by Olmi (1984, pp. 351-353) was already modified afterwards (Olmi 1987a, 1987c, 1989b). Now it can be modified in the final part, after the number 11, as follows:

- 12 Head without sculpture or very weakly punctate.....35. *capei* Olmi
- Head strongly punctate.....12'
- 12' Gonoforceps approximately as long as penis (Fig. 12 C).....
-42. *harteni* n. sp.
- Gonoforceps much shorter than penis (Fig. 12 E).....13
- 13 Notaulices reaching approximately 0,5 length of scutum; head with OPL shorter than OL (Fig. 12 G).....34. *mosseli* Olmi
- Notaulices reaching approximately 0,3 length of scutum; head with OPL much longer than OL (Fig. 12 F).....44. *boharti* n. sp.
- 14 Head fully granulated, without areolae or irregular keels.....15
- Head reticulate rugose or with irregular keels, granulated among the areolae and keels.....19
- 15 Scutum fully granulated, dull.....16
- Scutum not granulated, at most weakly granulated only near lateral and posterior margin.....18
- 16 Notaulices reaching approximately 0,5 length of scutum.....
-10. *ugandanum* Olmi

- Notaulices shorter, only visible near the anterior margin of the scutum.....17
- 17 Head with OPL approximately 0,5 length of TL; antennae almost moniliform
.....8. *dayi* Olmi
- Head with OPL slightly shorter than TL; antennae filiform.....41. *evertsi* Olmi
- 18 Scutum punctate, without sculpture among the punctures, not granulated.
.....11. *kawandanum* Olmi
- Scutum very weakly punctate, without sculpture among the punctures, weakly granulated near lateral and posterior margins.....12. *afrum* Olmi
- 19 Gonoforceps much shorter than penis (Fig. 12 D).....43. *kenyanum* n. sp.
- Gonoforceps as long as, or slightly shorter than penis (Figs. 222, 238 in Olmi 1984).....20
- 20 Scutum with anterior half reticulate rugose.....38. *reunionense* Olmi
- Scutum not reticulate rugose.....21
- 21 Scutum dull, strongly granulated.....18. *gutturium* (Benoit)
- Scutum shiny, without sculpture or very weakly granulated.....6. *kivuanum* (Benoit)
- 22 Apex of the distal inner process of the gonoforceps nearer the apex of the gonoforceps (Fig. 258 in Olmi 1984).....36. *emeritum* Olmi
- Apex of the distal inner process of the gonoforceps farther from the apex of the gonoforceps (Figs. 218, 246, 259 in Olmi 1984).....23
- 23 Head weakly granulated, with numerous irregular transversal keels.....3. *maritimum* (Turner)
- Head granulated, without irregular transversal keels.....24
- 24 Head with TL approximately twice as long as OPL; notaulices reaching approximately 0,5 length of scutum.....25. *medleri* Olmi
- Head with TL slightly longer than OPL; notaulices reaching approximately 0,3 length of scutum.....37. *garambanum* Olmi

GENUS ANTEON: ORIENTAL REGION

Anteon maai n. sp.

Female: fully winged; length 2,25 mm; black; mandibles testaceous; antennae testaceous, with segments 6-9 darkened; legs testaceous, with hind coxae darkened; antennae not distally thickened; antennal segments in following proportions: 12:5:4:3:3:3:5:3,5:3,5:4 (last antennal segment missing in the only known specimen); head reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 3; TL = 3; pronotum dull, reticulate rugose, with posterior tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (3:14); scutum dull, reticulate rugose and granulated; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum dull, rugose; metanotum reticulate rugose; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); fore tarsal segments in following proportions: 7:1,5:1,5:2:7; enlarged claw (Fig. 12 H) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 12 H) with 2 rows of approximately

24 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Locus typicus: Tenompok (Sabah, Malaysia).

Typical material: holotype F! in B

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, T.C. Maa; the holotype was collected on February 10-19, 1959.

Anteon tarsale N. PONOMARENKO 1988

Female: fully winged; length 4,37-4,81 mm; black; mandibles testaceous; antennae testaceous, with segments 5-10 darkened; legs testaceous, with clubs of femora and occasionally hind coxae brown; antennae distally thickened; antennal segments in following proportions: 22:8:9:7:8:10:9:8:8:10; head dull, reticulate rugose; frontal line complete; occipital carina complete; POL = 8; OL = 4; OOL = 7; OPL = 9; TL = 6; pronotum shiny, with posterior tubercles reaching tegulae; anterior surface of pronotum strongly and transversely sculptured by keels or reticulate rugose; posterior surface shorter than scutum (10:22), smooth, without sculpture or partly reticulate rugose; scutum shiny, smooth, finely punctate; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands, weakly fully yellow; distal part of radial vein shorter than proximal part (5:15); fore tarsal segments in following proportions: 14:3:3:1,5:16; enlarged claw (Fig. 13 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 13 A) with two rows of approximately 3-4 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Tamdao (Vinfu Prov., Viet Nam).

Typical material: holotype F! in LN.

Distribution: known also of Malaysia (Forest Camp, 19 Km N of Kalabakan, Sabah), B!.

Notes: the holotype was collected by L.N. Medvedev on April 16, 1986.

Anteon pahanganum n. sp.

Female: unknown

Male: fully winged; length 2,12-2,62 mm; black; mandibles, antennae and legs testaceous; antennae not distally thickened; antennal segments in following proportions: 12:6:6:6:6:6:6:6:8; head dull, reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 3,5; OOL = 5; OPL = 5; TL = 4; scutum shiny, with anterior and lateral regions reticulate rugose; central and posterior regions smooth, punctate, without sculpture among the punctures; notaulices incomplete; reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose with a strong transversal keel between dorsal and posterior surface; posterior surface with two

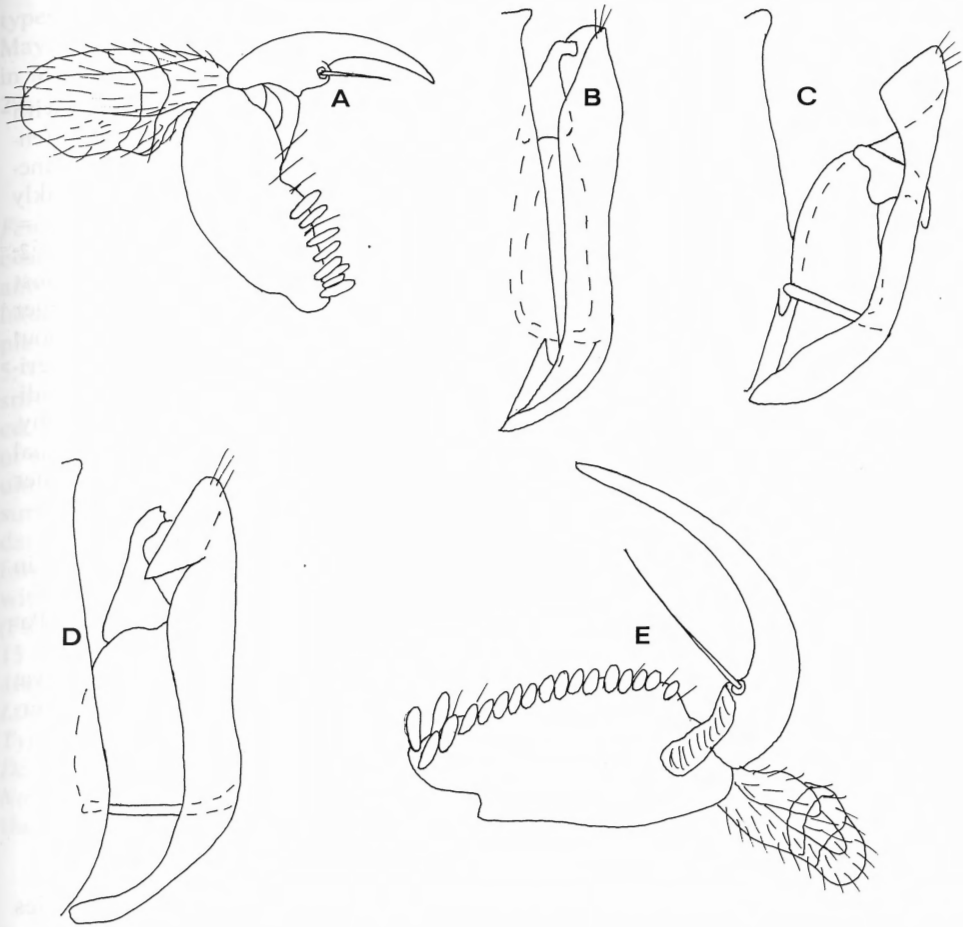


Fig. 13 - Chela of *Anteon tarsale* N. Ponomarenko from Sabah (A) and *spenceri* n. sp. (holotype) (E); male genitalia of *Anteon pahanganum* n. sp. (holotype) (B), *quatei* n. sp. (paratype from Malaya) (C), *priscum* n. sp. (paratype from Bogor) (D).

longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2,5:9); gonoforceps (Fig. 13 B) without distal inner pointed process, approximately as long as penis; tibial spurs 1, 1, 2.

Locus typicus: Gua 'Che Yatim to Terenggan (Pahang, Malaya, Malaysia).

Typical material: holotype M! in B; 1 paratype M! in OL; 2 paratypes MM! in TW.

Distribution: MALAYSIA: Gua 'Che Yatim to Terenggan (Pahang, Malaya), B! Pasoh Forest Reserve (Negri S., Malaya), TW! HONG KONG: Sai Kung Station (New Territories), OL!

Notes: the holotype was collected by T.C. Maa on December 17, 1958; the paratypes from Pasoh Forest were collected by P. and M. Becker on April 30, 1980 (in primary forest) and on June 10, 1978 (in forest gap); the paratype from Hong Kong was collected by T.C. Maa on December 17, 1958.

Anteon quatei n. sp.

Female: unknown

Male: fully winged; length 1,50-2,43 mm; brown or black; antennae brown, with segments 1-2 testaceous; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 7:5:5:5:5:5:4,5:4:5:6; head shiny, finely punctate, without sculpture among the punctures; frontal line complete, but weakly visible; occipital carina complete; in the holotype: POL = 5; OL = 2,5; OOL = 6; OPL = 2,5; TL = 4; in a small paratype from Malaya: POL = 3; OL = 2; OOL = 4; OPL = 2; TL = 2; scutum shiny, without sculpture; notaulices almost complete, posteriorly separated; minimum distance between the notaulices longer than POL (4:3, in a paratype from Malaya); scutellum and metanotum shiny, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median area shiny, with few keels, mostly smooth; lateral areas shiny, rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); gonoforceps (Fig. 13 C) with a distal inner rounded process; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan).

Typical material: holotype M! and 3 paratypes MM! in TW; 3 paratypes MM! in OL; 1 paratype M! in B.

Distribution: TAIWAN: Meifeng (m 2150), TW! OL! MALAYSIA: Kuala Tahan (Pahang, Malaya), B!

Notes: the species is named in honor of the collector of the paratype from Malaya, L.W. Quate; this paratype was collected on December 12-14, 1958; the typical series from Taiwan was collected by Henry Townes on May 10, 1983.

Anteon priscum n. sp.

Female: unknown

Male: fully winged; length 1,68-1,87 mm; black or occasionally brown; mandibles testaceous; antennae brown, with segment 1 testaceous; legs fully testaceous; occasionally hind coxae and hind clubs of femora brownish; antennae not distally thickened; antennal segments in following proportions: 10:6:7:7:7:7:6:6:9; head shiny, strongly or finely punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 4; OL = 2; OOL = 5; OPL = 3; TL = 3; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5-0,9 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:9); gonoforceps (Fig. 13 D) with a distal inner pointed process, tibial spurs 1, 1, 2.

Locus typicus: Wushe (m 1150, Taiwan).

Typical material: holotype M! and 200 paratypes MM! in TW; 1 paratype M! in B; 4 paratypes MM! in OL; 1 paratype M! in AL.

Distribution: INDONESIA: Bogor (Java), B! TAIWAN: Wu-feng, TW! Wushe (m 1150), TW! AL! OL! Meifeng (m 2150), TW!

Notes: the holotype was collected by Henry Townes on May 10, 1983; the para-

types from Wushe (Taiwan) were collected by Henry Townes in March, April and May, 1983; the paratypes from Meifeng (Taiwan) were collected by Henry Townes in May, 1983; the paratype from Java was collected by J. Winkler on December 29, 1964.

***Anteon spenceri* n. sp.**

Female: fully winged; length 3 mm; black; mandibles testaceous; antennae testaceous, with segments 7-10 darkened; legs testaceous, antennae distally thickened; antennal segments in following proportions: 14:5:8:5:7:7:6:6:9; head dull, granulated, with numerous irregular keels; frontal line complete; occipital carina complete; two longitudinal keels are visible on the frons along the orbits; POL = 5; OL = 3; OOL = 5; OPL = 3; TL = 2; pronotum shiny, rugose, with posterior surface almost smooth and shorter than scutum (7:18); scutum weakly granulated, shiny; notaulices very short, incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:10); fore tarsal segments in following proportions: 9:2:2:3:11; enlarged claw (Fig. 57) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 13 E) with a very wide inner expansion and with two rows of approximately 15 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 1, 2.
Male: unknown

Locus typicus: Fyan (m 1200, Viet Nam).

Typical material: holotype F! in B

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, N.R. Spencer; the holotype was collected on July 11 - August 9, 1961.

***Anteon yoshimotoi* n. sp.**

Female: fully winged; length 2,25-2,50 mm; black; mandibles testaceous; antennae brown, with segments 1-3 testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 8:4,5:8:5:4,5:4,5:4,5:5:5:6; head shiny, punctate, without sculpture among the punctures, with numerous areolae on vertex; frontal line complete; two lateral and longitudinal keels are visible near orbits; occipital carina complete; POL = 6; OL = 4; OOL = 3; OPL = 2,5; TL = 2,5; pronotum rugose, except for the surface near posterior margin shiny and smooth; posterior surface shorter than scutum (6:10); scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:8); fore tarsal segments in following proportions: 7:2:2,5:3:11; enlarged claw (Fig. 14 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 14 A) with two rows of approximately 14 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

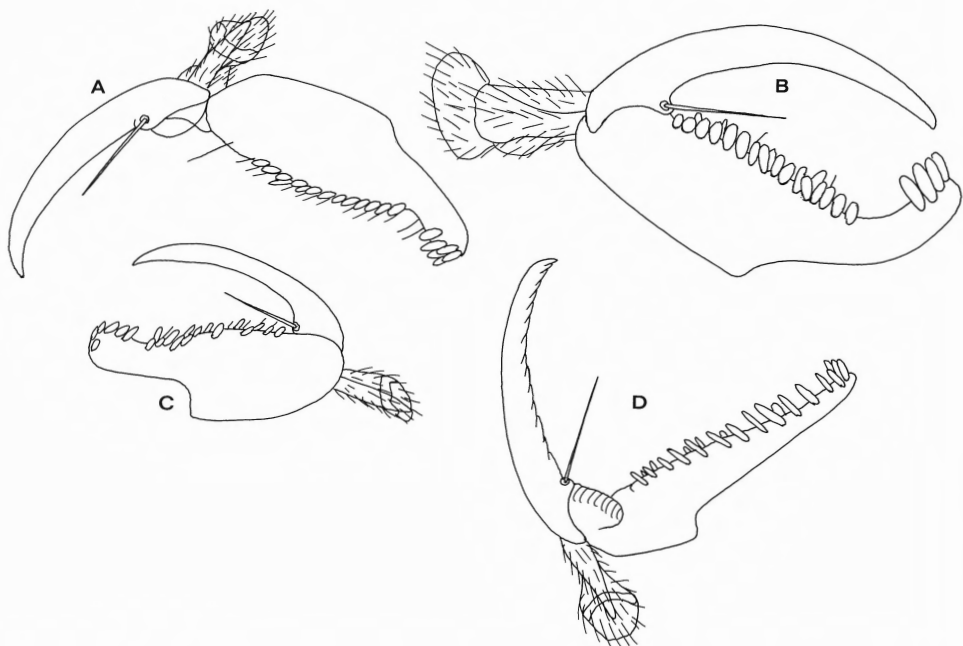


Fig. 14 - Chela of *Anteon yoshimotoi* n. sp. (holotype) (A), *acre* n. sp. (holotype) (B), *dignum* n. sp. (holotype) (C), *provinciale* n. sp. (holotype) (D).

Male: unknown

Locus typicus: Blao (= Balao) (m 500, Viet Nam).

Typical material: holotype F! in B; 1 paratype F! in OL; 2 paratypes FF! in TW.

Distribution: VIET NAM: Blao (= Balao) (m 500), B! LAOS: Wapi (Wapikhamthong Prov.), OL! MALAYSIA: Pasoh Forest Reserve (Negri S., Malaya), TW!

Notes: the species is named in honor of the collector of the holotype, C.M. Yoshimoto; the holotype was collected on October 14-21, 1960; the paratype from Laos was collected by a native collector on September 15, 1967; the paratypes from Malaysia were collected by P. and M. Becker on September 1, 1978 (in gap forest) and on December 14, 1978 (in forest).

***Anteon acre* n. sp.**

Female: fully winged; length 2,31 mm; black; mandibles testaceous; antennae brown, with segments 1-3 testaceous; legs testaceous; abdomen brown; antennae distally thickened; antennal segments in following proportions: 9:6:7:5:4,5:5:5:4 (last two segments missing in the only known specimen); head dull, reticulate rugose; frontal line almost complete (only obsolete near clypeus); two lateral and longitudinal keels are visible near orbits; occipital carina complete; POL = 5; OL = 3; OOL = 5; OPL = 2; TL = 2; pronotum dull, reticulate rugose, with posterior surface approximately as long as anterior surface and with posterior surface shorter than scutum (5:12); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approxi-

mately 0,4 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:10); fore tarsal segments in following proportions: 6,5:2:2,5:4,5:13; enlarged claw (Fig. 14 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 14 B) with two rows of approximately 20 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: M. Lang (m 1500-2000, Bian, Viet Nam).

Typical material: holotype F! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by N.R. Spencer on May 19 - June 8, 1961.

Anteon dignum n. sp.

Female: fully winged; length 2,25 mm; head black, with mandibles, clypeus, genae and ventral side testaceous; thorax and propodeum black; abdomen and legs testaceous; antennae distally thickened; antennal segments in following proportions: 7:4:5:4:3:4:4:3:6; head shiny, with anterior half of frons reticulate rugose; posterior half of frons near anterior ocellus punctate and without sculpture among the punctures; vertex and temples rugose, sculptured by areolae and irregular keels; frontal line complete, occipital carina complete; POL = 4; OL = 2; OOL = 3; OPL = 3; TL = 4; pronotum shiny, with anterior surface rugose and posterior surface smooth; posterior surface much shorter than scutum (3:10); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6); fore tarsal segments in following proportions: 50:15:19:24:85; enlarged claw (Fig. 14 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 14 C) with two rows of approximately 14 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Khaochang (m 200, Khaophappa, Trang Prov., Thailand).

Typical material: holotype F! in B; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by G.A. Samuelson in January, 1964.

Anteon provinciale n. sp.

Female: fully winged; length 2,5 mm; black; mandibles testaceous; antennae brown, with segments 1, 2 and part of 3 testaceous; legs testaceous, with fore and mid coxae and clubs of fore femora brown; antennae distally thickened; antennal segments in following proportions: 9:4:6:6:5:5:5:5:9; head shiny, finely punctate, without sculpture among the punctures; frontal line complete; occipital carina

complete; POL = 3; OL = 3; OOL = 4; OPL = 3; TL = 5; breadth of posterior ocelli: 2; pronotum shiny, with posterior tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (7:11); scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,7 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median area rugose, with a central area smooth; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:6); fore tarsal segments in following proportions: 6:2:2,5:8:16; enlarged claw (Fig. 14 D) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 14 D) with two rows of approximately 14 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Mayoyao (m 1200-1500, Ifugao, Mountain Prov., Philippines).

Typical material: holotype F! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by H.M. Torre Villas on September 3, 1966.

Anteon luzonense n. sp.

Female: unknown

Male: fully winged; length 1,75-1,93 mm; black; antennae brown, with segment 1 light; mandibles testaceous; legs brown, with tibiae and tarsi light; antennae not distally thickened; antennal segments in following proportions: 9:5:6:7,5:8:7:6,5:7:5,5:10; head dull, granulated; frontal line complete, but very weak; occipital carina complete; POL = 6; OL = 2,5; OOL = 4; OPL = 2,5; TL = 4; scutum shiny, finely punctate; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); gonoforceps (Fig. 15 A) without distal inner pointed process, approximately as long as penis; tibial spurs 1, 1, 2.

Locus typicus: Abatan (m 1800-2000, Buguias, 60 Km S of Bontoc, Mountain Prov., Luzon, Philippines).

Typical material: holotype M! in B; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by H.M. Torre Villas on May 15, 1964 (holotype) and on May 11, 1964 (paratype).

Anteon abatanense n. sp.

Female: unknown

Male: fully winged; length 1,56 mm; black; antennae and legs brown; mandibles testaceous; antennae not distally thickened; antennal segments in following proportions: 7:5:5:5:5:5:5:7,5; head dull, granulated; frontal line complete, but very weak; occipital carina complete; POL = 5; OL = 2,5; OOL = 5; OPL = 4; TL

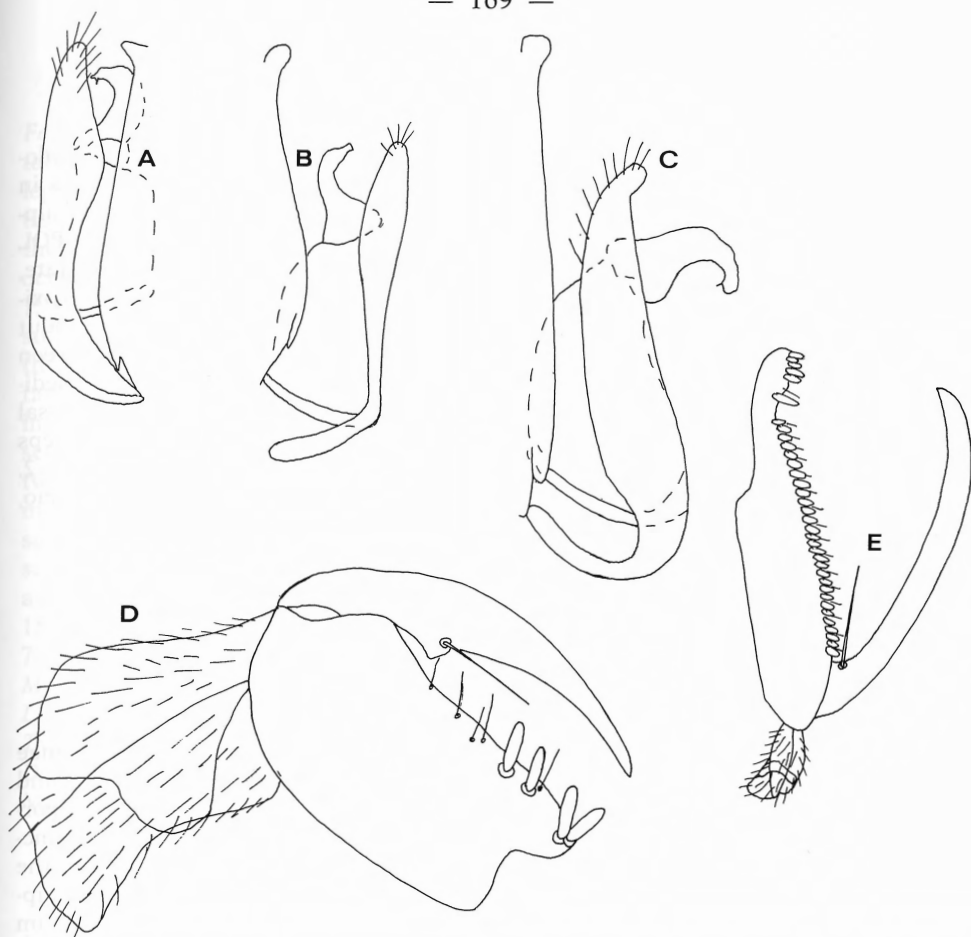


Fig. 15 - Male genitalia of *Anteon luzonense* n. sp. (holotype) (A), *abatanense* n. sp. (holotype) (B), *autumnnale* n. sp. (holotype) (C); chela of *Anteon wushense* n. sp. (holotype) (D) and *confusum* n. sp. (holotype) (E).

= 4; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,2 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:5); gonoforceps (Fig. 15 B) much shorter than penis, without distal inner pointed process; approximately as long as penis; tibial spurs 1, 1, 2.

Locus typicus: Abatan (m 1800-2000, Buguias, 60 Km S of Bontoc, Mountain Prov., Luzon, Philippines).

Typical material: holotype F! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by H.M. Torrevillas on April 30, 1964; this species is like *A. luzonense* n. sp. (from the same locality): the only difference is concerning the length of the gonoforceps.

Anteon autumnale n. sp.

Female: unknown

Male: fully winged; length 2,37 mm; brown-reddish; antennae, mandibles, abdomen and legs testaceous; antennae not distally thickened; antennal segments in following proportions: 9:6:6,5:6:6:6,5:6,5:6,5:6:9; head shiny, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 7; OPL = 4,5; TL = 5; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:12); gonoforceps (Fig. 15 C) much shorter than penis, without distal inner process; tibial spurs 1, 1, 2. *Locus typicus*: M. Pomalihi (21 Km W Gingoog City, Misamis Oriental, Mindanao, Philippines).

Typical material: holotype M! in B

Distribution: only known from the typical locality.

Notes: the holotype was collected by H.M. Torrevillas on October 11, 1965.

Anteon wushense n. sp.

Female: fully winged; length 2,37-5,18 mm; black; mandibles testaceous; antennae testaceous, occasionally more or less darkened; legs fully testaceous, or with hind coxae darkened; antennae distally thickened; antennal segments in following proportions: 16:7:7:5:7:7:7:7:10; head shiny, punctate, without sculpture among the punctures; anterior half of frons rugose; ocellar triangle rugose; vertex behind the ocelli rugose; frontal line complete; two keels are visible around the orbits; occipital carina complete; POL = 7,5; OL = 3,5; OOL = 5; OPL = 6; TL = 4; pronotum shiny, reticulate rugose, except for the posterior surface smooth and without sculpture; posterior surface shorter than scutum (5:19); scutum shiny, punctate, without sculpture among the punctures; notaulices short, only visible near anterior margin of the scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; occasionally posterior surface with longitudinal keels incomplete; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2,5:13); fore tarsal segments in following proportions: 11:2,5:2,5:3:10; enlarged claw (Fig. 15 D) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 15 D) with a row of 5-10 lamellae without interruption to the apex; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Wushe (m 1150, Taiwan).

Typical material: holotype F! and 3 paratypes FF! in TW; 2 paratypes FF! in OL.

Distribution: TAIWAN: Wushe (m 1150), TW! OL! Meifeng (m 2150), OL! TW!

Notes: the typical series was collected by Henry Townes; the holotype on March 16, 1983; the paratypes from Wushe on April 26, 1983; May 10, 1983; May 29, 1983; the paratypes from Meifeng on May 3, 1983.

Anteon confusum n. sp.

Female: fully winged; length 3,62 mm; black; mandibles, clypeus and a short frontal region near clypeus testaceous; antennae brown, with segments 1-2 testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 14:7:15:12:12:11:10:11:10:14; head shiny, punctate, without sculpture among the punctures, with anterior half of frons and partly vertex reticulate rugose; occipital carina complete; frontal line complete; POL = 6; OL = 4,5; OOL = 7; OPL = 6; TL = 7; breadth of the ocelli: 3; pronotum shiny, with anterior surface rugose and with posterior surface punctate and without sculpture among the punctures; posterior surface shorter than scutum (10:19); scutum shiny, punctate, without sculpture among the punctures; notaulices almost complete, reaching approximately 0,9 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:15); fore tarsal segments in following proportions: 10:3:5:6,5:27; enlarged claw (Fig. 15 E) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 15 E) with a row approximately 30 lamellae; apex with a group of approximately 7 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Wushe (m 1150, Taiwan).

Typical material: holotype F! in TW.

Distribution: only known from the typical locality.

Notes: the holotype was collected by Henry Townes on April 26, 1983.

Anteon fidum n. sp.

Female: fully winged; length 2 mm; black; mandibles testaceous; antennae brown, with segments 1-2 testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 7:4,5:6:4,5:4:4:4:4,5:6; head shiny, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 3,5; OL = 2; OOL = 4,5; OPL = 2,5; TL = 4,5; breadth of the ocelli: 2; pronotum with anterior surface rugose; posterior surface mostly smooth, shiny, longer than anterior surface, with pronotal tubercles reaching tegulae; posterior surface shorter than scutum (3:10); scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); fore tarsal segments in following proportions: 4,5:1,5:2:5:11; enlarged claw (Fig. 16 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 16 A) with 1 row of approximately 12 lamellae; apex with a group of approximately 2 lamellae; tibial spurs 1, 1, 2.

Male: unknown

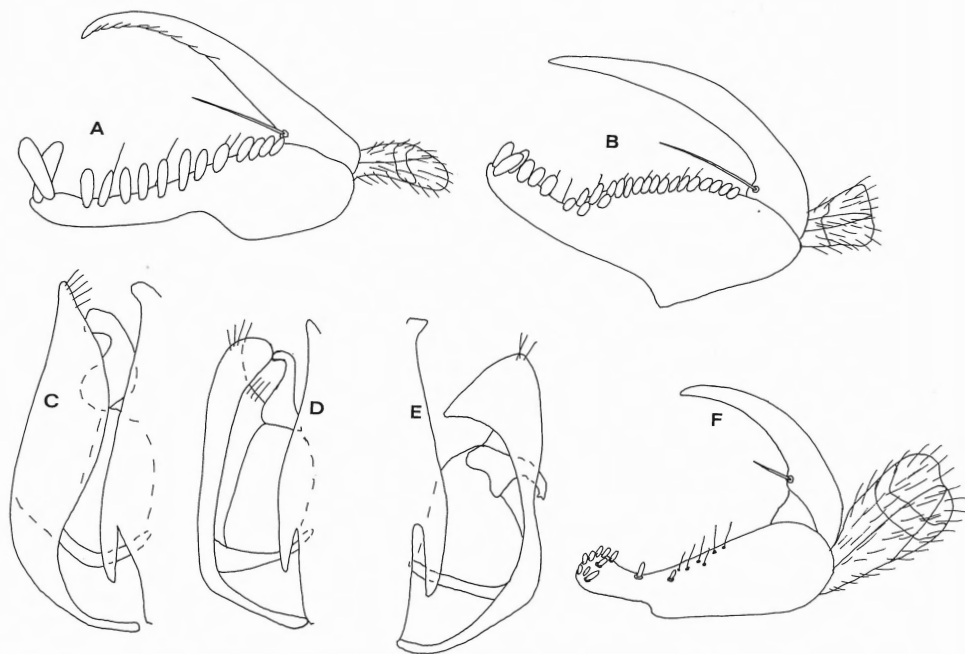


Fig. 16 - Chela of *Anteon fidum* n. sp. (holotype) (A), *insertum* n. sp. (holotype) (B), *amitodiphagum* n. sp. (paratype) (F); male genitalia of *Anteon insertum* n. sp. (paratype) (C), *meifenganum* n. sp. (holotype) (D), *taiwanense* n. sp. (holotype) (E).

Locus typicus: Wushe (m 1150, Taiwan).

Typical material: holotype F! in TW.

Distribution: only known from the typical locality.

Notes: the holotype was collected by Henry Townes on April 2, 1983.

***Anteon insertum* n. sp.**

Female: fully winged; length 2,87-3,37 mm; black; mandibles testaceous; antennae brown, with segments 1-3 testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 11:5:7:5:5:5:5:5:7; head shiny, punctate, without sculpture among the punctures; anterior half of frons reticulate rugose; frontal line complete; two longitudinal keels directed towards the antennal sockets are visible near orbits on the frons; occipital carina complete; POL = 6; OL = 4; OOL = 6; OPL = 4; TL = 5; pronotum with posterior surface as long as anterior surface and shorter than scutum (7:15); anterior surface reticulate rugose; posterior surface punctate, smooth; pronotal tubercles reaching tegulae; scutum punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal

part of radial vein shorter than proximal part (3,5:9); fore tarsal segments in following proportions: 7:2:3:7:16; enlarged claw (Fig. 16 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 16 B) with two rows of approximately 21 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 2,06-2,37 mm; black; mandibles testaceous; antennae testaceous, with segments 2-10 weakly darkened; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 9:5:7:5:5:6:6:6:6:9; head shiny, punctate, without sculpture among the punctures; vertex with some areolae near occipital carina; frontal line complete; occipital carina complete; two short longitudinal keels directed towards the antennal sockets are visible on the frons near orbits; POL = 7; OL = 3; OOL = 5; OPL = 2; TL = 3; scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum finely punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:9); gonoforceps (Fig. 16 C) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Wu-feng (Taiwan).

Typical material: holotype F! and 4 paratypes (1 F, 3 MM)! in TW; 3 paratypes (1 F, 2 MM)! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by Henry Townes; the holotype on April 14, 1983; 3 paratypes on April 3, 1983; a paratype on April 6, 1983; 2 paratypes on March 22, 1983; a paratype on March 20, 1983.

***Anteon meifenganum* n. sp.**

Female: unknown

Male: fully winged; length 3,25 mm; black; mandibles testaceous; antennae testaceous; legs testaceous, with hind coxae partly black; antennae not distally thickened; antennal segments in following proportions: 13:6:9:9:9:10:9:9:9:11; head shiny, strongly areolate and reticulate rugose, mostly on vertex; frontal line complete; occipital carina complete; POL = 8; OL = 4; OOL = 9; OPL = 5; TL = 5; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum finely punctate, without sculpture among the punctures; propodeum with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth, shiny; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:13); gonoforceps (Fig. 16 D) with a distal inner rounded process; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan).

Typical material: holotype M! in TW.

Distribution: only known from the typical locality.

Notes: the holotype was collected by Henry Townes on May 10, 1983.

Anteon taiwanense n. sp.

Female: unknown

Male: fully winged; length 2,32-2,75 mm; black (a paratype from Malaya however is brown); mandibles and antennae testaceous; legs testaceous, with basal region of hind coxae black; antennae not distally thickened; antennal segments in following proportions: 10:5:8:8:7:8:8:7:7:10; head shiny, punctate, without sculpture among the punctures; frontal line incomplete, only visible in front of the anterior ocellus; occipital carina complete; POL = 4; OL = 2; OOL = 7; OPL = 3; TL = 5; scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,7 length of scutum; scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; propodeum with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:11); gonoforceps (Fig. 16 E) with a distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Meifeng (m 2150, Taiwan).

Typical material: holotype M! and 9 paratypes MM! in TW; 3 paratypes MM! in OL.

Distribution: TAIWAN: Meifeng (m 2150), TW! OL! MALAYSIA: Pasoh Forest Reserve (Negri S., Malaya), TW!

Notes: the typical series from Taiwan was collected by Henry Townes on May 3, 1983 (holotype and a paratype), on May 10, 1983 (9 paratypes) and on April 26, 1983 (a paratype); the paratype from Malaya was collected by P. and M. Becker on December 2, 1979.

Anteon amritodiphagum n. sp.

Female: fully winged; length 2,18-2,25 mm; black; mandibles testaceous; antennae testaceous, with hind coxae and clubs of hind femora partly black; antennae distally thickened; antennal segments in following proportions: 10:4:3,5:3,5:4:3:3:3:3,5:6; head shiny, more or less slightly rugose on vertex and frons; frons with an unsculptured area in front of the anterior ocellus; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 3,5; TL = 4; pronotum shiny, sculptured by strong transversal keels, with posterior surface shorter than scutum (5:11); scutum, scutellum and metanotum shiny, smooth, without sculpture; notaulices incomplete, reaching approximately 0,4 length of scutum; propodeum dull, rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4,5:6); fore tarsal segments in following proportions: 6:1,5:1,5:2:10; enlarged claw (Fig. 16 F) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 16 F) with two rows of bristles, in addition to a distal lamella; apex with a group of approximately 11 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Islamabad (Pakistan).

Typical material: holotype F! and 1 paratype F! in BM; 1 paratype F! in OL.

Hosts: in Pakistan *Amritodus atkinsoni* (Lethierry) (*Cicadellidae Idiocerinae*) and *Idioscopus nagpurensis* (Singh-Pruthi) (*Cicadellidae Idiocerinae*) on Mango.

Distribution: PAKISTAN: Islamabad, BM! OL! Lahore (A.I. Mohyuddin pers. comm.).

Anteon austini n. sp.

Female: fully winged; length 2 mm; head black, with mandibles testaceous; antennae black, with segments 1-2 testaceous; thorax and propodeum black; abdomen black; legs yellow; antennae distally thickened; antennal segments in following proportions: 11:5:6,5:4,5:4,5:5:5:5:5:7; head dull, fully reticulate rugose; frontal line complete; frons with two lateral keels around the orbits; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 3; TL = 2; pronotum shiny, rugose, with pronotal tubercles reaching tegulae; posterior surface of pronotum transverse, approximately 0,3 as long as scutum (4:12); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:9); fore tarsal segments in following proportions: 10:2:2:2:5; enlarged claw (Fig. 17 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 17 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 17 A) with two rows of approximately 4 bristles; apex with a group of 2 lamellae; tibial spurs 1, 1, 2.

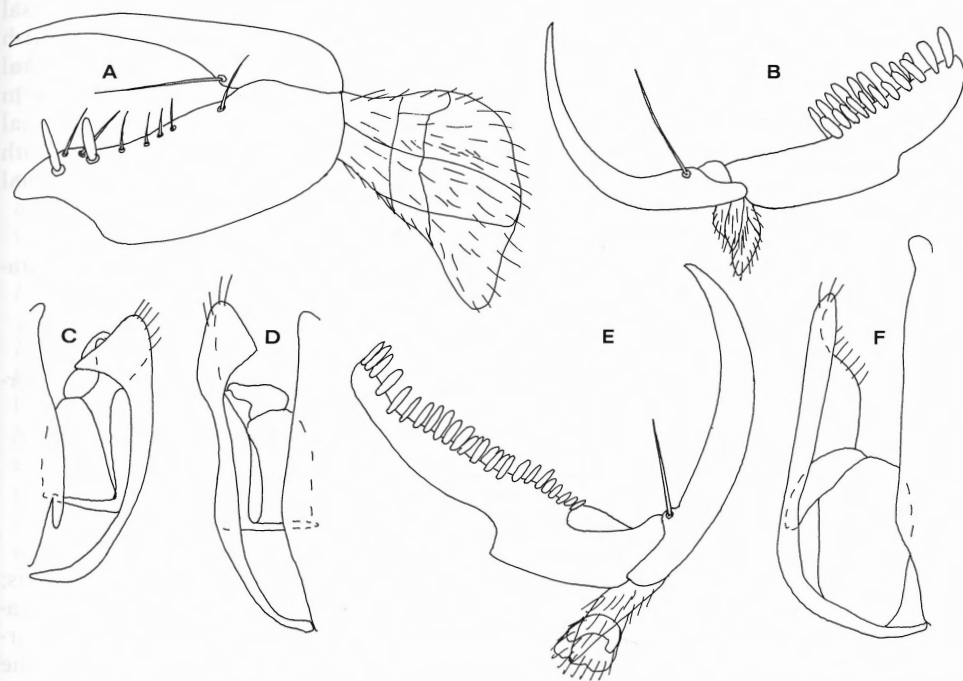


Fig. 17 - Chela of *Anteon austini* n. sp. (holotype) (A), *achterbergi* n. sp. (holotype) (B), *bauense* Olmi from Wushe (E); male genitalia of *Anteon sulawesianum* n. sp. (holotype) (C), *parapriscum* n. sp. (holotype) (D), *peterseni* Olmi from Abatan (F).

Male: unknown

Locus typicus: Tanah Rata (Cameron H'lands, Malaya, Malaysia).

Typical material: holotype F! in BM.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, A.D. Austin; the holotype was collected along the edge of a rainforest on September 10-12, 1982.

***Anteon achterbergi* n. sp.**

Female: fully winged; length 2,62 mm; head black, with mandibles testaceous; antennae testaceous, with segments 8-10 black or brown; prothorax reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 14:6:6:4:4:5:5:5:4,5:7; head shiny, with frons reticulate rugose; vertex almost fully smooth, not reticulate rugose, with two oblique keels connecting posterior ocelli to occipital carina; frontal line complete; frons with two lateral keels around the orbits; occipital carina complete; POL = 7; OL = 5; OOL = 5; OPL = 4; TL = 5; pronotum shiny, smooth, without sculpture, raised into a transversal carina between anterior and posterior surface; pronotal tubercles reaching tegulae; anterior surface approximately as long as posterior surface; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, only visible near the anterior margin of the scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing with two dark transversal bands beneath the pterostigma and on the basal cells; distal part of radial vein shorter than proximal part (2,5:5,5); fore tarsal segments in following proportions: 6:2:2,5:4,5:12; enlarged claw (Fig. 17 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 17 B) with two rows of approximately 22 lamellae, without interruption to the apex; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Bhujung - Tara Farm (m 875, Doddagubbi, nr. Bangalore, Karnataka, India).

Typical material: holotype F! in LE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, C. van Achterberg; the holotype was collected on October 23, 1986.

***Anteon sulawesianum* n. sp.**

Female: unknown

Male: fully winged; length 1,43-1,93 mm; head black, with mandibles testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 7:4:5:4,5:4,5:4,5:4:4,5:4:6; head shiny, punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 4; OL = 2; OOL = 4; OPL = 1,5; TL = 2; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,65 length of scu-

tum; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose, posterior surface with two longitudinal keels; median area shiny, almost fully smooth; lateral areas weakly rugose, shiny; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2,5:6); gonoforceps (Fig. 17 C) with a distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 00°34'N 123°54'E (Maze Toraut River, m 220, Dumoga - Bone National Park, N Sulawesi, Indonesia).

Typical material: holotype M! and 3 paratypes MM! in LE; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by a malaise trap by C. van Achterberg on November 1-9, 1985 (holotype and 3 paratypes) and on November 9-15, 1985 (a paratype).

***Anteon parapriscum* n. sp.**

Female: unknown

Male: fully winged; length 1,87 mm; head black, with mandibles testaceous; antennae brown, with segment 1 testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 9:5,5:7:7:6,5:6,5:7:6,5:6,5:9; head shiny, punctate, without sculpture among the punctures; frontal line incomplete, not visible near clypeus; occipital carina complete; POL = 4; OL = 2; OOL = 5; OPL = 3; TL = 3; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6-0,7 length of scutum; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:8); gonoforceps (Fig. 17 D) with a distal inner rounded process; tibial spurs 1, 1, 2.

Locus typicus: Khaochang (m 200-400, Khaophappa, Trang Prov., Thailand).

Typical material: holotype M! in B; 1 paratype M! in LE; 1 paratype M! in OL.

Distribution: THAILAND: Khaochang (m 200-400, Khaophappa, Trang Prov.), B! PHILIPPINES: M. Katanglad (m 1480, Bukidnon, Mindanao), OL! MALAYSIA: Near Long Pa Sia (west) (m 1020, SW Sabah), LE!

Notes: the holotype was collected by G.A. Samuelson on January 3, 1964; the paratype from the Philippines was collected by L.W. Quate on October 27-31, 1959; the paratype from Sabah was collected by a malaise trap by C. van Achterberg on April 1-14, 1987. This species is very near *A. priscum* n. sp.: the only difference is in the shape of the distal inner process of gonoforceps (rounded and not pointed).

***Anteon bauense* OLM 1984**

A. bauense was described only on the basis of male specimens. In the last years a series of male and female specimens from Taiwan was examined. The following description of the female can be proposed:

Female: fully winged; length 4,06-5,75 mm; black; mandibles testaceous; antennae testaceous, with segments 2-5 darkened; legs testaceous, with fore coxae, fore clubs of femora and hind coxae darkened; antennae distally thickened; antennal segments in following proportions: 13:6,5:12:9:8:8:8:8:11; head shiny, punctate, without sculpture among the punctures; anterior half of frons reticulate rugose; frontal line complete; occipital carina complete; POL = 6; OL = 4; OOL = 8; OPL = 5; TL = 8; breadth of ocelli: 3, pronotum shiny, punctate, without sculpture among the punctures, with posterior surface longer than anterior surface; posterior surface shorter than scutum (12:21); scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5-0,6 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area smooth, not rugose; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:15); fore tarsal segments in following proportions: 9:5:5:12:30; enlarged claw (Fig. 17 E) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 17 E) with two rows of approximately 25 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

A. bauense Olmi is known from the following localities: LAOS: Ban Van Eue (Vientiane Prov.), B! MALAYSIA: Bidi (Bau District, Sarawak), B! OL! Forest Camp (N Kalabakan, Sabah), B! Cameron Highland (Pahang, Malaya), BM! Tanah Rata (Cameron H'lands, Malaya), BM! Malaya University Field Study Center (16th mile, Gombak, Selangor, Malaya), TE! SRI LANKA: Udawattakele Sanct. (Kan. Dist.), WA! PHILIPPINES: Baroring Riv. (M. Apo, Mindanao), CM! Sibulan Riv. (M. Apo, Mindanao), OL! Tia Ridge (M. Apo, Mindanao), CM! Galog Riv. (M. Apo, Mindanao), CM! TAIWAN: Wulai (Taipei Hsien), B! Wu-feng, TW! Wushe, TW! Meifeng (m 2150), TW! TE!

***Anteon peterseni* OLMI 1984.**

Anteon peterseni Olmi was described on the basis of a male specimen. This only specimen had the abdomen damaged; in the revision of Olmi (1984) in fact the genitalia were not drawn.

In the last years a series of male specimens from the Philippines was examined. The drawing of the genital armature so can be proposed (Fig. 17 F).

A. peterseni is known from the following localities: PHILIPPINES: Pinigisan (Mantalingajan, Palawan), CO! Sibulan Riv. (M. Apo, Mindanao), OL! Abatan (m 1800-2000, Buguias, 60 Km S of Bontoc, Mountain Prov., Luzon), B! TAIWAN: Wu-feng, TW! Wushe, TW! Meifeng (m 2150), TW!

***Anteon borneanum* OLMI 1984**

Anteon borneanum Olmi was described only on the basis of a female specimen. In the last years a series of female and male specimens from the Philippines and Taiwan was examined. The description of the male can be proposed, as follows: *Male*: fully winged; length 1,62-3,00 mm; black; mandibles testaceous; antennae brown, with segments 1-2 testaceous; legs testaceous, with hind coxae partly dar-

kened; antennae distally thickened (this character is uncommon; usually in fact the males of the *Anteon* have antennae not distally thickened); antennal segments in following proportions: 9:3,5:3:4,5:4,5:5:4,5:4:7; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 4,5; OL = 2,5; OOL = 5; OPL = 2; TL = 2; scutum shiny, granulated; occasionally scutum with only posterior half granulated and anterior half punctate and without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); gonoforceps (Fig. 18 A) shorter than penis, without distal inner pointed process; tibial spurs 1, 1, 2.

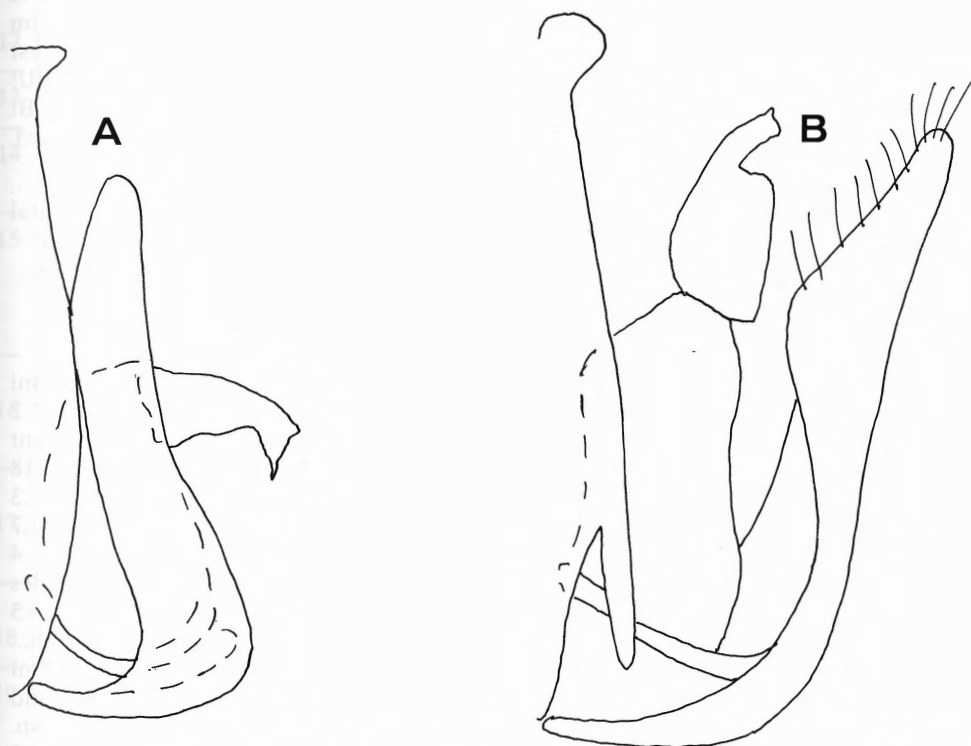


Fig. 18 - Male genitalia of *Anteon borneanum* Olmi from Abatan (A) and *hansonii* n. sp. (holotype) (B).

Anteon borneanum Olmi is now known from the following localities: MALAY-SIA: Nanga Pelagus (near Kapit, Sarawak), B! PHILIPPINES: Abatan (m 1800-2000, Buguias, 60 Km S of Bontoc, Mountain Prov., Luzon), B! TAIWAN: Wushe (m 1150), TW! AL! Meifeng (m 2150), TW!

Anteon javanum OLM1 1984

= *Anteon munroei* Olmi 1984: 439; n. syn.

Anteon javanum Olmi and *Anteon munroei* Olmi were considered different species, mainly because of the different colour and of the different ratio OPL/breadth of the ocelli. In the last years a series of female specimens from Sulawesi and Taiwan was examined. In these populations the colour and the ratio OPL/breadth of the ocelli showed a great variability. *A. munroei* is only a variety of *A. javanum*, without systematic value.

Anteon javanum Olmi is now known from the following localities: INDONESIA: Tijibodas (Java), BM! 00°44'N 124°27'E (m 1400, Gn. Ambang N. R., N Sulawesi), LE! 01°15'N 120°20'E (m 1100, nr. Dongi-Dongi shelter, Lore - Lindu N. P., C. Sulawesi), LE! LAOS: Ban Van Eue (Vientiane), B! Sayaboury (Sayaboury Prov.), B! OL! INDIA: Kodaikanal (Pulney Hills, S India), OT! CHINA: Tien Fong Mts (Hainan Island), BM! TAIWAN: Tseuy Feng, BM! OL! Wushe, TW! Meifeng (m 2150, Nantou Hsien), TE! TW! MALAYSIA: Fraser's Hill (Malaya), B! Pasoh Forest Reserve (Negri S., Malaya), TW! Sq. Kabah (Ng. Tada, 3d Div., Sarawak), BU! OL! THAILAND: Chiangdao, OL! Khaochang (Khaophappa, Trang Prov.), B! PHILIPPINES: Jacmal Bunhian (m 800-1000, 24 Km E Mayoyao, Ifugao Prov.), B! OL!

After the description of the above new species a new key to the Oriental *Anteon* can be proposed, as follows:

FEMALES

- 1 Segment 4 of front tarsus at most 0,5 as long as segment 1 (Fig. 260 in Olmi 1984).....2
- Segment 4 of front tarsus slightly shorter, as long as, or longer than segment 4 (Fig. 277 in Olmi 1984).....18
- 2 Posterior surface of propodeum without longitudinal keels.....3
- Posterior surface of propodeum with two longitudinal keels.....7
- 3 Scutum fully reticulate rugose and granulated.....4
- Scutum not fully reticulate rugose, at most with irregular keels on the sides of the notaulices.....5
- 4 Notaulices absent; scutellum and metanotum smooth, without sculpture....25. *metuendum* Olmi
- Notaulices reaching approximately 0,25 length of scutum; scutellum and metanotum rugose.....29. *maai* n. sp.
- 5 Scutum punctate, without sculpture among the punctures; arolium (Fig. 15 D) very large, approximately as long as enlarged claw.....42. *wushense* n. sp.
- Scutum granulated, occasionally with irregular keels on the sides of the notaulices; arolium (Fig. 13 E) small, much shorter than enlarged claw...6
- 6 Segment 5 of front tarsus with an inner large expansion (Fig. 13 E).....34. *spenceri* n. sp.
- Segment 5 of front tarsus without a large inner expansion (Fig. 260 in Olmi 1984).....1. *borneanum* Olmi

- 7 Head black, with anterior half of frons, clypeus and mandibles testaceous.....37. *dignum* n. sp.
— Head black, only with mandibles testaceous.....8
8 Head fully strongly reticulate rugose.....9
— Head at most with irregular keels or only with vertex reticulate rugose; never fully reticulate rugose.....12
9 Scutum sculptured by longitudinal keels; scutellum smooth, weakly punctate.....21. *philippinum* Olmi
— Scutum and scutellum without longitudinal keels.....10
10 Scutum and scutellum strongly punctate, with very wide impressions similar to areolae.....2. *thai* Olmi
— Scutum and scutellum finely punctate, smooth.....11
11 Posterior surface of pronotum approximately 0,5 as long as scutum; fore wing weakly fully yellow.....30. *tarsale* N. Ponomarenko
— Posterior surface of pronotum approximately 0,3 as long as scutum; fore wing fully hyaline.....49. *austini* n. sp.
12 Posterior surface of propodeum with median area as rugose as lateral areas...13
— Posterior surface of propodeum with median area smooth, not rugose...17
13 Head with POL approximately as long as OOL, or shorter or slightly longer...14
— Head with POL approximately twice as long as OOL.....16
14 Chela with arolium very large, approximately as long as enlarged claw (Fig. 15 D).....43. *wushense* n. sp.
— Chela with arolium much smaller than enlarged claw (Fig. 16 F).....15
15 Segment 5 of front tarsus with apical part approximately as long as basal part, or slightly shorter, or slightly longer (Fig. 263 in Olmi 1984); antennae longer.....3. *silvicolum* Olmi
— Segment 5 of front tarsus with apical part much shorter than basal part (Fig. 16 F); antennae shorter.....48. *amritodiphagum* n. sp.
16 Notaulices shorter, approximately reaching 0,3 length of scutum.....22. *viraktamathi* Olmi
— Notaulices longer, approximately reaching 0,6 length of scutum.....35. *yoshimotoi* n. sp.
17 Head punctate, without sculpture among the punctures.....4. *indicum* Olmi
— Head punctate, weakly granulated and with weak irregular keels.....5. *mysorensis* Olmi
18 Posterior surface of propodeum without longitudinal keels.....19
— Posterior surface of propodeum with two longitudinal keels.....25
19 Segment 5 of front tarsus laterally expanded and forming a wide lamina (Fig. 20 in Olmi 1987a).....23. *laminatum* Olmi
— Segment 5 of front tarsus laterally not expanded (Fig. 17 B).....20
20 Head granulated, not rugose, without areolae and keels (at most with frontal line and two frontal lateral keels near orbits).....21
— Head at least partly rugose, not granulated, with areolae and keels (in addition to the frontal line and two lateral keels near orbits).....22
21 Scutum shiny, without sculpture.....6. *yasumatsui* Olmi
— Scutum dull, fully granulated.....27. *malaysianum* Olmi
22 Pronotum raised into a transversal carina between anterior and posterior half.....50. *achterbergi* n. sp.

- Pronotum not raised into a transversal carina between anterior and posterior half.....23
- 23 Segment 1 of front tarsus approximately as long as segment 4.....
.....7. *sarawaki* Olmi
- Segment 1 of front tarsus much shorter than segment 4.....24
- 24 Notaulices shorter, faintly visible near anterior margin of scutum; head not reticulate rugose on the sides of the ocellar triangle.....
.....8. *bengalense* Olmi
- Notaulices longer, reaching approximately 0,5 length of scutum; head fully reticulate rugose.....9. *krombeini* Olmi
- 25 Head smooth, more or less punctate, without sculpture among the punctures, not reticulate rugose.....26
- Head fully or partly reticulate rugose.....29
- 26 Segment 4 of front tarsus approximately twice as long as segment 1.....
.....13. *javanum* Olmi
- Segment 4 of front tarsus as long as, or less than twice as long as segment 1.....27
- 27 Head with OPL twice or almost twice as long as breadth of the posterior ocelli.....14. *lankanum* Olmi
- Head with OPL at most 1,5 times as long as breadth of the posterior ocelli.....28
- 28 Posterior surface of pronotum longer, longer than half of scutum.....
.....38. *provinciale* n. sp.
- Posterior surface of pronotum shorter, shorter than half of scutum.....
.....44. *fidum* n. sp.
- 29 Fore wing hyaline, without dark transversal bands.....30
- Fore wing with 1-2 dark transversal bands.....36
- 30 Head fully reticulate rugose.....10. *muiiri* Olmi
- Head partly reticulate rugose, partly smooth.....31
- 31 Segment 5 of front tarsus with basal region not much longer or not much shorter than apical region, approximately as long as, or slightly shorter or slightly longer (Figs. 14 B, 16 B).....32
- Segment 5 of front tarsus with basal region much longer or much shorter than apical region (Fig. 275 in Olmi 1984; Fig. 15 E).....33
- 32 Segment 4 of front tarsus shorter than segment 1.....36. *acre* n. sp.
- Segment 4 of front tarsus as long as segment 1.....45. *insertum* n. sp.
- 33 Segment 5 of front tarsus with basal part much longer than apical part (Fig. 15 E).....43. *confusum* n. sp.
- Segment 5 of front tarsus with basal part much shorter than apical part (Fig. 275 in Olmi 1984).....34
- 34 Posterior surface of propodeum with median area smooth and without sculpture.....19. *bauense* Olmi
- Posterior surface of propodeum with median area as rugose as lateral areas....35
- 35 Head punctate, reticulate rugose only on anterior half of frons; posterior surface of pronotum much longer than anterior surface.....
.....26. *naduense* Olmi
- Head almost fully reticulate rugose, only with a smooth area in front of the ocelli; posterior surface of pronotum as long as anterior surface.....
.....24. *flaccum* Olmi

- 36 Pronotum fully smooth, without sculpture or weakly punctate.....11. *laotianum* Olmi
— Dorsal surface of pronotum strongly reticulate rugose.....12. *fyanense* Olmi

MALES

- 1 Posterior surface of propodeum without longitudinal keels.....2
— Posterior surface of propodeum with two longitudinal keels.....8
2 Gonoforceps with a distal inner pointed process (Fig. 281 in Olmi 1984)...
.....15. *nemorale* Olmi
— Gonoforceps without distal inner process (Figs. 270, 282 in Olmi 1984)...3
3 Scutum fully reticulate rugose; notaulices invisible.....16. *silvestre* Olmi
— Scutum without sculpture or punctate or granulated, never reticulate rugose,
occasionally partly reticulate rugose; notaulices visible.....4
4 Scutum granulated.....1. *borneanum* Olmi
— Scutum punctate or without sculpture, not granulated; occasionally partly
reticulate rugose.....5
5 Head dull, smooth, granulated.....6. *yasumatsui* Olmi
— Head shiny, rugose, with areolae and irregular keels.....6
6 Notaulices almost reaching the posterior margin of the scutum.....
.....7. *sarawaki* Olmi
— Notaulices reaching at most 0,5 length of scutum.....7
7 Head with OPL slightly shorter than OOL.....9. *krombeini* Olmi
— Head with OPL much shorter than OOL, approximately 0,5 as long as OOL
.....2. *thai* Olmi
8 Posterior surface of propodeum with median area smooth, almost fully not
rugose.....9
— Posterior surface of propodeum with median area as rugose as lateral
areas.....18
9 Gonoforceps with a distal inner pointed or rounded process (Figs. 13 C, 16
D, 16 E, 17 C).....10
— Gonoforceps without distal inner process (Figs. 283, 285 in Olmi 1984).....14
10 Notaulices reaching approximately 0,6-0,8 length of scutum.....11
— Notaulices reaching approximately 0,3-0,5 length of scutum.....13
11 Gonoforceps with distal inner process rounded (Fig. 13 C).....
.....32. *quatei* n. sp.
— Gonoforceps with distal inner process pointed (Figs. 16 E, 17 C).....12
12 Frontal line absent.....51. *sulawesiannum* n. sp.
— Frontal line incomplete, shortly visible in front of the anterior ocellus.....
.....47. *taiwanense* n. sp.
13 Distal inner process of gonoforceps medial (Fig. 266 in Olmi 1984).....
.....5. *mysorense* Olmi
— Distal inner process of gonoforceps apical (Fig. 16 D).....
.....46. *meifenganum* n. sp.
14 Notaulices reaching approximately 0,5 length of scutum.....15
— Notaulices reaching at least 0,65 length of scutum.....17
15 Head fully or almost fully reticulate rugose.....17. *expolitum* Olmi
— Head fully or almost fully punctate, not reticulate rugose.....16

16 Gonoforceps approximately as long as penis (Fig. 17 F).....	18. <i>peterseni</i> Olmi
— Gonoforceps much shorter than penis (Fig. 15 C).....	41. <i>autumnale</i> n. sp.
17 Gonoforceps approximately as long as penis (Fig. 284 in Olmi 1984).....	19. <i>bauense</i> Olmi
— Gonoforceps much shorter than penis (Fig. 285 in Olmi 1984).....	20. <i>debile</i> Olmi
18 Head punctate or granulated, not reticulate rugose.....	19
— Head fully or partly reticulate rugose.....	23
19 Head fully granulated.....	20
— Head fully punctate, not granulated.....	21
20 Gonoforceps approximately as long as penis (Fig. 15 A).....	39. <i>luzonense</i> n. sp.
— Gonoforceps much shorter than penis (Fig. 15 B).....	40. <i>abatanense</i> n. sp.
21 Gonoforceps without distal inner process (Fig. 278 in Olmi 1984).....	13. <i>javanum</i> Olmi
— Gonoforceps with a pointed or rounded distal inner process (Figs. 13 D, 17 D).....	22
22 Gonoforceps with a distal inner pointed process (Fig. 13 D).....	33. <i>priscum</i> n. sp.
— Gonoforceps with a distal inner rounded process (Fig. 17 D).....	52. <i>paraprisicum</i> n. sp.
23 Gonoforceps much shorter than penis (Fig. 262 in Olmi 1984).....	2. <i>thai</i> Olmi
— Gonoforceps approximately as long as penis (Fig. 13 B).....	24
24 Head mostly punctate and without sculpture among the punctures, with areolae only near orbits.....	23. <i>viraktamathi</i> Olmi
— Head fully reticulate rugose.....	25
25 Scutum fully smooth, punctate, without sculpture among the punctures....	28. <i>gauldi</i> Olmi
— Scutum with lateral and anterior regions reticulate rugose; central region smooth, punctate, without sculpture among the punctures.....	31. <i>pahanganum</i> n. sp.

GENUS ANTEON: NEARCTIC REGION

Anteon hansonii n. sp.

Female: unknown

Male: fully winged; length 2,5 mm; head black, with mandibles testaceous; antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen black; legs brown, with tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 8:5:6:5:5:6:6:6:10; head dull, strongly sculptured by numerous longitudinal keels on frons and on vertex; frontal line absent; occipital carina complete; POL = 7; OL = 4; OOL = 7; OPL = 4; TL = 7; scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum reticulate rugose, with a strong transversal

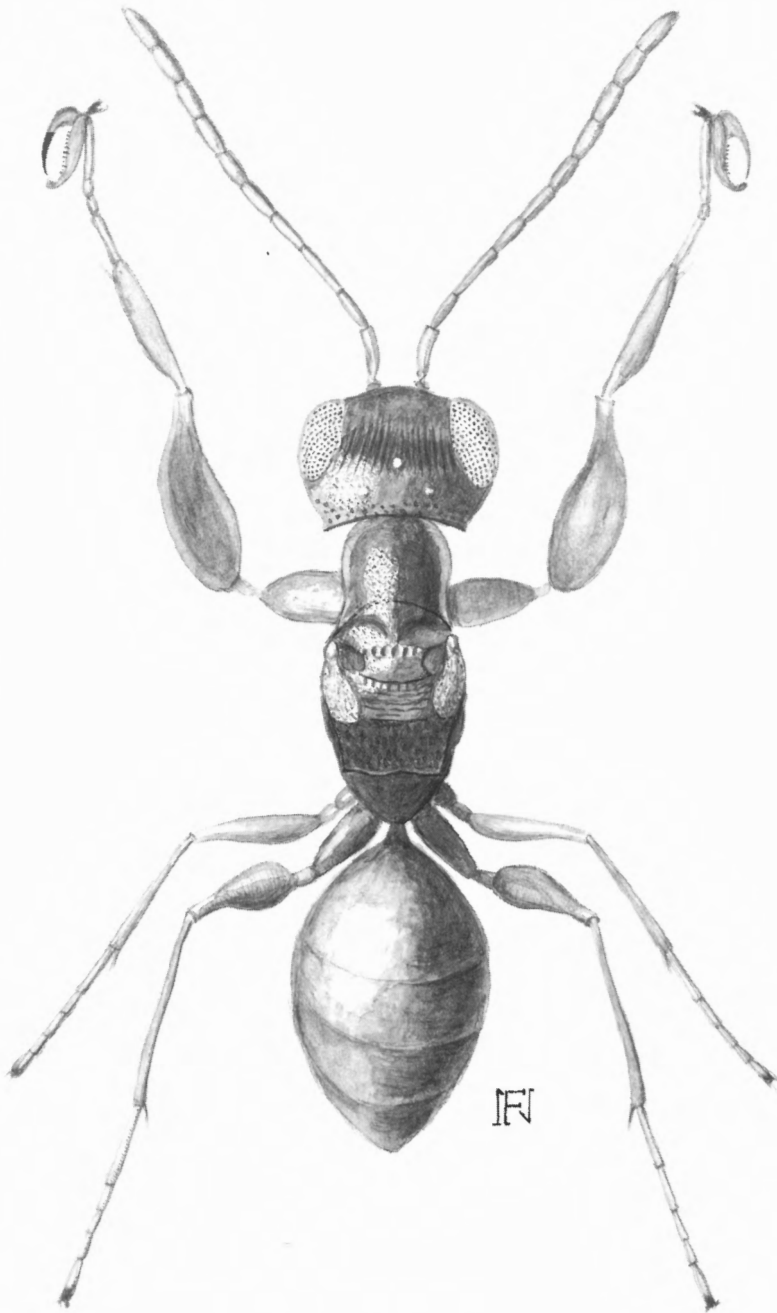


Fig. 19 - Female of *Anteon buntini* n. sp. (holotype).

keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median and lateral areas with wide smooth regions without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:10); gonoforceps (Fig. 18 B) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: La Bajada (San Blas, Nayarit, Mexico).

Typical material: holotype M! in HS.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, W.J. Hanson; the holotype was collected on March 20-21, 1983.

Anteon buntini n. sp.

Female (Fig. 19): micropterous; length 2,18 mm; fully testaceous; antennae distally thickened; antennal segments in following proportions: 7:4:6:5:4:4,5:4,5:5:4,5:7; head dull, weakly granulated, with numerous longitudinal striae on frons; vertex granulated, without longitudinal striae; frontal line absent; occipital carina complete; POL = 5; OL = 4; OOL = 5; OPL = 4; TL = 5; pronotum dull, granulated, weakly humped, without transversal impression, slightly longer than scutum (9:7); pronotal tubercles reaching tegulae; scutum dull, granulated; notaulices invisible; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore tarsal segments in following proportions: 5,5:1,5:3:3:9; fore tarsal segments not produced into hooks; enlarged claw (Fig. 20 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 20 A) with a row of approximately 20 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Pike Co. (Georgia, U.S.A.).

Typical material: holotype F! in CH.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, David Buntin; the holotype was collected on bermuda grass on September 1, 1985.

Anteon ciudad Olmi 1984

Anteon ciudad Olmi was described only on the basis of male specimens. In the last years a series of male and female specimens from Mexico was examined. The following description of the female can be proposed:

Female: fully winged; length 1,87-2,00 mm; head black, with mandibles testaceous; antennae black, with segment 1 testaceous; thorax, propodeum and abdomen black; fore legs testaceous; mid and hind legs black, with mid coxae testaceous; antennae distally thickened; antennal segments in following proportions: 9:4:6:4,5:4:4:4:4,5:4:6; head shiny, punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 3; TL = 4; pronotum with anterior surface approximately as long as posterior surface; anterior surface strongly rugose; posterior surface smooth, shiny, without sculpture, shorter than scutum (3:14); pronotal tubercles reaching tegulae; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices

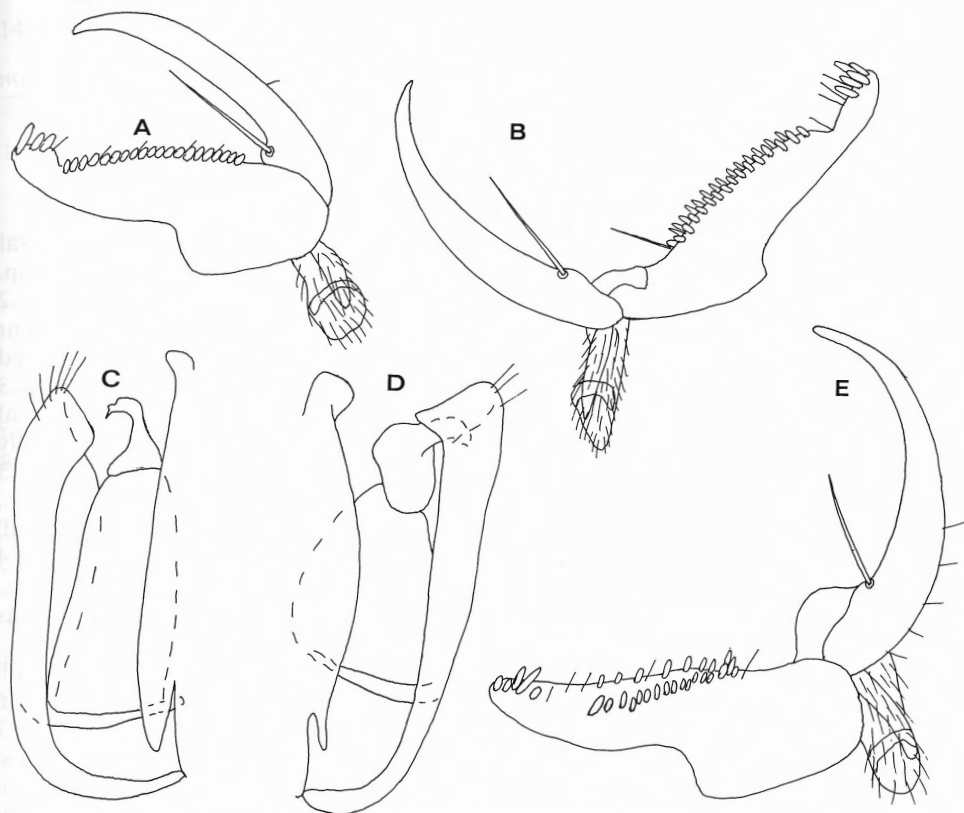


Fig. 20 - Chela of *Anteon buntini* n. sp. (holotype) (A), *ciudad Olmi* from El Colli (B), *translucens* n. sp. (holotype) (E); male genitalia of *Anteon huybenszi* n. sp. (holotype) (C) and *palanquense* n. sp. (holotype) (D).

incomplete, reaching approximately 0,3-0,4 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median area shiny, at least partly smooth; lateral areas rugose; fore wing with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (3:7); fore tarsal segments in following proportions: 6:2:2:4:10; enlarged claw (Fig. 20 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 20 B) with two rows of approximately 31 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

A. ciudad now is known from the following localities: U.S.A.: Pinehurst (Oreg.), TW! MEXICO: La Ciudad (Durango), OT! El Colli (m 1620, Guadalajara, Jalisco), OL!

The material from El Colli (MEXICO) was sent by Mr. Gustavo Moya Raygoza, from Chapingo (Mexico). He reared *A. ciudad* from *Dalbulus quinquenotatus* De Long & Nault (*Cicadellidae Deltoccephalinae Macrostelini*) (see also Moya Raygoza 1990).

Many thanks to Mr. G. Moya Raygoza for his help.

After the descriptions of the above new species the key to the Nearctic *Anteon* must be modified, as follows:

FEMALES

- 1 Species micropterous, with fore wing very short, reaching only the dorsal surface of propodeum.....19. *buntini* n. sp.
- Species fully winged.....2
- 2 Segment 5 of front tarsus with basal part longer than apical part; segment 4 of front tarsus at most 0,5 as long as 1; front tarsal segments 3 or 4 produced into a hook.....3
- Segment 5 of front tarsus with basal part as long as, or shorter than apical part; segment 4 of front tarsus at least 0,66 as long as segment 1; usually front tarsal segment 2 produced into a hook.....5
- 3 Posterior surface of propodeum without longitudinal keels.....1. *popenoei* (Ashmead)
- Posterior surface of propodeum with two longitudinal keels.....4
- 4 Notaulices reaching approximately 0,5 length of scutum.....2. *arizonense* Perkins
- Notaulices reaching at most 0,3 length of scutum.....3. *canadense* (Ashmead)
- 5 Posterior surface of propodeum without longitudinal keels.....6
- Posterior surface of propodeum without two longitudinal keels.....7
- 6 Prothorax black.....5. *funestum* (Perkins)
- Prothorax reddish.....6. *wasbaueri* Olmi
- 7 Fore and hind wings fully dark.....4. *nebulosum* Olmi
- Hind wings always hyaline; fore wings hyaline or with a dark spot, or fully slightly darkened.....8
- 8 Fore wings with a dark spot beneath the pterostigma.....14. *ciudadi* Olmi
- Fore wings hyaline or fully slightly darkened.....9
- 9 Antennal segment 2 as long as segment 3.....7. *minimum* (Fenton)
- Antennal segment 2 shorter than segment 3.....10
- 10 Segment 4 of front tarsus approximately twice as long as segment 1.....11
- Segment 4 of front tarsus as long as, or slightly longer than segment 1.....13
- 11 Head smooth, weakly punctate, without irregular keels; head and thorax mostly testaceous.....8. *masoni* Olmi
- Head granulated or rugose and punctate; frons and vertex with or without numerous irregular keels; head and thorax black or partly testaceous...12
- 12 Head granulated; head and thorax black or partly testaceous.....10. *puncticeps* Ashmead
- Head rugose; frons and vertex with or without numerous irregular keels; head and thorax black.....9. *rugosiceps* Kieffer
- 13 Head dull, reticulate rugose or granulated and with or without irregular keels14
- Head shiny, punctate, without sculpture among the punctures.....15

- 14 Scutum smooth, punctate, without sculpture among the punctures.....10. *puncticeps* Ashmead
- Scutum almost fully sculptured by longitudinal and irregular keels.....17. *affine* Olmi
- 15 Pronotum fully smooth, weakly punctate, without sculpture among the punctures; head and thorax black, with prothorax yellow.....11. *xanthothorax* (Bradley)
- Pronotum rugose, with irregular keels on the anterior half; punctate on the posterior half; occasionally anterior half strongly rugose; head and thorax differently colored.....12. *osborni* (Fenton)

MALES

Anteon hansonii n. sp. is near *Anteon rugosiceps* Kieffer, in the key to the males of the Nearctic *Anteon* published by Olmi (1984, p. 451-452). That key can be modified as follows:

- 5 Head weakly punctate, smooth, shiny, without sculpture among the punctures
- 14. *ciudadii* Olmi
- Head reticulate rugose or strongly sculptured by longitudinal keels or granulated, not smooth.....5'
- 5' Head reticulate rugose and granulated.....9. *rugosiceps* Kieffer
- Head strongly sculptured by numerous longitudinal keels.....18. *hansonii* n. sp.

GENUS ANTEON: NEOTROPIC REGION

Anteon huybenszi n. sp.

Female: unknown

Male: fully winged; length 2,37 mm; black; mandibles testaceous; legs brown, with coxae partly testaceous; antennae not distally thickened; antennal segments in following proportions: 13:7:10:10:9:9:8,5:7:12; head dull, reticulate rugose; frontal line absent; occipital carina complete; frons without lateral keels; POL = 6; OL = 3; OOL = 7; OPL = 3; TL = 5; scutum shiny, punctate, without sculpture among the punctures; anterior surface of scutum more strongly punctate, near anterior margin partly reticulate rugose; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum shiny, smooth, without sculpture; metanotum dull, reticulate rugose; propodeum reticulate rugose; with a weak transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:14); gonoforceps (Fig. 20 C) with a distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 15 Km E Loja (m 2750, Loja Prov., Ecuador).

Typical material: holotype M! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, M. Huybensz; the holotype was collected on February 23, 1988.

Anteon palanquense n. sp.

Female: unknown

Male: fully winged; length 2,00-2,12 mm; head black, with mandibles testaceous; thorax and propodeum black; abdomen black; legs brown, with tibiae and tarsi testaceous; antennae not distally thickened, pectinate, with segments 3-7 produced into dorsal apophyses; antennal segments in following proportions: 9:5:5:4:4:5:5:5 (segment 10 missing in the only known specimen); head shiny, fully reticulate rugose; frontal line absent; occipital carina complete; clypeus chisel shaped; POL = 6; OL = 4; OOL = 5; OPL = 4; TL = 5; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,25 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area shiny, smooth, without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); gonoforceps (Fig. 20 D) with a distal inner pointed process, tibial spurs 1, 1, 2.

Locus typicus: Rio Palanque Research Station (Pichincha Prov., Ecuador).

Typical material: holotype M! in AL; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by a malaise trap by M. Sharkey and L. Masner in February, 1983.

Anteon translucens n. sp.

Female: fully winged; length 1,87-2,00 mm; fully testaceous, with petiole brown; antennae distally thickened; antennal segments in following proportions: 8:5:5:5:5:4:4,5:4,5:5:7; head shiny, fully (but weakly) reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 2; TL = 1,5; pronotum not forming a transversal raised carina, with margin (in lateral view) rounded; anterior surface of pronotum slightly longer than posterior surface (5:4), shorter than scutum (4:11); pronotum fully rugose; pronotal tubercles reaching tegulae; scutum shiny, smooth, without sculpture, except for some lateral areolae near tegulae; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum shiny, smooth, without sculpture; metanotum reticulate rugose; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:8); fore tarsal segments in following proportions: 6:2:2,5:4:11; enlarged claw (Fig. 20 E) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 20 E) with two rows of approximately 24 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Las Cumbres (Panama).

Typical material: holotype F! in AL; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by H. Wolda on March 18-24, 1979 (holotype) and on October 10-16, 1982 (paratype).

Anteon paucum n. sp.

Female: unknown

Male: fully winged; length 1,5 mm; mandibles testaceous; antennae and legs testaceous; abdomen brown; antennae not distally thickened; antennal segments in following proportions: 6:5:6:6:6:6:6:5,5:7; head dull, fully irregularly rugose; frontal line complete; occipital carina complete; POL = 4; OL = 2,5; OOL = 4; OPL = 3; TL = 3; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6); gonoforceps (Fig. 21 A) without distal inner pointed process, tibial spurs 1, 1, 2.

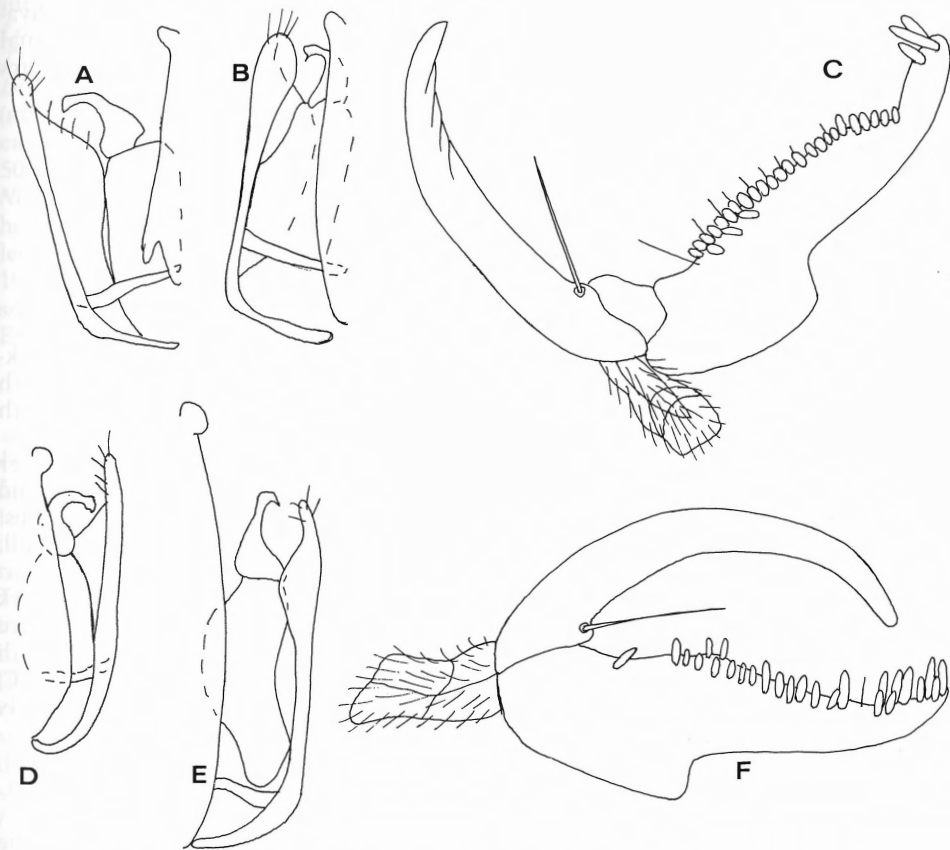


Fig. 21 - Male genitalia of *Anteon paucum* n. sp. (holotype) (A), *gracile* n. sp. (holotype) (B), *huggerti* n. sp. (holotype) (D), *mayanum* n. sp. (holotype) (E); chela of *Anteon araripense* n. sp. (holotype) (C) and *dulcicolum* n. sp. (holotype) (F).

Locus typicus: Itaum (Mato Grosso, Brazil),

Typical material: holotype M! in AL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by M. Alvarenga in March, 1974.

***Anteon gracile* n. sp.**

Female: unknown

Male: fully winged; length 2,06 mm; mandibles testaceous; antennae testaceous; legs testaceous, with clubs of femora and mid and hind tibiae darkened; antennae not distally thickened; antennal segments in following proportions: 7:5:5:5:4:5:5:5:8; antennal segment 9 approximately three times as long as broad; head fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 2; OOL = 4; OPL = 2; TL = 1; scutum, scutellum and metanotum smooth, shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area shiny, smooth, almost fully without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:6); gonoforceps (Fig. 21 B) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Puerto Maldonado (Madre de Dios Dept., Peru).

Typical material: holotype M! in AL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by L. Huggert on January 3, 1984.

***Anteon araripense* n. sp.**

Female: fully winged; length 2,00-2,12 mm; fully testaceous; antennae distally thickened; antennal segments in following proportions: 8:4:6:5:5:5:5:5:6; head shiny, with frons sculptured by numerous irregular and longitudinal striae; vertex smooth, with short weak striae; frontal line complete; occipital carina complete; POL = 4; OL = 2; OOL = 4; OPL = 2; TL = 4; pronotum dull, rugose, with posterior surface shorter than scutum (5:10); pronotal tubercles reaching tegulae; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; propodeum dull, reticulate rugose with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:10); fore tarsal segments in following proportions: 6:2:3:5:12; enlarged claw (Fig. 21 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 21 C) with two rows of approximately 30 lamellae; apex with a group of approximately 3 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Serrada Araripe (Crato, Ceará State, Brazil).

Typical material: holotype F! in AL!; 1 paratype F! in OL.

Distribution: BRAZIL: Serrada Araripe (Crato, Ceará State), AL! ECUADOR: Tinalandia (m 500, 16 Km SE Santo Domingo de los Colorados, Pichinca Prov.), OL!

Notes: the holotype was collected by M. Alvarenga in May, 1969; the paratype was collected by S. and J. Peck in June - August, 1985.

Anteon huggerti n. sp.

Female: unknown

Male: fully winged; length 1,43-2,56 mm; head black; with mandibles testaceous; antennae testaceous, with segments 3-10 or 8-10 darkened; thorax and propodeum black; abdomen brown; legs brown; occasionally legs fully testaceous or only tarsi testaceous; antennae thickened, with segment 9 less than twice as long as broad (3,5:2,5); antennal segments in following proportions: 7:3:3:3:2,5:3:3,5:3,5:3,5:5; head dull, fully reticulate rugose; areolae very broad; frontal line absent; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 2; TL = 4; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median and lateral areas smooth, without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (1,5:5); gonoforceps (Fig. 21 D) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Satipo (Junin Dept., Peru).

Typical material: holotype M! in AL; 1 paratype M! in DE; 2 paratypes MM! in OL.

Distribution: PERU: Satipo (Junin Dept.), AL! COLOMBIA: 30 Km E Buenaventura (m 560, Central de Anchicaya, Valle Dept.), DE! COSTA RICA: 24 Km W Piedras Blancas (m 200, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! Estacion Bijagoal (m 500, Carara Biological Reserve, Puntarenas Prov.), OL!

Notes: the species is named in honor of the collector of the holotype, L. Huggert; the holotype was collected on January 18, 1984; the paratype from Colombia was collected in a tropical very wet forest by a malaise trap by R.C. Wilkerson on July 14-16, 1975; the paratypes from Costa Rica were collected by malaise traps by Paul Hanson in March - May, 1989 (from 24 Km W Piedras Blancas) and in October, 1989 (from Estacion Bijagoal).

Anteon mayanum n. sp.

Female: unknown

Male: fully winged; length 1,81 mm; black; mandibles testaceous; legs brown, with tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 9:4:4:4:5:4,5:5:5:5:6,5; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 5; OPL = 3; TL = 3; scutum shiny, almost fully granulated, except for the anterior third, which is punctate and without sculpture among the punctures; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6); gonoforceps (Fig. 21 E) much shorter than penis, without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Panajachel (Guatemala).

Typical material: holotype M! in CA.

Distribution: only known from the typical locality.

Notes: the holotype was collected by D.Q. Cavagnaro and M.E. Irwin on August 19, 1963.

Anteon dulcicolum n. sp.

Female: fully winged; length 2,25 mm; head brown-black, with mandibles, genae, clypeus and anterior region of frons reddish-testaceous; antennae yellow-testaceous; prothorax reddish; mesothorax, metathorax and propodeum reddish-brown, with pleura and posterior margin of the propodeum reddish-testaceous; abdomen brown; legs yellow-testaceous; antennae distally thickened; antennal segments in following proportions: 10:5:7:6:5:5:5:5:5:5:8; head shiny, almost smooth, weakly reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 3; OPL = 4; TL = 3; pronotum shiny, rounded in lateral view, not raised into a transversal carina, with anterior surface smooth and without sculpture; posterior surface shorter than scutum (6:11), reticulate rugose, with posterior half without sculpture; pronotal tubercles reaching tegulae; scutum shiny, smooth finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:8); fore tarsal segments in following proportions: 6:2:2:5:12; enlarged claw (Fig. 21 F) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 21 F) with two rows of approximately 18 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 08°45'N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in March - May, 1989. This species is very near *A. traslucens* n. sp. from Panama; the only difference is concerning the colour of the body, fully yellow-testaceous in *A. traslucens* and partly brown or black in *A. dulcicolum*.

Anteon semirubrum n. sp.

Female: fully winged; length 3,62 mm; head fully reddish-testaceous; antennae testaceous; prothorax black, with posterior margin of pronotum reddish; mesothorax, metathorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 12:7:7,5:7,5:7,5:7:7:7:10,5; head dull, with frons reticulate rugose; vertex sculptured by weak irregular and longitudinal striae; frontal line absent; occipital carina complete; region of the head behind the posterior ocelli with two incomplete oblique longitudinal keels directed from the posterior ocelli to the occipital carina (as in *Deinodryinus*); POL = 4; OL = 4; OOL = 7; OPL = 9; TL = 7; pronotum hairy, with posterior surface flat and sculptured by strong transversal keels; posterior surface of pronotum shorter than scutum (13:20); pronotal tubercles reaching tegulae; scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dor-

sal and posterior surface; posterior surface with two longitudinal keels; median area partly smooth and partly rugose; lateral areas rugose; fore wing with a small dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (6:12); fore tarsal segments in following proportions: 10:3:4:10:21; enlarged claw (Fig. 22 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 22 A) with two rows of approximately 35 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

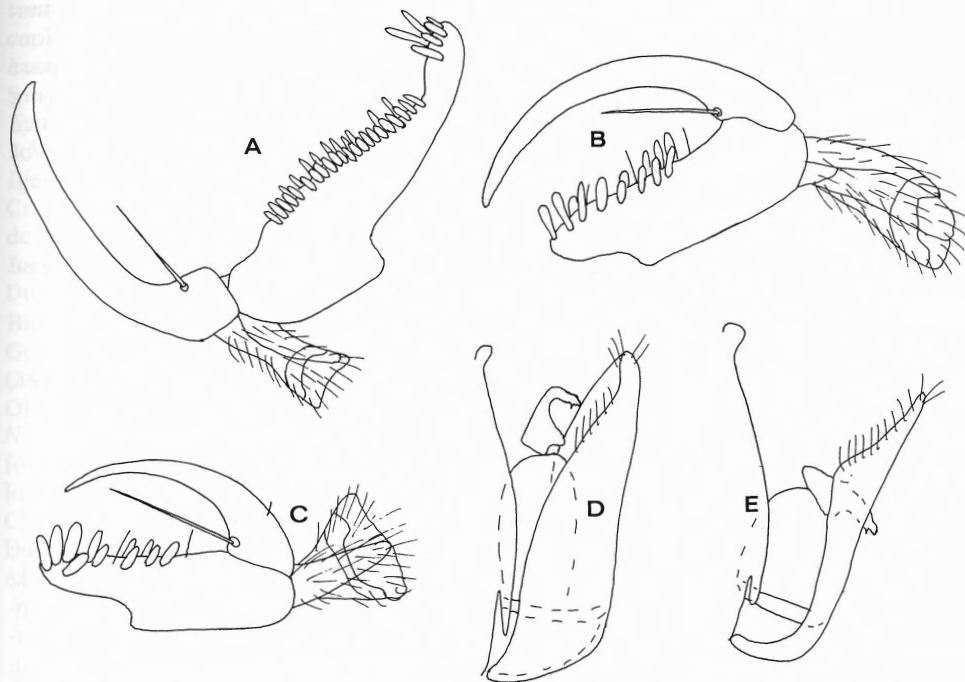


Fig. 22 - Chela of *Anteon semirubrum* n. sp. (holotype) (A), *nigrolucens* n. sp. (holotype) (B), *mirificum* n. sp. (holotype) (C); male genitalia of *Anteon mirificum* n. sp. (paratype from 6 Km NE S. Jeronimo de Moravia) (D) and *hortense* n. sp. (holotype) (E).

Male: known

Locus typicus: 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in June - July, 1988.

***Anteon nigrolucens* n. sp.**

Female: fully winged; length 3,12 mm; head black, with mandibles testaceous; antennae testaceous, with segments 7-10 brown; thorax and propodeum black; abdomen brown; legs testaceous, with hind coxae partly black; antennae distally

thickened; antennal segments in following proportions: 13:6:6:6:5:5,5:5,5:5,5:5:8; head strongly granulated; frons with two lateral longitudinal keels directed towards the antennal sockets; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 8; OPL = 3,5; TL = 6; pronotum dull, rounded in lateral view, not raised into a transversal carina, granulated, sculptured by strong transversal keels; posterior surface of pronotum shorter than scutum (5:17); pronotal tubercles reaching tegulae; scutum dull, strongly granulated; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, weakly granulated; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); fore tarsal segments in following proportions: 7:3:3:4:11,5; enlarged claw (Fig. 22 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 22 B) with two rows of approximately 20 lamellae, without interruption to the apex; inner side of segment 5 straight; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 20 Km S Empalme (m 2800, Cartago - San Isidro Road, San José Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in October, 1988.

***Anteon mirificum* n. sp.**

Female: fully winged; length 1,87-2,00 mm; head black, with mandibles testaceous; antennae testaceous, with segments 5-10 brown; thorax and propodeum black; abdomen brown; legs brown, with tarsi light; antennae distally thickened; antennal segments in following proportions: 7:3:3:3:2,5:3:3:3:3:5,5; head dull, granulated; frontal line complete; frons with two lateral keels directed towards the antennal sockets; POL = 4,5; OL = 3; OOL = 4; OPL = 3; TL = 4; pronotum dull, rugose, raised into a transversal carina, with posterior margin smooth and shiny; posterior surface of pronotum shorter than scutum (4:11) and as long as anterior surface; pronotal tubercles reaching tegulae; scutum dull, granulated; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (2:5); fore tarsal segments in following proportions: 4:1,5:1,5:2:8; enlarged claw (Fig. 22 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 22 C) with two rows of approximately 9 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 1,37-2,12 mm; head black, with mandibles testaceous; antennae brown, with segments 1-2 testaceous; occasionally only segment 1 testaceous; thorax and propodeum black; abdomen brown; legs testaceous; occasionally legs brown, with trochanters, tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 8:4:6:7:7:7:6:6:7;

head dull, with frons sculptured by numerous irregular longitudinal keels; vertex and lateral areas of the frons reticulate rugose; occasionally frons granulated and sculptured by numerous transversal keels; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 5; OPL = 3,5; TL = 5; scutum shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2,5:8); gonoforceps (Fig. 22 D) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov., Costa Rica).

Typical material: holotype F! and 10 paratypes (1 F, 9 MM)! in OL; 2 paratypes (1 F, 1 M)! in GC.

Distribution: COSTA RICA: 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov.), OL! 6 Km NE San Jeronimo de Moravia (m 1500, Carr. Carrillo, San José Prov.), OL! Rio Chitaria (m 750, NE of Jabillos, Cartago Prov.), GC! 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! Estacion Quebrada Bonita (m 50, Carara Biological Reserve, Puntarenas Prov.), OL! 11°00'N 85°26'W (Estacion Pitilla, m 700, Guanacaste Nat. Park, 9 Km S Santa Cecilia, Guanacaste Prov.), OL! 08°45' N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! E Sirena (Corcovado Nat. Park, m 50, Puntarenas Prov.), OL!

Notes: the typical material was collected by malaise traps by Paul Hanson (except for the paratypes from Estacion Pitilla collected by Ian Gauld in April, 1989); the following are the dates of collection: holotype: December, 1988; paratypes from Rio Chitaria: April 28, 1988; from San Jeronimo de Moravia: May 12, 1988; from Golfo Dulce For. Res.: February-March and March-April, 1989; from Corcovado Nat. Park: April-August, 1989; from Estacion Quebrada: May-June, 1989.

***Anteon hortense* n. sp.**

Female: unknown

Male: fully winged; length 1,50-2,06 mm; head black, with mandibles testaceous; antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen brown; legs testaceous, with hind tarsi, hind tibiae and hind femora darkened; antennae not distally thickened; antennal segments in following proportions: 7:4:5:5:5:5:4,5:4,5:7; head weakly granulated; frontal line absent; occipital carina complete; POL = 3,5; OL = 2; OOL = 4; OPL = 2; TL = 3; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); gonoforceps (Fig. 22 E) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov., Costa Rica).

Typical material: holotype M! and 1 paratype M! in OL.

Distribution: COSTA RICA: 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov.), OL! Administrative Building of the Braulio Carrillo National Park (m 1600, San José Prov.), OL!

Notes: the typical series was collected by malaise traps by Paul Hanson in May, 1988 (holotype) and in May - June, 1988 (paratype).

Anteon rugiscutum n. sp.

Female: unknown

Male: fully winged; length 2,31 mm; head black; mandibles brown; antennae brown; thorax and propodeum black; abdomen brown; legs brown, with trochanters, fore tibiae and mid and fore tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 12:7:7:6:6:6:6:6:9; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 5; OPL = 3; TL = 4; scutum dull, granulated and reticulate rugose; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum shiny, without sculpture; metanotum rugose; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:9); gonoforceps (Fig. 23 A) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Administrative Building of the Braulio Carrillo National Park (m 1600, San José Prov., Costa Rica).

Typical material: holotype M! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in May - June, 1988.

Anteon triste n. sp.

Female: fully winged; length 2,25-2,43 mm; head black; with mandibles testaceous; antennae testaceous, with segments 6-10 brown; thorax and propodeum black; abdomen brown; legs testaceous, with mid and hind femora and mid and hind tibiae darkened; antennae distally thickened; antennal segments in following proportions: 12:5:5:4:4:5:6:6:5,5:8; head dull, reticulate rugose; frontal line complete; two lateral longitudinal keels are visible on frons: they are directed towards the antennal sockets; occipital carina complete; POL = 5,5; OL = 2,5; OOL = 5; OPL = 3,5; TL = 4,5; pronotum dull, not raised or raised into a transversal carina, strongly rugose, except for the posterior margin smooth and shiny; posterior surface of pronotum much shorter than scutum (3:14); pronotal tubercles reaching tegulae; scutum dull, granulated, reticulate rugose near the anterior margin, with irregular keels in the whole surface; notaulices incomplete, shortly visible near the anterior margin of the scutum; scutellum shiny, smooth, without sculpture; metanotum partly rugose and partly smooth; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline or with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (3:7); fore tarsal segments in following proportions: 6:1,5:2:4:10; enlarged claw (Fig. 23 B) with a proximal prominence bearing a long bristle; segment 5 of front tar-

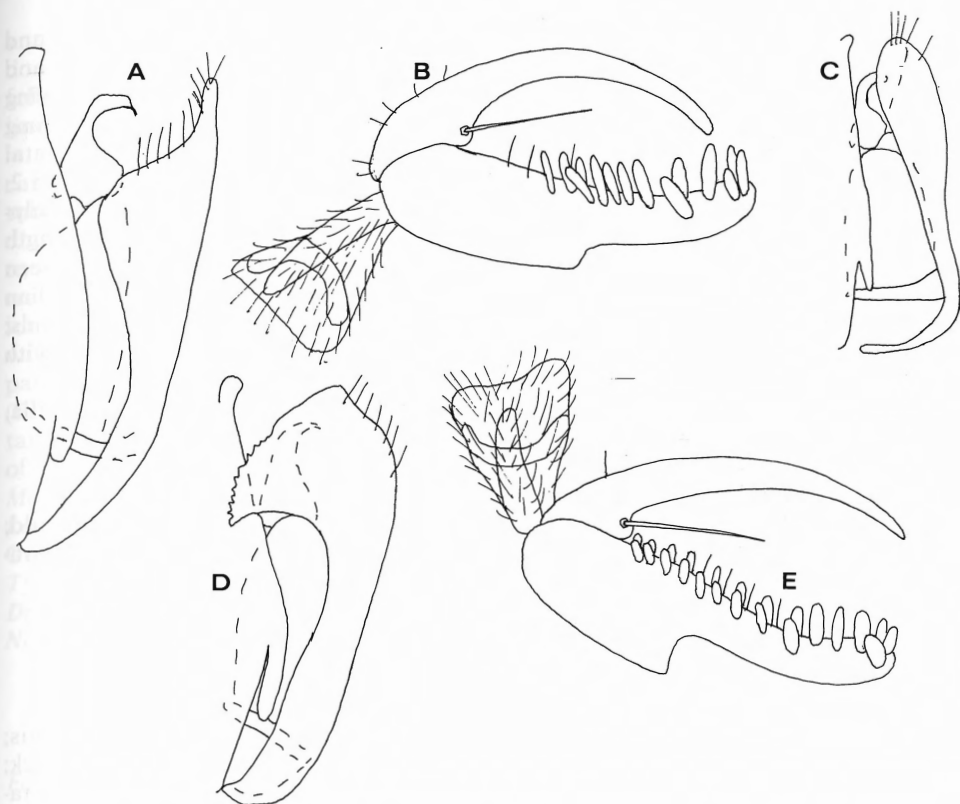


Fig. 23 - Male genitalia of *Anteon rugiscutum* n. sp. (holotype) (A), *gauldi* n. sp. (holotype) (C), *limonense* n. sp. (holotype) (D); chela of *Anteon triste* n. sp. (holotype) (B) and *sculptum* n. sp. (holotype) (E).

sus (Fig. 23 B) with two rows of approximately 11 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 10°04'N 84°00'W (Zurquí de Moravia, m 1600, San José Prov., Costa Rica).

Typical material: holotype F! and 3 paratypes FF! in OL.

Distribution: COSTA RICA: 10°04'N 84°00'W (Zurquí de Moravia, m 1600, San José Prov.), OL! 10°56'N 85°28'W (Estacion Mengo, m 1100, Guanacaste National Park, SW Volcán Cacao, Guanacaste Prov.), OL! 11°00'N 85°33'W (Cerro El Hacha, m 300, Guanacaste National Park, NW Volcán Orosí, Guanacaste Prov.), OL!

Notes: the typical series was collected by malaise traps by Paul Hanson in February, 1989 (holotype), in 1988-89 (paratype from Estacion Mengo) and in 1989 (paratype from Cerro El Hacha).

Anteon gauldi n. sp.

Female: unknown

Male: fully winged; length 1,37-2,12 mm; head black, with mandibles testaceous

and clypeus reddish-dark; antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen brown; legs testaceous, with mid and hind tibiae and hind femora darkened; antennae not distally thickened; antennal segments in following proportions: 8:4,5:6,5:4,5:5:5:6:5,5:5,5:9; head shiny, punctate, without sculpture among the punctures; anterior half of frons rugose; occasionally also vertex rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 4,5; OPL = 2; TL = 2,5; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); gonoforceps (Fig. 23 C) with an inner rounded apical process; tibial spurs 1, 1, 2.

Locus typicus: 11°00'N 85°26'W (Estacion Pitilla, m 700, 9 Km S Santa Cecilia, Guanacaste National Park, Guanacaste Prov., Costa Rica).

Typical material: holotype M! and 2 paratypes MM! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, Ian Gauld; the typical material was collected by malaise traps in April (holotype) and May (paratypes), 1989.

Anteon limonense n. sp.

Female: unknown

Male: fully winged; length 1,50-2,12 mm; head black, with mandibles testaceous; antennae brown, with segment 1 or 1-2 testaceous; thorax and propodeum black; abdomen brown; legs brown, with tarsi testaceous; occasionally also tibiae testaceous and tarsi brown; antennae not distally thickened; antennal segments in following proportions: 10:5:6:5:5:6:5,5:5,5:6:8; head shiny, with frons and vertex sculptured by irregular keels; frons with two lateral longitudinal keels directed towards the antennal sockets; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 3,5; OPL = 3; TL = 3,5; scutum, scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6,5); gonoforceps (Fig. 23 D) with a distal inner pointed process; apical margin of this process serrate; tibial spurs 1, 1, 2.

Locus typicus: 10°09'N 83°55'W (16 Km W Guápiles, m 400, Limón Prov., Costa Rica).

Typical material: holotype M! and 3 paratypes MM! in OL; 1 paratype M! in GC.

Distribution: only known from the typical locality.

Notes: the typical series was collected by malaise traps by Paul Hanson in March (holotype), March - May (2 paratypes) and April (2 paratypes), 1989.

Anteon sculptum n. sp.

Female: fully winged; length 2,31 mm; head black, with mandibles testaceous;

antennae brown, with segments 1-2 testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 10:6:7:5:5:5:6:5:5:8; head dull, fully reticulate rugose; frontal line absent; frons without lateral keels; occipital carina complete; POL = 6; OL = 3; OOL = 5; OPL = 3; TL = 4; pronotum dull, not raised into a transversal carina, with posterior surface very short, shorter than scutum (2:13); pronotal tubercles reaching tegulae; scutum shiny, fully sculptured by numerous longitudinal and parallel keels; notaulices invisible among the keels; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); fore tarsal segments in following proportions: 7:2:2:4,5:11; enlarged claw (Fig. 23 E) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 23 E) with two rows of approximately 19 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 10°56'N 85°28'W (Estacion Mengo, m 1100, SW Volcán Cacao, Guanacaste National Park, Guanacaste Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected in 1988-89.

***Anteon compactum* n. sp.**

Female: fully winged; length 3,00-3,06 mm; head black, with mandibles testaceous; antennae testaceous, with segments 5-10 or 6-10 brown; thorax, propodeum and abdomen black; legs black, with trochanters, fore coxae, mid and fore tarsi and fore tibiae testaceous; antennae distally thickened; antennal segments in following proportions: 14:6:4:3,5:5:5:6:5:5:6:8; head dull, granulated and reticulate rugose; frontal line complete; frons with two lateral keels around the orbits directed towards the antennal sockets; occipital carina complete; POL = 6,5; OL = 4; OOL = 6; OPL = 7; TL = 6; pronotum dull, granulated and rugose, with posterior surface shorter than scutum (7:17); pronotal tubercles reaching tegulae; scutum dull, strongly granulated; notaulices incomplete, very short, only visible near anterior margin of scutum; scutellum shiny, smooth, without sculpture; metanotum without sculpture, except for median area rugose; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (5:8); fore tarsal segments in following proportions: 9:2:2:3:11; enlarged claw (Fig. 24 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 24 A) with two rows of approximately 12 lamellae; apex with a group of approximately 3 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 10°56'N 85°28'W (Estacion Mengo, m 1100, SW Volcán Cacao, Guanacaste National Park, Guanacaste Prov., Costa Rica).

Typical material: holotype F! and 1 paratype F! in OL.

Distribution: COSTA RICA: 10°56'N 85°28'W (Estacion Mengo, m 1100, SW Vol-

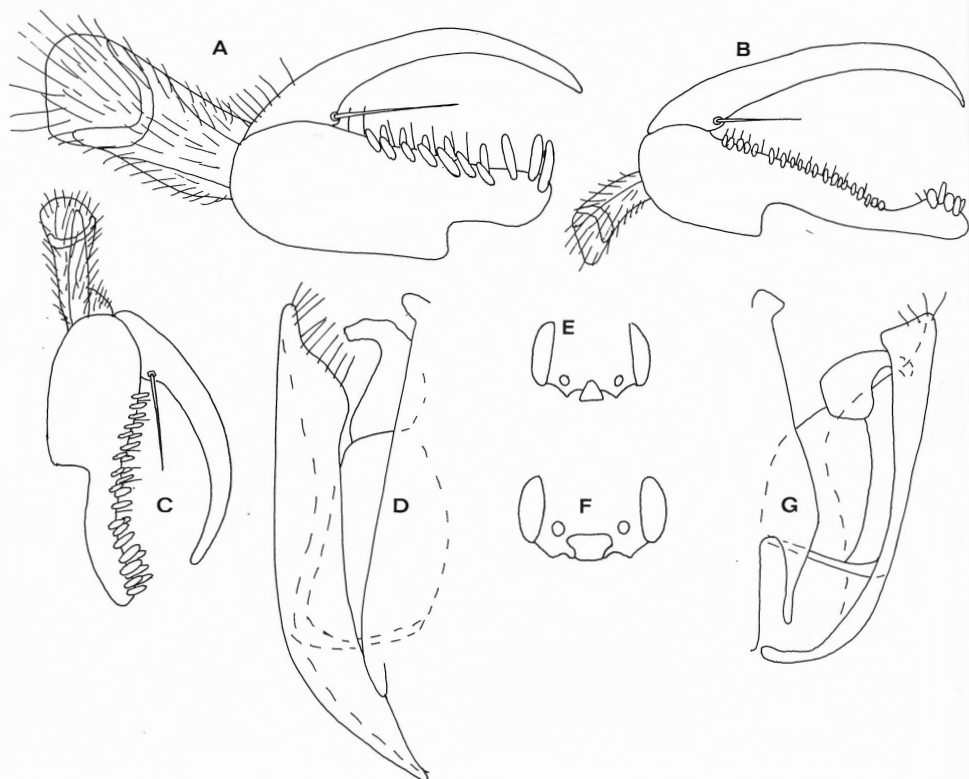


Fig. 24 - Chela of *Anteon compactum* n. sp. (holotype) (A), *habile* n. sp. (paratype) (B), *pernicosum* n. sp. (holotype) (C); male genitalia of *Anteon dominicanum* n. sp. (holotype) (D) and *guadeloupense* n. sp. (holotype) (G); clypeus of male of *Anteon guadeloupense* n. sp. (holotype) (E) and *chiriquense* (Cameron) from 16 Km W Guápiles (Costa Rica) (F).

cán Cacao, Guanacaste National Park, Guanacaste Prov.), OL! 11°00'N 85°33'W (Cerrp El Hacha, m 300, NW Volcán Orosí, Guanacaste National Park, Guanacaste Prov.), OL!

Notes: the holotype was collected in 1988-89; the paratype in 1988.

***Anteon habile* n. sp.**

Female: fully winged; length 2,00-2,62 mm; head black, with mandibles testaceous; antennae and legs testaceous; thorax, propodeum and abdomen black; antennae distally thickened; antennal segments in following proportions: 9:5:9:6:5:5:6:5:5:8; head shiny, strongly punctate, without sculpture among the punctures; anterior half of frons reticulate rugose; ocellar region with few irregular folds; occipital carina complete; frontal line absent; POL = 6; OL = 3,5; OOL = 6; OPL = 5; TL = 8; pronotum rounded in lateral view, not forming a raised transversal carina between anterior and posterior half; anterior surface of pronotum approximately as long as posterior surface; pronotal tubercles reaching tegulae; anterior

surface of pronotum rugose; posterior surface punctate and without sculpture among the punctures; scutum, scutellum and metanotum punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,25 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline or with a weak dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (4,5:9); fore tarsal segments in following proportions: 8:2:2,5:6:16; enlarged claw (Fig. 24 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 24 B) with a row approximately 20 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: S. Cristobal de las Casas (Chiapas, Mexico).

Typical material: holotype F! in AL; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by B.V. Peterson on June 18-25, 1969.

***Anteon perniciosum* n. sp.**

Female: fully winged; length 3,43 mm; head black, with mandibles testaceous; antennae brown; thorax, propodeum and abdomen black; legs testaceous, with hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 15:7:14:10:10:10:9:9:8:13; head dull, with frons sculptured by numerous longitudinal keels and with vertex punctate and without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 5; OL = 2,5; OOL = 10; OPL = 6; TL = 9; pronotum punctate and without sculpture among the punctures, with posterior margin smooth and without sculpture; posterior surface of pronotum shorter than scutum (8:19); pronotal tubercles reaching tegulae; scutum punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (10:15); fore tarsal segments in following proportions: 11:3:3:5,5:16; enlarged claw (Fig. 24 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 24 C) with two rows of approximately 18 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 09°38'N 83°48'W (Cerro de la Muerte, m 2800, 20 Km S Empalme, San José Prov., Costa Rica)

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in May - June, 1989.

***Anteon dominicanum* n. sp.**

Female: unknown

Male: fully winged; length 2,31-3,00 mm; black; antennae and mandibles testa-

ceous; antennae not distally thickened; antennal segments in following proportions: 11:6:9,5:8:7,5:8:7:7:7:11; head dull, fully reticulate rugose; frontal line absent; occipital carina complete; POL = 9; OL = 5; OOL = 10; OPL = 5; TL = 4; scutum dull, fully reticulate rugose; notaulices almost invisible, incomplete, reaching approximately 0,2 length of scutum; scutellum shiny, punctate, without sculpture among the punctures; metanotum rugose; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area almost fully smooth and without sculpture; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:12); gonoforceps (Fig. 24 D) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 21 Km N Cabo Rojo (Pedernales Prov., Dominican Republic).

Typical material: holotype M! and 1 paratype M! in DE; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the typical series was collected by a malaise trap by R.E. Woodruff and E.E. Grissell on June 19-20, 1976.

***Anteon guadeloupense* n. sp.**

Female: unknown

Male: fully winged; length 1,81 mm; black; antennae, mandibles and legs testaceous; antennae not distally thickened; antennal segments in following proportions: 8:5:5:5:5:5:5:5:5:8; head dull, reticulate rugose, with anterior half of the frons sculptured by numerous longitudinal striae; clypeus chisel shaped (Fig. 24 E); occipital carina complete; POL = 7; OL = 4; OOL = 4; OPL = 3; TL = 4; scutum shiny, punctate, without sculpture among the punctures; posterior half of the scutum weakly granulated; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); gonoforceps (Fig. 24 G) with a distal inner pointed process, tibial spurs 1, 1, 2.

Locus typicus: Castarel Forest (Petit Bourg, Domain Duclos, Guadeloupe).

Typical material: holotype M! in DE.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by W.H. Whitcomb on March 16, 1977.

***Anteon rogersi* n. sp.**

Female: unknown

Male: fully winged; length 2,56 mm; black; antennae, mandibles and legs testaceous, except for hind coxae partly brown; antennae pectinate, with segments 3-6 produced into dorsal apophyses; antennal segments in following proportions: 12:8:6:6:6:7:7:8:8:13; head dull, fully reticulate rugose; frontal line absent; clypeus chisel shaped; occipital carina complete; POL = 8; OL = 6; OOL = 7; OPL =

6; TL = 5; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area shiny, smooth, without sculpture; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:14); gonoforceps (Fig. 25 A) without distal inner pointed process; tibial spurs 1, 1, 2.

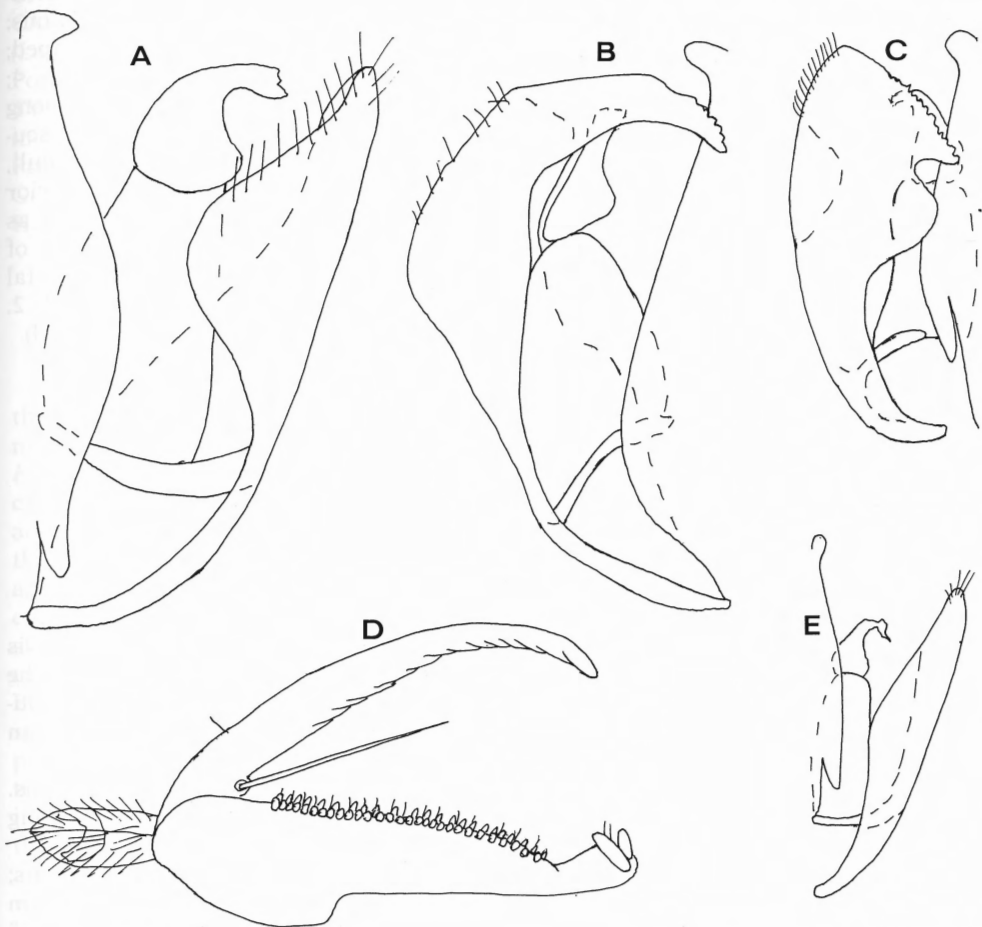


Fig. 25 - Male genitalia of *Anteon rogersi* n. sp. (holotype) (A), *paulense* n. sp. (holotype) (B), *albitarse* (Cameron) from Zurquí de Moravia (C), *dayi* Olmi from Farmer's Brigade (E); chela of *Anteon vivax* Olmi from Cerro de la Muerte (D).

Locus typicus: Casa Grande (Boraceia Field Station, Sao Paulo State, Brazil).

Typical material: holotype M! in DE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, T. Rogers; the holotype was collected on February 12, 1976.

***Anteon paulense* n. sp.**

Female: unknown

Male: fully winged; length 2,18 mm; black; mandibles brown, with teeth testaceous; antennae brown; legs brown, with tarsi and fore tibiae testaceous; antennae filiform, not distally thickened; antennal segments in following proportions: 10:5:5:5:5:5:5:6:5:5:8,5; head dull, reticulate rugose; clypeus not chisel shaped; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 2; TL = 2; scutum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); gonoforceps (Fig. 25 B) with a distal inner pointed process; apical margin of this process serrate; tibial spurs 1, 1, 2. *Locus typicus:* Casa Grande (Boraceia Field Station, Sao Paulo State, Brazil).

Typical material: holotype M! in DE.

Distribution: only known from the typical locality.

Notes: the holotype was collected by T. Rogers on February 12, 1976.

***Anteon abitarse* (CAMERON 1888)**

= *Anteon annulicornis* Brues 1905: 185; n. syn.

= *Anteon annulicorne* Brues: Olmi 1984: 511.

The synonymy with *Anteon annulicorne* Brues was established on the basis of the observation of variability of the sculpture of the pronotum: in fact the only difference was this sculpture (posterior surface of pronotum rugose or granulated in *albitarse*; without sculpture in *annulicorne*). Really this sculpture can vary, as observed in series of specimens from Costa Rica.

Anteon albitarse (Cameron) was known only on the basis of female specimens. In the last years male specimens from Costa Rica were examined. The following description of the male can be proposed:

Male: fully winged; length 1,81-2,37 mm; head black, with mandibles testaceous; antennae fully black or brown, with segment 1 testaceous; thorax, propodeum and abdomen black; abdomen occasionally brown; legs black or brown, with tarsi and fore tibiae testaceous; occasionally also mid and hind tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 13:7:8:8:7:8:8:7,5:7,5:9; head dull, fully reticulate rugose and granulated; frontal line absent; occipital carina complete; two lateral longitudinal keels directed towards the antennal sockets are visible on the frons; POL = 6; OL = 3; OOL = 5; OPL = 4; TL = 5; scutum dull, fully reticulate rugose; occasionally scutum granulated, with anterior half or only anterior margin rugose; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum

shiny, smooth, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:10); gonoforceps (Fig. 25 C) with a distal inner pointed process; apical margin of this process serrate; tibial spurs 1, 1, 2.

A. albitarse is now known from the following localities: VENEZUELA: Yacambú, OL! PANAMA: Las Lagunas (Chiriqui), AL! GUATEMALA: Panajachel, BM! TRINIDAD: St. Augustine (St. George), OL! BM! COLOMBIA: Cali (Valle Dept.), CA! ECUADOR: Quito — S. Domingo Road (Pichinca), TW! BOLIVIA: Chulumani (La Paz), BM! S. Fermin, CM! Coroico — Chulumani Road (La Paz), CM! BRAZIL: Pocos de Caldas (Minas Gerais), AL! COSTA RICA: S. Rosa Park (Guanacaste Prov.), TW! Carrizal (m 1800, Alajuela Prov.), GC! 10°04'N 84°00'W (Zurquí de Moravia, m 1600, San José Prov.), OL! 10°09'N 83°55'W (16 Km W Guápiles, m 400, Limón Prov.), OL! 10°56'N 85°28'W (Estacion Mengo, m 1100, SW Volcán Cacao, Guanacaste National Park, Guanacaste Prov.), OL! 11°00'N 85°33'W (Cerro El Hacha, m 300, NW Volcán Orosí, Guanacaste National Park, Guanacaste Prov.), OL!

***Anteon vivax* OLMI 1984**

Anteon vivax Olmi was described only on the basis of male specimens. In the last years a series of female and male specimens from Costa Rica was examined. The following description of the female can be proposed:

Female: fully winged; length 2,68-3,12 mm; head black, with mandibles, genae, clypeus and anterior third of the the frons testaceous; occasionally vertex of head and occiput testaceous; antennae testaceous, with segments 9-10 or 3-10 darkened; thorax, propodeum and abdomen black; occasionally posterior half of pronotum and posterior half of scutum testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 11:6:13:12:11:10:9:9:8:11; head shiny, smooth, punctate, without sculpture among the punctures; frontal line incomplete, only visible in the posterior half of the frons; occipital carina complete; POL = 5; OL = 2; OOL = 6; OPL = 4; TL = 7; pronotum with posterior surface smooth, punctate, without sculpture among the punctures; posterior surface of pronotum shorter than scutum (8:14); pronotal tubercles reaching tegulae; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (8:12); fore tarsal segments in following proportions: 10:3:3:8:17; enlarged claw (Fig. 25 D) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 25 D) with two rows of approximately 48 lamellae; apex with a group of approximately 2 lamellae; tibial spurs 1, 1, 2.

A. vivax Olmi is now known from the following localities: MEXICO: San Cristobal de las Casas (Chiapas), OT! COSTA RICA: 09°38'N 83°48'W (Cerro de la Muerte, m 2800, 20 Km S Empalme, San José Prov.), OL! GC! 16 Km SE Empalme (m 2600, Cartago - San Isidro Road, San José Prov.), OL!

Anteon panamense OLMÍ 1984

= *Anteon rosanum* Olmi 1987a: 399; n. syn.

Anteon panamense Olmi was described only on the basis of female specimens, whereas *Anteon rosanum* Olmi was described on the basis of male specimens. In the last years a series of male and female specimens from Costa Rica was examined. The study of material from Penas Blancas demonstrated that *A. rosanum* is the opposite sex of *A. panamense* (they have similar morphologic characters, but they were not reared).

A. panamense is known from the following localities: PANAMA: Las Cumbres, AL! Barro Colorado Island, LE! OL! BELIZE: Blue Creek (Toledo Distr.), AL! BRAZIL: Rio Javari (Estiro do Ecuador, Amazonas), AL! OL! PERU: Puerto Maldonado (Madre de Dios Dept.), AL! MEXICO: El Sumidero (Chiapas), HS! COSTA RICA: S. Rosa Park (Guanacaste Prov.), TW! OL! Penas Blancas (m 600, Guanacaste Prov.), AL! Jabillos (m 100, Alajuela Prov.), GC! Sotobosque (m 1100, W side Volcán Cacao, Guanacaste Prov.), OL! Chilamate (m 75, Heredia Prov.), OL! 4 Km NE Bribri (m 50, Limón Prov.), OL! 11°00'N 85°26'W (Estacion Pitilla, m 900, 9 Km S Santa Cecilia, Guanacaste National Park, Guanacaste Prov.), OL! 08°45'N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL!

Anteon pilicorne OGLOBLIN 1938

= *Anteon mexicanum* Olmi 1984: 499; n. syn.

The synonymy of *A. mexicanum* Olmi and *A. pilicorne* Ogloblin was established after study of numerous slides of male genitalia. The material was coming from Costa Rica. The distal inner rounded process (only difference between the males of the two species) is only the result of the crushing of the gonoforceps.

A. pilicorne is known from the following localities: ARGENTINA: La Plata (Buenos Aires), CM! OL! Burzaco (Buenos Aires), BM! General Urquiza (Buenos Aires), BA! BRAZIL: Estação Forestal (Cabeça do Veado, Distrito Federal), OL! OT! S.J. Barreiros (Serra da Bocaina), CM! Sao Paulo, AL! COLOMBIA: Penas Blancas (Valle Dept.), DE! MEXICO: Manzanillo (Colima), CM! Orizaba (Veracruz), CM! San Cristobal de las Casas (Chiapas), OT! OL! 3 mi. E Huatusco (Veracruz), TE! 31 mi. N Barra de Navidad (Jalisco), HS! 11 Km S Naupan (m 2000, Puebla), AL! 11,2 mi. N Iguala (Guerrero), TE! Puerto Vallarta (Jalisco), HS! JAMAICA: Blue Mt., OT! PERU: Machu Picchu (nr. Agua Caliente, Cuzco Dept.), TW! AL! VENEZUELA: Tabay, TW! OL! Yacambú, TW! 55 Km NE of San Cristobal (Tachira), OT! COSTA RICA: S. Rosa Park (Guanacaste Prov.), TW! OL! 10°18'N 84°48'W (Monteverde, m 1520, Puntarenas Prov.), AL! 08°02'N 83°00'W (S. Vito, Puntarenas Prov.), CM! 09°54'N 84°08'W (San Antonio de Escazú, m 1300, San José Prov.), OL! 9,5 Km NE Tunel (Braulio Carrillo National Park, m 1000, San José Prov.), OL! 09°38'N 83°48'W (Cerro de la Muerte, m 2600, 16 Km S Empalme, San José Prov.), OL! 10°56'N 85°28'W (Estacion Mengo, m 1100, SW Volcán Cacao, Guanacaste Prov.), OL!

Anteon lobatum OLMÍ 1984

= *Anteon bifrons* Olmi 1987a: 398; n. syn.

Anteon lobatum Olmi was described on the basis of female specimens, whereas *Anteon bifrons* Olmi was described on the basis of male specimens. The study of material from Costa Rica showed that *A. bifrons* is the opposite sex of *A. lobatum*. The two species in fact have similar morphologic characters (but they were not reared).

Anteon lobatum Olmi is known from the following localities: PANAMA: Gamboa (Canal Zone), LE! OL! Barro Colorado (Canal Zone), OL! COLOMBIA: 30 Km E Buenaventura (m 560, Central de Anchicaya, Valle Dept.), DE! Atuncela (Valle Dept.), DE! COSTA RICA: 08°45'N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! GC! 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! S. Rosa Park (Guanacaste Prov.), TW! OL! E Sirena (m 50, Corcovado National Park, Puntarenas Prov.), OL! Chiles de Aguas Zarcas (m 300, Café, Alajuela Prov.), OL! 10°18'N 84°48'W (Monteverde, m 1400, Puntarenas Prov.), OL! Estacion Quebrada Bonita (m 50, Carara Biological Reserve, Puntarenas Prov.), OL! Arenales (m 900, W side Volcán Cacao, Guanacaste Prov.), OL! 11°00'N 85°33'W (Cerro El Hacha, m 300, NW Volcán Orosí, Guanacaste Prov.), OL!

Anteon chiriquense (CAMERON 1888)

= *Anteon yon* Olmi 1987a: 400; n. syn.

Anteon chiriquense (Cameron) was described only on the basis of female specimens, whereas *Anteon yon* Olmi was described on the basis of male specimens. The study of male and female specimens from Costa Rica demonstrated that *A. yon* is the opposite sex of *A. chiriquense*. They have in fact similar morphologic characters (but they were not reared).

A. chiriquense is now known from the following localities: VENEZUELA: Yacambú, TW! PANAMA: Volcán de Chiriquí, BM! Barro Colorado Island (Canal Zone), OL! BOLIVIA: 10 Km E San Antonio (Rio Mamore, Beni Dept.), AM! BRAZIL: Nova Teutonia (S.ta Catarina), OT! 12°31'S 55°37'W (Sinop, Mato Grosso), TW! Taperinha (Pará), OL! Guanabara (Repressa Rio Grande), AL! ECUADOR: La Chiquita (11 Km SE San Lorenzo, Esmeralda), AL! COLOMBIA: Penas Blancas (Valle Dept.), DE! COSTA RICA: 10°09'N 83°55'W (16 Km W Guápiles, m 400, Limón Prov.), OL! 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! GC! 08°45'N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! 08°48'N 82°58'W (Jardín Botánico Wilson, m 1200, Las Cruces, 6 Km S of San Vito de Jaba, Puntarenas Prov.), OL! Tortuguero National Park (m 0, Limón Prov.), OL! Estacion Quebrada Bonita (m 50, Carara Biological Reserve, Puntarenas Prov.), OL!

After the description of the above new species a new key to the Neotropic *Anteon* must be proposed, as follows:

FEMALES

1 Segment 4 of front tarsus at most 0,5 as long as segment 1.....	2
— Segment 4 of front tarsus slightly shorter, as long as, or longer, than segment 1.....	10
2 Posterior surface of propodeum with two longitudinal keels.....	3
— Posterior surface of propodeum without longitudinal keels.....	4
3 Segment 5 of front tarsus with basal part much longer than distal part (Fig. 310 in Olmi 1984); scutum partly granulated and reticulate rugose; notaulices invisible.....	1. <i>clavatum</i> Olmi & Currado
— Segment 5 of front tarsus with basal part approximately as long as distal part (Fig. 24 C); scutum punctate, without sculpture among the punctures; notaulice visible, reaching approximately 0,4 length of scutum.....	49. <i>perniciosum</i> n. sp.
4 Scutum weakly punctate, without sculpture among the punctures.....	7. <i>oliveirai</i> Olmi
— Scutum fully strongly or weakly granulated.....	5
5 Frons granulated, not reticulate rugose.....	6
— Frons reticulate rugose.....	7
6 Fore wing hyaline, without dark transversal bands.....	39. <i>nigrolucens</i> n. sp.
— Fore wing with a dark spot beneath the pterostigma.....	40. <i>mirificum</i> n. sp.
7 Notaulices usually short, only visible near anterior margin of the scutum; scutum strongly granulated.....	8
— Notaulices longer, reaching approximately 0,3 length of scutum; scutum weakly granulated.....	9
8 Fore wing with a dark spot beneath the pterostigma.....	47. <i>compactum</i> n. sp.
— Fore wing hyaline, without dark transversal bands.....	6. <i>pilicorne</i> Ogloblin
9 Pronotum raised into a transversal carina between anterior and posterior half.....	28. <i>paraguayense</i> Olmi
— Pronotum not raised into a transversal carina between anterior and posterior half.....	24. <i>victor</i> Olmi
10 Posterior surface of propodeum without longitudinal keels.....	11
— Posterior surface of propodeum with two longitudinal keels.....	22
11 Fore wing hyaline, without dark transversal bands.....	12
— Fore wing with 1-2 dark transversal bands.....	18
12 Pronotum and head fully black, at most with mandibles testaceous.....	13
— Pronotum and head at least partly red or testaceous or whitish.....	15
13 Head fully granulated, not reticulate rugose, not sculptured by numerous irregular keels.....	18. <i>micros</i> Olmi
— Head granulated and reticulate rugose or sculptured by numerous areolae or irregular keels.....	14
14 Segment 5 of front tarsus with distal part much longer than basal part (Fig. 311 in Olmi 1984).....	2. <i>molle</i> Olmi
— Segment 5 of front tarsus with distal part approximately as long as basal part (Fig. 23 B).....	43. <i>triste</i> n. sp.
15 Head fully black, with mandibles testaceous.....	3. <i>nigrorubrum</i> Olmi

- Head at least partly testaceous or brown-reddish.....16
- 16 Scutum with anterior region smooth; posterior half rugose, dull, punctate, with irregular striae.....5. *jamaicanum* Olmi
- Scutum fully smooth, punctate and without sculpture among the punctures.....17
- 17 Body fully testaceous.....34. *araripense* n. sp.
- Body at least partly black.....4. *panamense* Olmi
- 18 Posterior surface of pronotum with two dorsal transversal lobes; posterior surface of propodeum smooth, shiny, weakly punctate, without sculpture among the punctures.....19
- Posterior surface of pronotum without dorsal lobes; posterior surface of propodeum dull, fully reticulate rugose or with transversal keels or granulated.....20
- 19 Head shiny, without sculpture or punctate and without sculpture among the punctures.....8. *noyesi* Olmi
- Head dull, granulated.....19. *surinamense* Olmi
- 20 Posterior surface of propodeum with anterior half smooth, granulated, and posterior half sculptured by transversal keels; prothorax reddish.....22. *caraibicum* Olmi
- Posterior surface of propodeum fully reticulate rugose; prothorax black....21
- 21 Pronotum with posterior surface as long as or longer than half of scutum.....13. *albitarse* (Cameron)
- Pronotum with posterior surface much shorter than half of scutum.....43. *triste* n. sp.
- 22 Pronotum with two dorsal lobes near posterior margin.....23
- Pronotum without dorsal lobes.....24
- 23 Head fully granulated.....17. *bolivianum* Olmi
- Head punctate, without sculpture among the punctures, not granulated....9. *lobatum* Olmi
- 24 Pronotum produced into a raised transversal carina between anterior and posterior surface (Fig. 322 A, B in Olmi 1984).....25
- Pronotum not produced into a raised transversal carina between anterior and posterior surface.....27
- 25 Anterior surface of pronotum approximately as long as posterior surface (Fig. 322 B in Olmi 1984).....10. *propodeale* (Fenton)
- Anterior surface of pronotum much shorter than posterior surface (Fig. 322 A in Olmi 1984).....26
- 26 Head fully reticulate rugose, with OPL shorter, approximately as long as, or slightly longer than POL.....17. *chiriquense* (Cameron)
- Head with only frons reticulate rugose; vertex smooth, with numerous longitudinal and median striae in the region between anterior ocellus and occipital carina; OPL approximately three times as long as POL.....12. *nycteam* Olmi
- 27 Scutum fully sculptured by numerous longitudinal keels.....46. *sculptum* n. sp.
- Scutum not sculptured by longitudinal keels.....28
- 28 Head fully punctate, without sculpture among the punctures.....14. *vivax* Olmi
- Head at least partly granulated or reticulate rugose.....29

29 Head fully granulated, not reticulate rugose.....	23. <i>evansi</i> Olmi
— Head fully or partly reticulate rugose.....	30
30 Posterior surface of pronotum sculptured by strong transversal keels.....	
.....	38. <i>semirubrum</i> n. sp.
— Posterior surface of pronotum rugose or smooth, not sculptured by strong transversal keels.....	31
31 Body fully testaceous, with petiole brown.....	31. <i>translucens</i> n. sp.
— Body at least partly black.....	32
32 Prothorax testaceous-reddish.....	37. <i>dulcicolum</i> n. sp.
— Prothorax black, at most with lateral margins reddish or testaceous.....	
.....	48. <i>habile</i> n. sp.

MALES

1 Posterior surface of propodeum with two longitudinal keels.....	2
— Posterior surface of propodeum without longitudinal keels.....	19
2 Antennae pectinate.....	3
— Antennae filiform.....	5
3 Frons fully sculptured by numerous longitudinal keels; frontal line complete	20. <i>pectinicornis</i> Olmi
— Frons fully reticulate rugose, without longitudinal keels; frontal line absent....	4
4 Gonoforceps with a distal inner pointed process (Fig. 20 D).....	
.....	30. <i>palanquense</i> n. sp.
— Gonoforceps without distal inner pointed process (Fig. 25 A).....	
.....	52. <i>rogersi</i> n. sp.
5 Head with anterior half of frons reddish-testaceous; posterior half of frons black.....	9. <i>lobatum</i> Olmi
— Head black or brown, at most with mandibles, clypeus, genae and anterior margin of frons reddish-testaceous.....	6
6 Gonoforceps without distal inner pointed process (Figs. 22 E, 23 C, 24 D); at most with a rounded process (Fig. 23 C, 24 D).....	7
— Gonoforceps with a distal inner pointed process (Figs. 24 G, 25 B).....	16
7 Head with anterior half of frons sculptured by longitudinal striae.....	8
— Head with anterior half of frons not sculptured by longitudinal striae....	9
8 Posterior surface of propodeum with median region rugose.....	
.....	17. <i>bolivianum</i> Olmi
— Posterior surface of propodeum with median region smooth and without sculpture.....	9. <i>lobatum</i> Olmi
9 Head fully granulated.....	41. <i>hortense</i> n. sp.
— Head reticulate rugose or punctate and without sculpture among the punctures	10
10 Head fully or partly reticulate rugose.....	11
— Head fully punctate and without sculpture among the punctures, not reticulate rugose.....	15
11 Scutum fully reticulate rugose.....	50. <i>dominicanum</i> n. sp.
— Scutum fully or almost fully punctate and without sculpture among the punctures	12
12 Posterior surface of propodeum with median area as rugose as lateral areas.....	13
— Posterior surface of propodeum with median area smooth and shiny....	14

- 13 Head fully reticulate rugose.....16. *plaumanni* Olmi
— Head with a large part of the frons and occasionally also of the vertex punctate and without sculpture among the punctures; anterior half of the frons and occasionally also vertex rugose.....44. *gauldi* n. sp.
- 14 Frontal line complete; posterior surface of propodeum with median area smooth and with lateral areas rugose; antennae slender, with segment 9 approximately three times as long as broad.....33. *gracile* n. sp.
— Frontal line absent; posterior surface of propodeum with median and lateral areas smooth; antennae less slender, thickened, with segment 9 at most twice as long as broad.....35. *huggerti* n. sp.
- 15 Gonoforceps approximately as long as penis (Fig. 328 in Olmi 1984).....
.....14. *vivax* Olmi
— Gonoforceps much shorter than penis ((Fig. 6 A in Olmi 1987b).....
.....27. *slanskyae* Olmi
- 16 Distal inner pointed process of the gonoforceps with apical margin not serrate (Fig. 24 G).....17
— Distal inner pointed process of the gonoforceps with apical margin serrate (Fig. 25 B).....18
- 17 Posterior surface of propodeum with median area rugose; scutum with posterior half weakly granulated and with anterior half punctate and without sculpture among the punctures; clypeus chisel shaped (Fig. 24 E).....
.....51. *guadeloupense* n. sp.
— Posterior surface of propodeum with median area laterally rugose and medially smooth; scutum punctate, without sculpture among the punctures; clypeus not chisel shaped (Fig. 24 F).....11. *chiriquense* (Cameron)
- 18 Scutum granulated; head without frontal line.....21. *yacambui* Olmi
— Scutum punctate, without sculpture among the punctures; head with a complete frontal line.....53. *paulense* n. sp.
- 19 Scutum reticulate rugose or fully or mostly granulated.....20
— Scutum without sculpture or punctate and without sculpture among the punctures (at most only the anterior region near pronotum is rugose).....24
- 20 Scutum fully reticulate rugose.....21
— Scutum fully or mostly granulated, at most with anterior margin rugose.....22
- 21 Gonoforceps without distal inner pointed process (Fig. 23 A).....
.....42. *rugiscutum* n. sp.
— Gonoforceps with a distal inner pointed process (Fig. 25 C); apical margin of this process serrate (Fig. 25 C).....13. *albitarse* (Cameron)
- 22 Gonoforceps much shorter than penis (Fig. 21 E).....36. *mayanum* n. sp.
— Gonoforceps as long as or slightly shorter than penis (Fig. 25 C).....23
- 23 Gonoforceps with or without distal inner process (Figs 318, 329 in Olmi 1984); distal process, if present, never with apical margin serrate.....
.....6. *pilicorne* Oglobin
— Gonoforceps with distal inner process (Fig. 25 C); apical margin of this process serrate (Fig. 25 C).....13. *albitarse* (Cameron)
- 24 Head fully without sculpture or finely punctate.....26. *minusculum* Olmi
— Head at least partly reticulate rugose, or sculptured by keels.....25
- 25 Head with numerous longitudinal or transversal keels.....26
— Head at least partly reticulate rugose, without longitudinal or transversal keels.....29

- 26 Frons with numerous transversal keels.....27
 — Frons with numerous longitudinal keels.....28
 27 Gonoforceps without distal inner pointed process (Fig. 22 D).....
40. *mirificum* n. sp.
 — Gonoforceps with a distal inner pointed process (Fig. 23 D); apical margin
 of this process serrate (Fig. 23 D).....45. *limonense* n. sp.
 28 Gonoforceps with a distal inner pointed process (Fig. 312 in Olmi 1984)...
2. *molle* Olmi
 — Gonoforceps without a distal inner pointed process (Fig. 22 D).....
40. *mirificum* n. sp.
 29 Head with frons smooth, without sculpture or finely punctate, without sculp-
 ture among the punctures; vertex reticulate rugose.....30
 — Head fully reticulate rugose or sculptured by numerous irregular keels...
31
 30 Apex of the gonoforceps broad (Fig. 29 in Olmi 1987a).....
4. *panamense* Olmi
 — Apex of the gonoforceps slender (Fig. 35 in Olmi 1987a).....
25. *oranium* Olmi
 31 Gonoforceps without a distal inner pointed process (Fig. 21 A).....32
 — Gonoforceps with a distal inner pointed or rounded process (Figs. 20 C,
 23 D).....33
 32 Notaulices reaching approximately 0,4 length of scutum.....
32. *paucum* n. sp.
 — Notaulices very reduced, only visible shortly near anterior margin of scutum
5. *jamaicanum* Olmi
 33 Inner distal process of gonoforceps with apical margin serrate (Fig. 23 D)
45. *limonense* n. sp.
 — Inner distal process of gonoforceps with apical margin not serrate (Fig.
 20 C).....34
 34 Frontal line absent.....29. *huybenszi* n. sp.
 — Frontal line present (complete or incomplete).....35
 35 Frons with two lateral keels near orbits directed towards the antennal sock-
 ets.....15. *conterminum* Olmi
 — Frons without lateral keels near orbits directed towards the antennal sock-
 ets.....2. *molle* Olmi

GENUS ANTEON: AUSTRALIAN REGION

Anteon rubrum n. sp.

Female: unknown

Male: fully winged; length 1,98 mm; reddish, with head brown; legs and antennae testaceous; antennae not distally thickened; antennal segments in following proportions: 8:5:5:5:5:4,5:5:5:5:7; head shiny, smooth, finely punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 4; OL = 2; OOL = 5; OPL = 2; TL = 3; scutum shiny, smooth, without sculpture; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate ru-

gose; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:6); gonoforceps (Fig. 26 A) much shorter than penis, with an inner pointed process; tibial spurs 1, 1, 2.

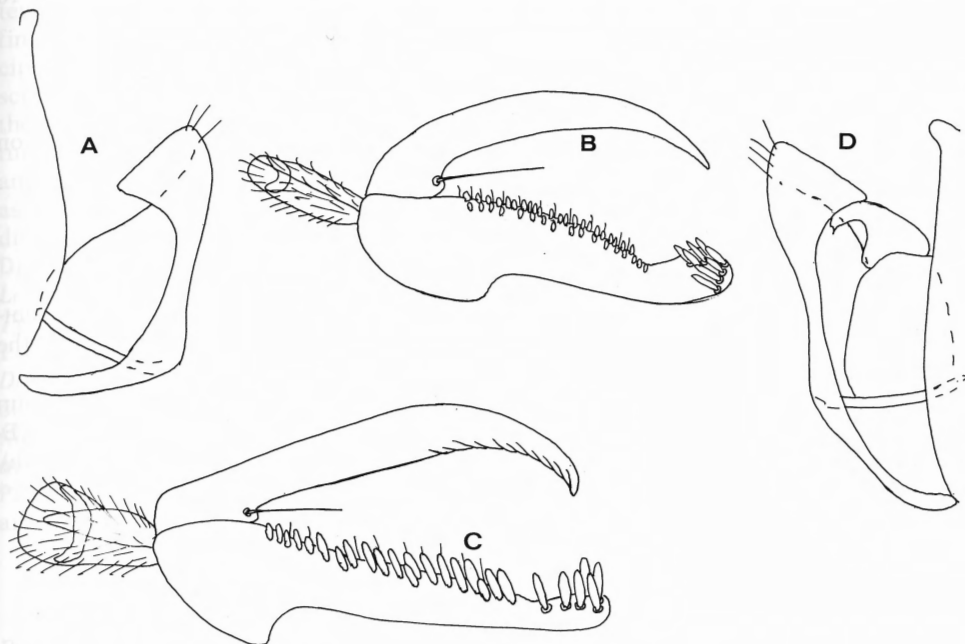


Fig. 26 - Male genitalia of *Anteon rubrum* n. sp. (holotype) (A) and *eucalypti* n. sp. (paratype from Mt. Glorious Nat. Park) (D); chela of *Anteon pseudorubrum* n. sp. (holotype) (B) and *niuense* n. sp. (holotype) (C).

Locus typicus: M. Glorious (SE Queensland, Australia).

Typical material: holotype M! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by L. & M. Gressitt on February 13, 1961.

Anteon pseudorubrum n. sp.

Female: fully winged; length 2 mm; reddish; antennae and legs testaceous; antennae distally thickened; antennal segments in following proportions: 8:4:4:3,5:3,5:3,5:3,5:3,5:3,5:3,5:5; head shiny, more or less granulated; frontal line complete; occipital carina complete; POL = 4; OL = 2,5; OOL = 3; OPL = 3; TL = 4; pronotum rugose, with a short region near posterior margin smooth; posterior region shorter than scutum (5:9); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture; notaulices incomplete, very short, only visible near the anterior margin of the scutum; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median area smooth, granulated; lateral

areas smooth and granulated; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:5); fore tarsal segments in following proportions: 5:1,5:2:4:10; enlarged claw (Fig. 26 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 26 B) with two rows of approximately 36 lamellae; apex with a group of approximately 10 lamellae; tibial spurs 1, 1, 2.

Locus typicus: M. Glorious (SE Queensland, Australia).

Typical material: holotype F! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by L. & M. Gressitt in a Sclerophyll forest on February 16-20, 1961.

Anteon yasumatsui OLMÍ 1984

A. yasumatsui Olmi was listed previously among the Oriental *Anteon*. Recently I have ascertained the presence of this species in the Caroline Islands, in the Australian Region.

A. yasumatsui is now known from the following localities: THAILAND: Phibun Mangsahan (Ubol Ratchathani), YA! Non-Sa-ard (Maha Sarakham), YA! INDONESIA: Pekalongan (Java), OL! INDIA: Delhi, BM! OL! Dehra Dun (Uttar Pradesh), BM! Bilaspur (Madhya Pradesh), BM! CAROLINE IS.: Kolonia (Yap I.), B!.

Anteon niuense n. sp.

Female: fully winged; length 1,87 mm; fully testaceous; antennae distally thickened; antennal segments in following proportions: 7:4:4,5:4:4:4,5:4:4:4,5:7; head shiny, hairless, smooth, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 4; OL = 2; OOL = 3; OPL = 4; TL = 5; pronotum shiny, smooth, without sculpture, with posterior surface almost as long as scutum (8:9); pronotal tubercles reaching tegulae; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,9 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6); fore tarsal segments in following proportions: 5,5:2:2,5:7:13; enlarged claw (Fig. 26 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 26 C) with two rows of approximately 21 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Alofi (Niue Island, New Zealand).

Typical material: holotype F! in B.

Distribution: only known from the typical locality.

Notes: the holotype was collected by N.L.H. Krauss in January, 1975.

Anteon eucalypti n. sp.

Female: unknown

Male: fully winged; length 1,56-1,75 mm; black, mandibles and legs testaceous; antennae brown, with segment 1 testaceous; antennae not distally thickened; antennal segments in following proportions: 7:5:5:5:5:5:5:4,5:6; head shiny, smooth, finely punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 3,5; OL = 2; OOL = 5; OPL = 2; TL = 4; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:5); gonoforceps (Fig. 26 D) with a distal inner pointed process, tibial spurs 1, 1, 2.

Locus typicus: Lake Eacham Nat. Park (Queensland, Australia).

Typical material: holotype M! and 1 paratype M! in CB; 1 paratype M! in TW; 1 paratype M! in OL.

Distribution: AUSTRALIA: Lake Eacham Nat. Park (Queensland), CB! OL! M. Glorious National Park (m 630, Queensland), TW!

Notes: the typical series from Lake Eacham Nat. Park was collected by I.D. Naumann and J.C. Cardale on May 25-26, 1980; the paratype from M. Glorious Nat. Park was collected in a dry sclerophyll *Eucalyptus* forest by L. Masner on February 28 - March 9, 1984.

Anteon rieki n. sp.

Female: fully winged; length 3,31-4,12 mm; black, with mandibles, antennae and legs testaceous; occasionally fore clubs of femora and hind coxae partly black; occasionally antennae darkened; antennae distally thickened, with segments 6-8 broader than the other segments; antennal segments in following proportions: 13:8:10:7:6:6:6:6:5:5:8; head shiny, flat, with anterior half of frons reticulate rugose and with vertex punctate and without sculpture among the punctures; occasionally vertex granulated; frontal line complete; occipital carina complete; POL = 7; OL = 5; OOL = 5; OPL = 6,5; TL = 6; pronotum dull, rugose, except for posterior margin smooth and without sculpture; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (9:22); scutum, scutellum and metanotum smooth, shiny, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3-0,4 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; occasionally longitudinal keels slightly visible; median area more or less smooth and shiny; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (6:13); fore tarsal segments in following proportions: 7:3:5:15:26; enlarged claw (Fig. 27 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 27 A) with many rows of approximately 40 lamellae without interruption to the apex; tibial spurs 1, 1, 2.

Male: fully winged; length 2,50-2,62 mm; black; mandibles testaceous; antennae brown; legs brown, with tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 11:5:8:8:7:8:7:7:10; head

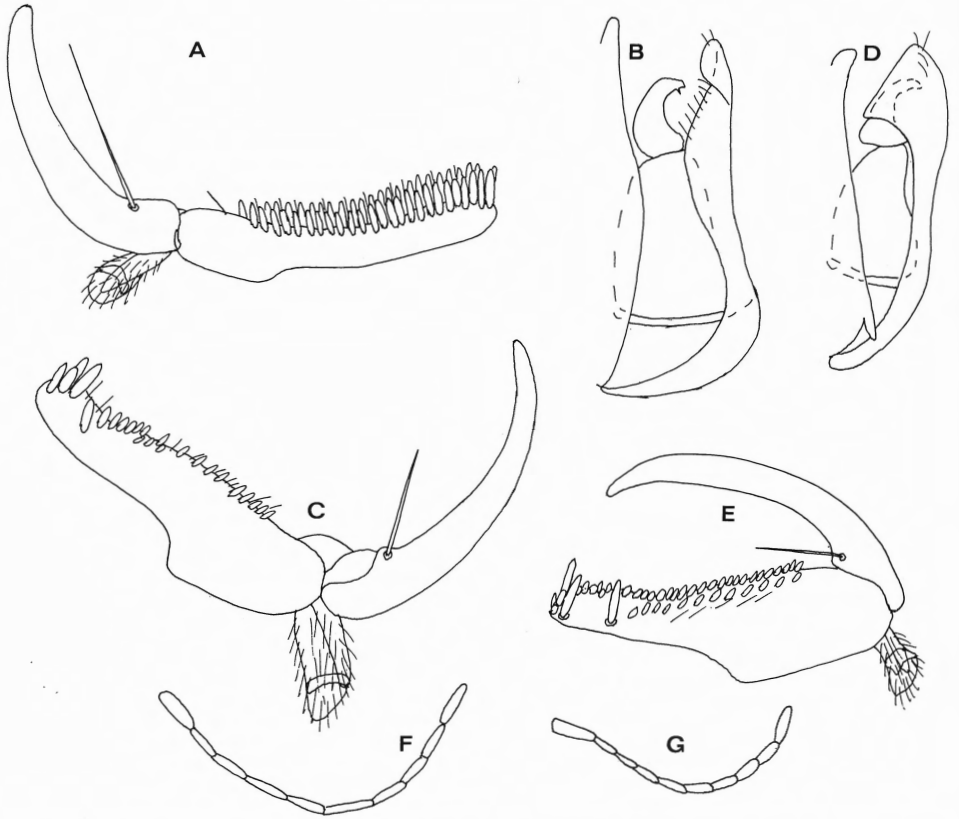


Fig. 27 - Chela of *Anteon rieki* n. sp. (holotype) (A), *completum* n. sp. (holotype) (C), *ceterum* n. sp. (holotype) (E); male genitalia of *Anteon rieki* n. sp. (paratype from Dainers Gap) (B) and *completum* n. sp. (paratype from Kuranda) (D); antenna of female of *Anteon ceterum* n. sp. (holotype) (F) and *aculeatum* Olmi from Mt. Webb Nat. Park (G).

shiny, punctate, without sculpture among the punctures; anterior half of frons strongly punctate and reticulate rugose; temples occasionally reticulate rugose; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 7; OPL = 4; TL = 4; scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete; reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels, with lateral surfaces reticulate rugose and with median surface sculptured by irregular keels and shiny; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); gonoforceps (Fig. 27 B) without distal inner pointed process; tibial spurs 1, 1, 2. *Locus typicus*: Jervis Bay (A.C.T., Australia).

Typical material: holotype F! and 14 paratypes (13 FF, 1 M)! in CB; 3 paratypes (2 FF, 1 M)! in OL.

Distribution: AUSTRALIA: Jervis Bay (A.C.T.), CB! OL! 37°35'S 146°11'E (m 1130, 6 Km W by S of Woods Point, Victoria), CB! 36°12'S 148°43'E (m 1585, Dainers

Gap, New South Wales), CB! OL! 12 mls. NW Milton (New South Wales), CB! 35°58'S 150°09'E (Congo, 8 Km SE by E of Moruya, New South Wales), CB! Crowea St. For. (nr. Pemberton, Western Australia), CB! 42°10'S 146°08'E (9 Km WSW Derwent Bridge, Tasmania), CB!

Notes: the species is named in honor of the collector of the typical series from Jervis Bay, E.F. Riek; the typical material from Jervis Bay (9 FF) was collected on November 7, 1956; the paratype F from Victoria was collected by I.F.B. Common and E.D. Edwards on January 16, 1979; the paratypes (1 F, 2 MM) from Dainers Gap were collected by P. Morrow on December 19 and December 28, 1973 in an *Eucalyptus pauciflora*, *stellulata* and *perriniana* forest; the paratype (F) from Crowea St. For. was collected by S.J. Curry in November - December 1978; the paratypes (2 FF) from Tasmania were collected by I.D. Naumann and J.C. Cardale on January 21, 1983; the paratype (F) from Milton was collected by J.C. Cardale on November 5, 1968; the paratype (F) from Congo was collected by M.S. Upton on August 31, 1982.

Anteon completum n. sp.

Female: fully winged; length 2,00-2,06 mm; head brown or black, with mandibles testaceous; antennae testaceous, with segments 7-10 or 3-10 darkened; thorax and propodeum brown or black; abdomen black or testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 6:4:4:4:4:4:4:4:6; head shiny, finely punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 5; OL = 2,5; OOL = 4; OPL = 2; TL = 2; pronotum dull, rugose, except for posterior margin smooth; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (4:8); scutum shiny, smooth without sculpture; notaulices incomplete, reaching approximately 0,3-0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); fore tarsal segments in following proportions: 5:2:2:5:11; enlarged claw (Fig. 27 C) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 27 C) with two rows of approximately 21 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 1,81 mm; black; mandibles testaceous; antennae testaceous-dark, with segment 1 light; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 9:5:5:5:4,5:5:5:5:4,5:7; head shiny, smooth, finely punctate without sculpture among the punctures; frontal line incomplete, only visible in front of the anterior ocellus; occipital carina complete; POL = 5; OL = 2; OOL = 5; OPL = 2; TL = 2,5; scutum, scutellum and metanotum shiny, smooth finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface reticulate rugose, with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:6,5); gonoforceps (Fig. 27 D) with a distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 16 Km S Chinchilla (Queensland, Australia).

Typical material: holotype F! and 4 paratypes (1 M, 3 FF)! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 16 Km S Chinchilla (Queensland), CB! 1,5 Km SE Kuranda (Queensland), CB! OL! 15°17'S 145°10'E (5 Km W by N Rounded Hill, nr Hope Vale Mission, Queensland), CB! Jim Jim Creek (19 Km WSW of M. Cahill, Northern Territory), CB!

Notes: the holotype was collected by E. Riek on March 28, 1957; the paratypes from Kuranda were collected by I.D. Naumann and J.C. Cardale on May 16-17, 1980; the paratype from Rounded Hill was collected by J.C. Cardale on October 7, 1980; the paratype from Jim Jim Creek was collected by D.H. Colless on October 24, 1972.

***Anteon ceterum* n. sp.**

Female: fully winged; length 4,37 mm; head black, with mandibles and anterior half of clypeus testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 13:6:10:11:11:10:9:9:9:10; head shiny, with frons reticulate rugose and with vertex punctate and without sculpture among the punctures; frontal line complete; frons with two lateral keels around orbits, directed towards the antennal sockets; occipital carina complete; POL = 5,5; OL = 3; OOL = 8; OPL = 8; TL = 5; pronotum dull, rugose, except for posterior half of posterior surface smooth; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (10:26); scutum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,2 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (6:13); fore tarsal segments in following proportions: 13:5:6:11:28; enlarged claw (Fig. 27 E) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 27 E) with two rows of approximately 51 lamellae; apex with a group of approximately 12 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Bendora (A.C.T., Australia).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by E. Riek on February 24, 1959.

***Anteon watsoni* n. sp.**

Female: fully winged; length 3,75-4,25 mm; black; mandibles, antennae and legs testaceous; antennae distally thickened; antennal segments in following proportions: 15:6:9:6:5:6:6:6:7; head reticulate rugose; frontal line complete; occipital carina complete; POL = 9; OL = 5; OOL = 7; OPL = 5; TL = 4; pronotum rugose, with posterior margin smooth; occasionally posterior surface of pronotum fully smooth, punctate, without sculpture among the punctures; posterior

surface of pronotum shorter than scutum (10:23); pronotal tubercles reaching tegulae; scutum finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3-0,4 length of scutum; scutellum and metanotum smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface without longitudinal keels, rugose, with a wide central area smooth and shiny; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:10); fore tarsal segments in following proportions: 5:3:4:12:23; enlarged claw (Fig. 28 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 28 A) with two rows of approximately 34 lamellae without interruption to the apex; tibial spurs 1, 1, 2.

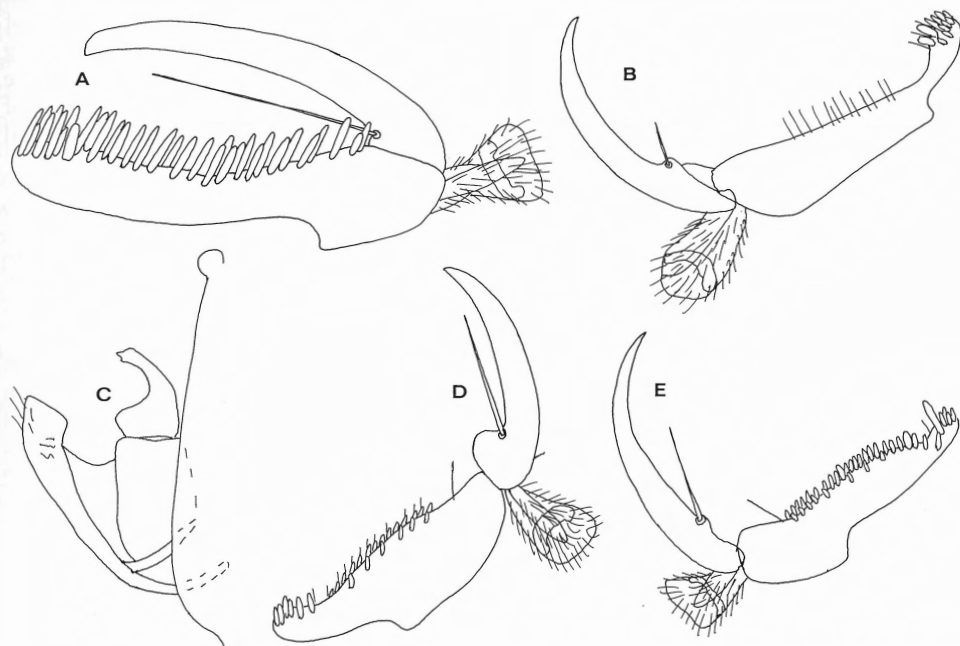


Fig. 28 - Chela of *Anteon watsoni* n. sp. (holotype) (A), *liepae* n. sp. (holotype) (B), *semialbum* n. sp. (holotype) (D), *cardaleae* n. sp. (holotype) (E); male genitalia of *Anteon bendorensis* n. sp. (holotype) (C).

Male: unknown

Locus typicus: 30°11'S 121°10'E (Canegrass, 70 Km NNW of Kalgoorlie, Western Australia).

Typical material: holotype F! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 30°11'S 121°10'E (Canegrass, 70 Km NNW of Kalgoorlie, Western Australia), CB! 17°16'S 145°54'E (Base Cableway, Mt. Bellenden - Ker, m 80, Queensland), OL!

Notes: the species is named in honor of the collector of the holotype, J.A.L. Watson; the holotype was collected on November 11, 1977; the paratype was collected by E.D. Edwards on November 1, 1981.

Anteon liepae n. sp.

Female: fully winged; length 3,18-3,56 mm; head black; mandibles, antennae and legs testaceous; occasionally hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 14:6:7:6:5:5:5:6:8; head shiny, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 4; OPL = 5; TL = 6; pronotum rugose, with posterior surface shiny and smooth; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (8:22); scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum reticulate rugose with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); fore tarsal segments in following proportions: 9:3:3:3,5:15; enlarged claw (Fig. 28 B) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 28 B) with two rows of approximately 13 bristles; apex with a group of approximately 11 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: River Clayton (50 Km NE by N of Marree, South Australia).

Typical material: holotype F! and 3 paratypes FF! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: River Clayton (50 Km NE by N of Marree, South Australia), CB! Millstream (Western Australia), OL! 25°22'S 151°07'E (Eidsvold, Queensland), CB! 31°05'S 141°42'E (Fowlers Gap Res. Stn., New South Wales), CB!

Notes: the species is named in honor of the collector of the holotype, Z. Liepa; the holotype was collected on September 16, 1972; the paratype from Millstream was collected by J.C. Cardale on October 23, 1970; the paratype from Queensland was collected by I. Naumann and J.C. Cardale on October 11, 1984; the paratypes from New South Wales were collected by J.C. Cardale on December 8-9, 1982 and on November 29 - December 2, 1981.

Anteon bendorensis n. sp.

Female: unknown

Male: fully winged; length 2,87 mm; black; mandibles testaceous; antennae brown, with proximal half of segment 1 testaceous; legs brown; antennae not distally thickened; antennal segments in following proportions: 10:6:6,5:6:6:6:6:6:10; head shiny, reticulate rugose; frontal line complete; occipital carina complete; POL = 8; OL = 4; OOL = 8,5; OPL = 3; TL = 5; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,2 length of scutum; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:7); gonoforceps (Fig. 28 C) without distal inner pointed process, much shorter than penis; tibial spurs 1, 1, 2.

Locus typicus: Bendora (A.C.T., Australia).

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by E.F. Riek on February 18, 1948.

Anteon semialbum n. sp.

Female: fully winged; length 2,00-2,62 mm; head whitish, with vertex and temples black; antennae and legs yellow; thorax and propodeum black; abdomen testaceous; antennae distally thickened; antennal segments in following proportions: 9:4,5:5:4:3,5:3:3,5:4:4:6; head shiny; frons strongly punctate; vertex partly punctate and partly reticulate rugose; frontal line white and slightly visible, complete; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 2,5; TL = 3,5; pronotum shiny, with anterior surface rugose; posterior surface smooth and finely punctate; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (5:11); scutum, scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,7 length of scutum; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:9); fore tarsal segments in following proportions: 6:1,5:2:3:10; enlarged claw (Fig. 28 D) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 28 D) with two rows of approximately 21 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 12°43'S 143°18'E (9 Km ENE Mt. Tozer, Queensland, Australia).

Typical material: holotype F! and 3 paratypes FF! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 12°43'S 143°18'E (11 Km ENE Mt. Tozer, Queensland), CB! OL! 12°43'S 143°17'E (9 Km ENE Mt. Tozer, Queensland), CB!

Notes: the typical series was collected by pantraps by J.C. Cardale on July 11-16, 1986 (holotype and 3 paratypes) and on July 5-10, 1986 (a paratype).

Anteon cardaleae n. sp.

Female: fully winged; length 1,56-1,81 mm; head black-brown; antennae and legs testaceous; thorax and propodeum brown-reddish; abdomen testaceous; antennae distally thickened; antennal segments in following proportions: 5,5:4:4:3:4:4:3,5:3,5:3,5:5,5; head dull, with some irregular keels or areolae on anterior half of frons and on vertex; posterior half of frons punctate and without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 3; OL = 2; OOL = 2,5; OPL = 1; TL = 1,5; pronotum with anterior surface rugose and posterior surface smooth and without sculpture; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (4:8); scutum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; occa-

sionally posterior surface with longitudinal keels incomplete; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2,5:7); fore tarsal segments in following proportions: 4,5:2:2,4:10; enlarged claw (Fig. 28 E) with two rows of approximately 31 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 12°43'S 143°18'E (11 Km ENE Mt. Tozer, Queensland, Australia).

Typical material: holotype F! and 5 paratypes FF! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 12°43'S 143°18'E (11 Km ENE Mt. Tozer, Queensland), CB! OL! 12°43'S 143°17'E (9 Km ENE Mt. Tozer, Queensland), CB! 12°44'S 143°13'E (2 Km NE by E Mt. Tozer, Queensland), CB!

Notes: the species is named in honor of the collector of the typical series, J.C. Cardale; the typical material was collected at MV light on July 11-16, 1986 (holotype and 4 paratypes), July 5-10, 1986 (a paratype) and July 1, 1986 (a paratype).

***Anteon alpinum* n. sp.**

Female: fully winged; length 3,12-3,75 mm; head black, with mandibles testaceous; antennae testaceous or brown with segment 1 testaceous; thorax, propodeum and abdomen black; legs testaceous; antennae distally thickened; antennal segments in following proportions: 15:9:11:10:8:9:9:8:10; head shiny, with frons reticulate rugose and strongly punctate; vertex finely punctate and without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 7; OPL = 7; TL = 5; pronotum shiny, with anterior surface rugose and with posterior surface smooth, finely punctate, without sculpture among the punctures; pronotal tubercles reaching tegulae; posterior surface of pronotum shorter than scutum (8:27); scutum shiny, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median area shiny, smooth, without sculpture; lateral areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (6:12); fore tarsal segments in following proportions: 13:3:3:4:17; enlarged claw (Fig. 29 A) with a proximal prominence bearing a long bristle; segment 5 of front tarsus (Fig. 29 A) with two rows of approximately 10 bristles; apex with a group of approximately 18 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Alpine Ck. (Kiandra, New South Wales, Australia).

Typical material: holotype F! and 1 paratype F! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: Alpine Ck. (Kiandra, New South Wales), CB! 31°05'S 141°42'E (Fowlers Gap Res. Stn., New South Wales), CB! Canberra (A.C.T.), OL!

Notes: the holotype was collected by J.C. Cardale on January 16, 1968; the paratype from Canberra was collected by E.F. Riek on November 12, 1965; the paratype from Fowlers Gap Res. Stn. was collected by J.C. Cardale on November 29 - December 2, 1981.

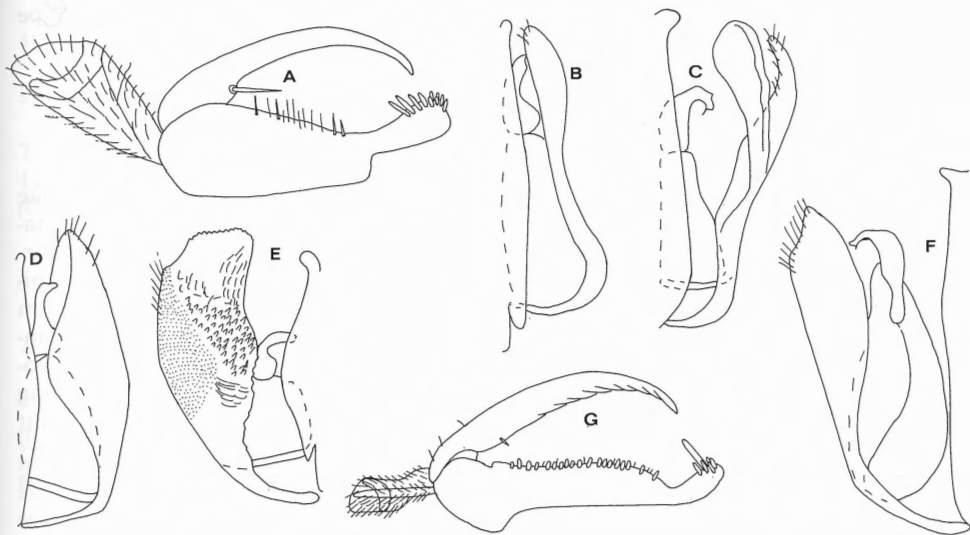


Fig. 29 - Chela of *Anteon alpinum* n. sp. (holotype) (A) and *Prioranteon hispanicum* n. sp. (holotype) (G); male genitalia of *Anteon naumanni* n. sp. (holotype) (B), *hornabrooki* n. sp. (holotype) (C), *Anteon palumense* n. sp. (holotype) (D), *nigricorne* (Perkins) from Mt. Field Nat. Park (Tasmania) (E), *fijianum* Olmi from 5 Km N Queen's Hwy (Viti Levu, Fiji Is.) (F).

***Anteon naumanni* n. sp.**

Female: unknown

Male: fully winged; length 1,37-1,43 mm; black; mandibles yellow; antennae brown, with segment 1 yellow; legs yellow; abdomen brown; antennae not distally thickened; antennal segments in following proportions: 8:4,5:4:4:4:4,5:4,5:5:5:7; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 4; OPL = 1; TL = 1; scutum dull, almost fully sculptured by longitudinal keels, except for a narrow surface near anterior margin reticulate rugose; scutum without sculpture among the longitudinal keels; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:5); gonoforceps (Fig. 29 B) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: Wongabel State Forest (via Atherton, Queensland, Australia).

Typical material: holotype M! and 1 paratype M! in CB; 1 paratype M! in OL; 1 paratype M! in BM.

Distribution: AUSTRALIA: Wongabel State Forest (via Atherton, Queensland), CB! OL! 6 Km W by S Paluma (Queensland), CB! E of Mareeba (N Queensland), BM!

Notes: the species is named in honor of one of the collectors of the typical series, I.D. Naumann; the typical material from Wongabel State Forest was collected by I.D. Naumann and J.C. Cardale on May 19-20, 1980; the paratype from Paluma

was collected by I.D. Naumann and J.C. Cardale on May 11, 1980; the paratype from Mareeba was collected by Z. Boucek in December, 1982.

Anteon hornabrooki n. sp.

Female: unknown

Male: fully winged; length 1,68 mm; black; mandibles testaceous; antennae testaceous-dark, with segment 1 light; legs brown, with tarsi and tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 8:4:4:4:4:4:4:4:4:5:7; head shiny, reticulate rugose; frontal line absent; occipital carina complete; POL = 5; OL = 2; OOL = 4; OPL = 1,5; TL = 2; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (2:7); gonoforceps (Fig. 29 C) with a long dorsal process; tibial spurs 1, 1, 2.

Locus typicus: Eastern H'lands (South (Okapa), New Guinea).

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, R. Hornabrook; the holotype was collected on November 5, 1964.

Anteon palumense n. sp.

Female: unknown

Male: fully winged; length 1,25 mm; black; mandibles, antennae and legs fully testaceous; antennae not distally thickened; antennal segments in following proportions: 6:3:4:3,5:3,5:4:4:3,5:4:6,5; head shiny, smooth, punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 3,5; OL = 2; OOL = 3; OPL = 1; TL = 1; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels, fully reticulate rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (1,5:6); gonoforceps (Fig. 29 D) without distal inner pointed process; tibial spurs 1, 1, 2.

Locus typicus: 18°59'S 146°10'E (Birthday Ck., 6 Km NW by W Paluma, Queensland, Australia).

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.C. Cardale on September 25, 1980.

Anteon myrmecophilum (PERKINS 1905)

Olmi (1982) designated the lectotype F and 2 paralectotypes FF of *A. myrmecophilum* (Perkins): they are kept in B. Recently I have seen in CB another

specimen belonging to the typical series; it's a male specimen labelled as follows: «Bundaberg, Q., Austr., 1904, Paratype, *Paranteon myrmecophilus* Perkins». This specimen is here designated as paralectotype.

Anteon myrmecophilum (Perkins) is known from the following localities: AUSTRALIA: Bundaberg (Queensland), B! CB! Sandhills (Queensland), OL! 32°08'S 126°18'E (23 Km ESE of Cocklebidy, Western Australia), CB! 23°23'S 132°57'E (Charley Ck., Milton Pk., Northern Territory), CB!

***Anteon parvulum* (PERKINS 1905)**

= *Anteon gloriosum* Olmi 1984: 575; n. syn.

Anteon parvulum (Perkins) was described only on the basis of female specimens, whereas *Anteon gloriosum* Olmi was known only on the basis of male specimens. Recently the study of a series of male and female specimens from Tasmania suggested the synonymy of the two species. *A. gloriosum* is only the opposite sex of *A. parvulum*. The examined material was not reared; both sexes however had similar morphologic characters and they were collected together in the same locality (40°57'S 144°40'E).

***Anteon destructor* (PERKINS 1905)**

Olmi (1982) designated the lectotype F and 2 paralectotypes (1 F, 1 M) of *A. destructor*: they are kept in B. Recently I have seen in CB another specimen belonging to the typical series; it's a male specimen labelled as follows: «Bundaberg, bred, 27.XI.04, slide R, (39), Bundaber., Q., Austr., 1904, Paratype, *Neochelognus destructor* Perkins». The labels are in Perkins' handwriting. This specimen is here designated as paralectotype.

***Anteon nigricorne* (PERKINS 1905)**

Anteon nigricorne (Perkins) was described on the basis of female specimens (Olmi 1984). In the last years a series of male and female specimens from Australia was examined. The following description of the male can be proposed:

Male: fully winged; length 2,56 mm; black; mandibles testaceous; legs brown, with fore tibiae and fore tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 11:5:6:7:7:6:6:7:9; head shiny, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 5; OPL = 3; TL = 3; scutum shiny, smooth, finely punctate, without sculpture among the punctures; region near anterior margin rugose; occasionally scutum weakly granulated near posterior margin; notaulices weak, incomplete, reaching approximately 0,3-0,6 length of scutum; scutellum and metanotum shiny, punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (4:9); gonoforceps (Fig. 29 E) with a large inner expansion, without distal inner pointed process; tibial spurs 1, 1, 2.

Anteon nigricorne (Perkins) is now known from the following localities: AUSTRALIA: Bundaberg (Queensland), B! Sandhill (Queensland), B! OL! Mt. Field Nat. Park (Tasmania), OL! Black Mtn. (A.C.T.), CB! 42°13'S 146°02'E (18 Km SW by W Derwent Bridge, Tasmania), CB! Mt. Dromedary (nr. Narooma, 2100 ft., New South Wales), CB!

Anteon fijianum OLMI 1984

Anteon fijianum Olmi was described on the basis of female specimens. In the last years a series of female and male specimens from the Fiji Islands was examined. The following description of the male can be proposed:

Male: fully winged; length 1,37 mm; black; mandibles testaceous; antennae brown, with segment 1 testaceous; legs brown, with fore tibiae and fore trochanters testaceous; antennae not distally thickened; antennal segments in following proportions: 6:3,5:3,5:4,5:4,5:4,5:4,5:5:5:7; head shiny, smooth, finely punctate, without sculpture among the punctures; frontal line complete; occipital carina complete; POL = 4,5; OL = 2,5; OOL = 4; OPL = 2; TL = 3; scutum, scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface without longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (3:5); gonoforceps (Fig. 29 F) without distal inner pointed process; tibial spurs 1, 1, 2.

A. fijianum Olmi is known from the following localities: FIJI ISLANDS: Lautoka (Viti Levu), OL! BM! Nandi (Viti Levu), B! 5 Km N Queen's Hwy (Namosi Rd., Viti Levu), OL! AUSTRALIA: Narrabri (New South Wales), BM! Black Mtn. (A.C.T.), CB!

After the above descriptions of new species a new key to the Australian *Anteon* can be proposed, as follows:

FEMALES

- 1 Segment 4 of front tarsus at most 0,5 as long as segment 1.....2
- Segment 4 of front tarsus slightly shorter, as long as, or longer than segment 1.....13
- 2 Posterior surface of propodeum with two longitudinal keels.....3
- Posterior surface of propodeum without longitudinal keels.....7
- 3 Head almost fully whitish; only vertex and temples black.....
-58. *semialbum* n. sp.
- Head almost fully black; only mandibles not black.....4
- 4 Head with at least vertex punctate and without sculpture among the punctures.....5
- Head more or less reticulate rugose, with at least the vertex reticulate rugose; occasionally with a more or less wide smooth frontal area.....6

- 5 Posterior surface of propodeum with median area smooth shiny, not rugose60. *alpinum* n. sp.
 — Posterior surface of propodeum with median area rugose, dull.....56. *liepae* n. sp.
- 6 Posterior surface of propodeum with median area rugose; head fully reticulate rugose.....1. *giluwense* Olmi
 — Posterior surface of propodeum with median area smooth; head reticulate rugose, usually with a more or less wide smooth area in front of the ocelli2. *chelognoides* (Perkins)
- 7 Head smooth, punctate, without sculpture among the punctures, not reticulate rugose; posterior surface of propodeum almost smooth, not reticulate rugose, with weak and short longitudinal keels.....3. *myrmecophilum* (Perkins)
 — Head reticulate rugose; posterior surface of propodeum reticulate rugose or with strong transversal keels.....8
- 8 Scutum fully reticulate rugose, or with strong or weak irregular longitudinal keels.....9
 — Scutum smooth, without sculpture or weakly punctate or very weakly granulated; occasionally partly reticulate rugose.....11
- 9 Propodeum with a strong transversal keel between dorsal and posterior surface; scutum very strongly sculptured by irregular longitudinal keels.....4. *reticulaticeps* Dodd
 — Propodeum usually without a distinct transversal keel between dorsal and posterior surface; occasionally with a weak transversal keel faintly visible among the other keels.....10
- 10 Scutum fully strongly reticulate rugose.....5. *aulicum* Olmi
 — Scutum shiny, sculptured by weak irregular longitudinal keels mainly visible on the sides.....6. *sedlaceki* Olmi
- 11 Antennal segment 1 approximately as long as segments 2 + 38. *australe* Olmi
 — Antennal segment 1 approximately as long as segments 2 + 3 + 4.....12
- 12 Fore wing hyaline, without dark transversal bands.....7. *anxium* Olmi
 — Fore wing with a dark transversal band.....40. *rufiscapum* Olmi
- 13 Posterior surface of propodeum with two longitudinal keels.....14
 — Posterior surface of propodeum without longitudinal keels.....36
- 14 Fore wing hyaline, without dark transversal bands.....15
 — Fore wing with 1-2 dark transversal bands.....32
- 15 Head punctate, without sculpture among the punctures.....16
 — Head partly or fully granulated or reticulate rugose or with longitudinal keels.....18
- 16 Posterior surface of pronotum approximately 0,5 as long as scutum; notaulices short, reaching approximately 0,3-0,5 length of scutum.....53. *completum* n. sp.
 — Posterior surface of pronotum as long as or almost as long as scutum; notaulices more than 0,5 as long as scutum.....17
- 17 Body fully testaceous.....50. *niuense* n. sp.
 — Body almost fully black.....46. *walesense* Olmi
- 18 Head granulated, not reticulate rugose or reticulate rugose only behind the ocelli.....19
 — Head at least partly reticulate rugose on frons or vertex.....20

19 Body black.....	9. <i>parvulum</i> (Perkins)
— Body reddish.....	48. <i>pseudorubrum</i> n. sp.
20 Head reticulate rugose on anterior half of frons, punctate or rugose or granulated on vertex; posterior half of frons punctate or granulated.....	21
— Head fully reticulate rugose or with numerous longitudinal keels on frons 5...2	
21 Segment 4 of front tarsus approximately twice as long as segment 1.....	52. <i>rieki</i> n. sp.
— Segment 4 of front tarsus shorter than segment 1 or less than twice as long as segment 1.....	22
22 Posterior surface of propodeum with median area smooth.....	10. <i>orientale</i> Olmi
— Posterior surface of propodeum with median area rugose.....	23
23 Antennae distally not thickened (Fig. 27 F).....	54. <i>ceterum</i> n. sp.
— Antennae distally thickened (Fig. 27 G).....	24
24 Thorax and propodeum black.....	11. <i>aculeatum</i> Olmi
— Thorax and propodeum brown-reddish.....	59. <i>cardaleae</i> n. sp.
25 Scutum fully reticulate rugose.....	26
— Scutum punctate, without sculpture among the punctures.....	27
26 Scutellum smooth; notaulices invisible or faintly visible near anterior margin of scutum.....	12. <i>corruptum</i> Olmi
— Scutellum partly reticulate rugose; notaulices reaching approximately 0,75 length of scutum.....	13. <i>miles</i> Olmi
27 Frons with numerous longitudinal keels.....	28
— Frons fully reticulate rugose.....	29
28 Antennae shorter and thicker; antennal segment 8 at most twice as long as broad.....	44. <i>bribianum</i> Olmi
— Antennae longer and slender; antennal segment 8 approximately three times as long as broad.....	18. <i>curradoi</i> Olmi
29 Apex of the enlarged claw (dorsally viewed) very broad, spatulate (Fig. 37 in Olmi 1987a).....	42. <i>largeclavatum</i> Olmi
— Apex of the enlarged claw (dorsally viewed) narrow, not spatulate (Fig. 355 in Olmi 1984).....	30
30 Head with OPL much shorter than TL.....	15. <i>caledonianum</i> Olmi
— Head with OPL as long as or longer than TL.....	31
31 Segment 4 of front tarsus as long as or longer than segment 1.....	14. <i>destructor</i> (Perkins)
— Segment 4 of front tarsus shorter than segment 1.....	39. <i>superbum</i> Dodd
32 Fore wing with a dark transversal band beneath the pterostigma.....	33
— Fore wing with 2 dark transversal bands.....	34
33 Posterior surface of propodeum with median area dull, fully rugose.....	45. <i>subnigrum</i> Olmi
— Posterior surface of propodeum with median area fully of mostly smooth, shiny, not rugose.....	16. <i>typicum</i> (Perkins)
34 Head with frons sculptured by strong, longitudinal keels, not reticulate rugose.....	17. <i>bougainvillei</i> Olmi
— Head fully reticulate rugose.....	35
35 Scutum reticulate rugose.....	19. <i>firmum</i> Olmi
— Scutum punctate, not reticulate rugose.....	20. <i>leiosomum</i> (Perkins)
36 Fore wing with 1-2 dark transversal bands.....	37

- Fore wing hyaline, without dark transversal bands.....38
- 37 Segment 4 of front tarsus approximately as long as segment 1; segment 5 of front tarsus with basal part long (Fig. 363 in Olmi 1984); fore wing with a dark transversal band.....21. *nitidum* (Perkins)
- Segment 4 of front tarsus approximately twice as long as segment 1; segment 5 of front tarsus with basal part short (Fig. 365 in Olmi 1984); fore wing with 2 dark transversal bands.....22. *bouceki* Olmi
- 38 Head fully or partly reticulate rugose or with longitudinal keels or with irregular keels.....39
- Head fully or almost fully granulated, not reticulate rugose.....44
- 39 Head with numerous longitudinal keels, not reticulate rugose.....
-23. *mundum* Olmi
- Head fully reticulate rugose or with irregular keels, without numerous longitudinal keels.....40
- 40 Head not fully reticulate rugose, only with irregular keels on vertex and on anterior region of fronts; also partly punctate.....59. *cardaleae* n. sp.
- Head fully reticulate rugose.....41
- 41 Segment 1 of front tarsus shorter than segment 4.....42
- Segment 1 of front tarsus as long as or longer than segment 4.....43
- 42 Posterior surface of propodeum fully dull and rugose; segment 4 of front tarsus less than twice as long as segment 1.....41. *giraulti* Dodd
- Posterior surface of propodeum with a more or less wide central smooth area; segment 4 of front tarsus more than twice as long as segment 1.....
-55. *watsoni* n. sp.
- 43 Segment 5 of front tarsus almost rectilinear, without a distinct curved apex (Fig. 367 in Olmi 1984).....24. *bellator* Olmi
- Segment 5 of front tarsus with a distinct curved apex (Fig. 368 in Olmi 1984).....25. *nigricorne* (Perkins)
- 44 Scutum without sculpture, shiny and smooth, except for the lateral areas very weakly granulated.....26. *fijianum* Olmi
- Scutum fully granulated.....45
- 45 Species shiny; notaulices reaching approximately 0,5 length of scutum.....
-27. *dubium* Fouts
- Species dull; notaulices shorter, reaching approximately 0,25-0,30 length of scutum.....28. *coriaceum* (Perkins)

MALES

- 1 Propodeum without a strong transversal keel between dorsal and posterior surface.....2
- Propodeum with a strong transversal keel between dorsal and posterior surface.....4
- 2 Posterior surface of propodeum with two longitudinal keels.....
-29. *sucklingi* Olmi
- Posterior surface of propodeum without longitudinal keels.....3
- 3 Head smooth, weakly punctate, without sculpture among the punctures....
-3. *myrmecophilum* (Perkins)
- Head fully reticulate rugose.....5. *aulicum* Olmi
- 4 Posterior surface of propodeum with two longitudinal keels.....5
- Posterior surface of propodeum without longitudinal keels.....18

- 5 Gonoforceps with a long dorsal process (Figs. 356, 357, 372 in Olmi 1984)6
— Gonoforceps without a long dorsal process (Figs. 373, 374, 375 in Olmi 1984)7
- 6 Dorsal process of gonoforceps very long and narrow, with apex curved (Figs. 356, 357 in Olmi 1984); scutum very weakly punctate.....15. *caledonianum* Olmi
— Dorsal process of gonoforceps shorter and broad, with apex not curved (Fig. 372 in Olmi 1984); scutum very strongly punctate; punctures very broad..30. *bismarckense* Olmi
- 7 Head fully granulated.....9. *parvulum* (Perkins)
— Head reticulate rugose, or punctate or with numerous longitudinal keels on frons.....8
- 8 Head fully or mostly reticulate rugose or with longitudinal keels on frons.....9
— Head punctate, at most with areolae near occipital carina, on malar space and on anterior half of frons.....13
- 9 Scutum almost fully reticulate rugose or with weak irregular keels.....
.....31. *vulsum* Olmi
— Scutum punctate and without sculpture among the punctures, not reticulate rugose.....10
- 10 Posterior surface of propodeum with median area smooth.....11
— Posterior surface of propodeum with median area rugose.....12
- 11 Head fully reticulate rugose.....32. *luctuosum* Olmi
— Head with frons sculptured by numerous longitudinal keels.....
.....33. *hageni* Olmi
- 12 Body mostly reddish; head reddish.....34. *haustum* Olmi
— Body mostly black; at least head black.....14. *destructor* (Perkins)
- 13 Notaulices reaching approximately 0,5 length of scutum.....14
— Notaulices at most reaching 0,4 length of scutum.....15
- 14 Gonoforceps with distal inner pointed process (Fig. 27 D).....53. *completum* n. sp.
— Gonoforceps without distal inner pointed process (Fig. 378 in Olmi 1984).35. *corallinum* Olmi
- 15 Posterior surface of propodeum with median area smooth.....
.....36. *tasmanianum* Olmi
— Posterior surface of propodeum with median area rugose.....16
- 16 Body reddish; gonoforceps much shorter than penis and with distal inner pointed process (Fig. 26 A).....47. *rubrum* n. sp.
— Body black; gonoforceps approximately as long as penis and with or without distal inner pointed process (Fig. 348 in Olmi 1984; Fig. 26 D).....17
- 17 Gonoforceps with distal inner pointed process (Fig. 26 D).....51. *eucalypti* n. sp.
— Gonoforceps without distal inner pointed process (Fig. 348 in Olmi 1984).10. *orientale* Olmi
- 18 Head punctate, without sculpture among the punctures.....19
— Head fully or partly reticulate rugose, or with longitudinal keels or granulated.....21
- 19 Posterior surface of propodeum with lateral areas dull and reticulate rugose and with median area smooth.....36. *tasmanianum* Olmi
— Posterior surface of propodeum fully dull and reticulate rugose.....20

- 20 Notaulices reaching approximately 0,5 length of scutum.....
26. *fijianum* Olmi
 — Notaulices reaching approximately 0,25 length of scutum.....
63. *palumense* n. sp.
- 21 Head fully or mostly granulated, occasionally also with few irregular keels
 22
 — Head with numerous longitudinal keels on frons or fully or partly reticulate
 rugose.....23
- 22 Notaulices reaching approximately 0,25 length of scutum.....
8. *australe* Olmi
 — Notaulices reaching approximately 0,5 length of scutum.....
49. *yasumatsui* Olmi
- 23 Head with numerous longitudinal keels on frons.....37. *permirum* Olmi
 — Head fully or partly reticulate rugose.....24
- 24 Scutum fully reticulate rugose.....43. *yorkense* Olmi
 — Scutum not or partly reticulate rugose.....25
- 25 Scutum sculptured by longitudinal keels, except for a narrow surface near
 anterior margin reticulate rugose.....61. *naumannii* n. sp.
 — Scutum granulated or punctate, not sculptured by longitudinal keels.....26
- 26 Scutum fully and weakly granulated.....27
 — Scutum punctate, without sculpture among the punctures.....28
- 27 Gonoforceps with a large inner expansion (Fig. 29 E).....
25. *nigricorne* (Perkins)
 — Gonoforceps without a large inner expansion (Fig. 381 in Olmi 1984).....
38. *involutum* Olmi
- 28 Posterior surface of propodeum with median region smooth, shiny and without
 sculpture.....41. *giraulti* Dodd
 — Posterior surface of propodeum fully dull, reticulate rugose.....29
- 29 Head punctate, without sculpture among the punctures, except for anterior
 half of frons strongly punctate and reticulate rugose and occasionally tem-
 ples reticulate rugose.....52. *rieki* n. sp.
 — Head fully reticulate rugose.....30
- 30 Gonoforceps with a long dorsal process (Fig. 29 C).....
62. *hornabrooki* n. sp.
 — Gonoforceps without a long dorsal process (Fig. 364 in Olmi 1984; Figs. 28
 C, 29 E).....31
- 31 Gonoforceps much shorter than penis (Fig. 28 C).....57. *bendorensis* n. sp.
 — Gonoforceps approximately as long as penis or slightly shorter or slightly
 longer (Fig. 364 in Olmi 1984; Fig. 29 E).....32
- 32 Gonoforceps with a large inner expansion (Fig. 29 E).....
25. *nigricorne* (Perkins)
 — Gonoforceps without large inner expansion (Fig. 364 in Olmi 1984).....
21. *nitidum* (Perkins)

GENUS *PRIORANTEON*: PALAEARCTIC REGION

***Prioranteon hispanicum* n. sp.**

Chelogyne? sp.: Ceballos 1927: 108.

Female: micropterous; length 2,18 mm; black-brown; antennae brown, with seg-

ments 1-3 testaceous; legs testaceous, with mid and hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 8:4:4:8:6:5:5:4:4:6; head shiny, flat, finely punctate, without sculpture among the punctures; occipital carina complete; frontal line absent; POL = 3; OL = 2; OOL = 7; OPL = 3; TL = 5; pronotum shiny, hairy, slightly convex, finely punctate; anterior disc very long; posterior transversal impression separating disc from posterior collar narrower than disc; posterior transversal impression only visible on the sides of the pronotum; posterior collar very short, with posterior margin straight and reaching tegulae; no pronotal tubercles directed towards the tegulae; scutum very short, excavated, rugose; scutellum shiny, humped, subspheroidal, without sculpture; tegulae + fore wings as long as scutum + scutellum; tegulae and reduced fore wings located on the sides of scutum + scutellum; fore wings reaching the anterior margin of the metanotum; metanotum excavated, reduced to a deep transversal furrow behind the scutellum; meso-metapleural suture distinct and complete; metathorax + propodeum dull, granulated; posterior region of propodeum not transversely striate; fore tarsal segments in following proportions: 7:2:4:9:17; enlarged claw (Fig. 29 G) with a bristle located further distally than the proximal prominence; segment 5 of front tarsus (Fig. 29 G) with a row of approximately 19 lamellae; apex with a group of approximately 5 lamellae, among which a very long lamella; rudimentary claw absent; segment 2 of front tarsus produced into a small hook; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: El Escorial (Madrid, Spain).

Typical material: holotype F! in MD.

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.G. Menor.

After the description of this new species a new key to the European *Prioranteon* can be proposed, as follows:

FEMALES

- 1 Posterior collar of pronotum whitish-testaceous.....1. *biroi* Olmi
— Pronotum fully black.....2. *hispanicum* n. sp.

The males are unknown.

In the Palearctic region a third species is known, *Prioranteon ghilarovi* Ponomarenko 1988, was described from Vaxsckj (Nureskj catchment basin, Central Asia, U.S.S.R.). I have seen the holotype of this species (kept in PN!); it's a junior synonym of *Prioranteon biroi* Olmi (new synonymy).

SUBFAMILY BOCCHINAE

GENUS BOCCHUS: ETHIOPIAN REGION

Bocchus botswanensis n. sp.

Female: fully winged; length 4 mm; head, thorax and propodeum reddish-testaceous; antennae testaceous, with segments 6-10 darkened; petiole testaceous; abdomen

black; legs testaceous, with hind femora and hind tibiae dark; antennae distally thickened; antennal segments in following proportions: 16:7:11:8:6:6:6:5:5:8; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 4; OOL = 10; OPL = 10; TL = 10; pronotum hairy, dull, sculptured by short longitudinal keels, with a strong transversal impression; pronotal tubercles reaching tegulae; scutum, scutellum and metanotum dull, fully reticulate rugose; notaulices incomplete, only visible near the anterior margin of the scutum; propodeum reticulate rugose; posterior surface of propodeum with two longitudinal keels; median area rugose, not reticulate; fore wing with a weak dark transversal band; distal part of radial vein approximately as long as proximal part (11:12); fore tarsal segments in following proportions: 19:3:4:12:17; enlarged claw (Fig. 30 A) with a row of 8 teeth and 1 bristle; segment 5 of front tarsus (Fig. 30 A) without preapical lamella and with a row of 8 bristles; tibial spurs 1, 1, 1.

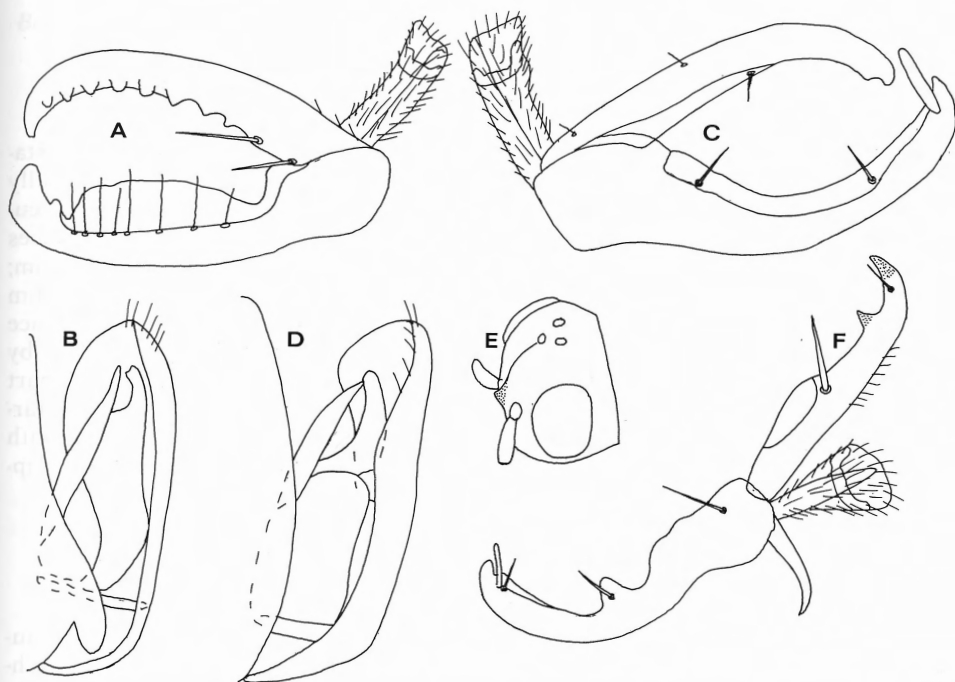


Fig. 30 - Chela of *Bocchus botswanensis* (paratype) (A), *krombeini* n. sp. (holotype) (C), *beckeri* n. sp. (holotype) (F); male genitalia of *Bocchus botswanensis* n. sp. (holotype) (B) and *zimbabweensis* n. sp. (holotype) (D); head of male of *Bocchus viet* n. sp. (paratype) (E).

Male: fully winged; length 2,00-2,68 mm; head black, with mandibles testaceous; antennae testaceous-dark; thorax, propodeum and abdomen black; legs black, with articulations, tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 16:5,5:6:7:6:6:6:5,5:5:8; head convex, dull, reticulate rugose, except for the areas around the antennal toruli, which

are smooth and without sculpture; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 7; OPL = 3,5; TL = 5,5; scutum dull, fully reticulate rugose; notaulices incomplete, reaching approximately 0,2-0,3 length of scutum; scutellum and metanotum dull, reticulate rugose; propodeum reticulate rugose, with tracks of two longitudinal keels on posterior surface; posterior surface with median area shiny, less rugose than lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:9); genitalia in fig. 30 B; tibial spurs 1, 1, 2.

Locus typicus: Farmer's Brigade (Serowe, Botswana).

Typical material: holotype M! in WA; 1 paratype M! in OL; 1 paratype F! in BM.

Distribution: BOTSWANA: Farmer's Brigade (Serowe), WA! OL! Serowe, BM!

Notes: the typical series from Farmer's Brigade was collected by a malaise trap by Per Forchhammer in September (holotype) and December (paratype), 1987; the paratype from Serowe was collected by a malaise trap by Per Forchhammer in September, 1984.

Bocchus krombeini n. sp.

Female: fully winged; length 2,68 mm; black; mandibles testaceous; antennae testaceous, with segments 6-10 brown; legs brown, with tarsi light; antennae distally thickened; antennal segments in following proportions: 10:6:5:4:4:4,5:4:4:3,5:6; scutum dull, granulated, with tracks of weak areolae near anterior margin; notaulices almost invisible, apparently almost reaching the posterior margin of the scutum; scutellum weakly granulated; metanotum shiny, without sculpture; propodeum reticulate rugose, with two longitudinal keels on posterior surface; dorsal surface of propodeum with areolae very broad; fore wing with distal half crossed by a brown transversal band; distal part of radial vein shorter than proximal part (4:12); petiole very long, approximately 0,25 as long as abdomen (13:45); fore tarsal segments in following proportions: 12:2:4:10:12; enlarged claw (Fig. 30 C) with a preapical tooth and 1 bristle; segment 5 of front tarsus (Fig. 30 C) with a preapical lamella and 2 bristles; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Farmer's Brigade (Serowe, Botswana).

Typical material: holotype F! in WA.

Distribution: only known from the typical locality.

Notes: the species is named in honor of Karl V. Krombein (Smithsonian Institution, Washington, D.C.); the holotype was collected by a malaise trap by Per Forchhammer in March, 1986.

Bocchus zimbabwensis n. sp.

Female: unknown

Male: fully winged; length 2,18 mm; head black, with mandibles testaceous; antennae brown; thorax and propodeum black; legs brown, with tarsi light; antennae not distally thickened; antennal segments in following proportions: 10:5:5,5:6:6:6:5,5:5,5:8; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 2,5; OOL = 6; OPL = 3; TL = 5; scutum fully granulated and with numerous irregular keels; notaulices complete,

posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (4:2); scutellum shiny, with anterior third without sculpture and with posterior surface granulated and with irregular keels; metanotum shiny, weakly granulated; propodeum reticulate rugose with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:10); genitalia in fig. 30 D; tibial spurs 1, 1, 2.

Locus typicus: Sengwa (Gokwe, Zimbabwe).

Typical material: holotype M! in AL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by B. Bell in January, 1983.

After the descriptions of the above new species a new key to the Ethiopian *Bocchus* can be proposed, as follows:

FEMALES

- 1 Micropterous; fore wing approximately as long as tegulae.....1. *richardsi* Olmi
— Fully winged.....2
2 Scutum fully granulated, not reticulate rugose.....5. *krombeini* n. sp.
— Scutum fully reticulate rugose.....3
3 Segment 1 of front tarsus approximately as long as segment 4 (Fig. 415 A in Olmi 1984); antennae short, distally broadened, with segments 5-9 approximately as long as broad.....3. *seyrigi* (Benoit)
— Segment 1 of front tarsus approximately 1,5 times as long as segment 4 (Fig. 414 B in Olmi 1984).....4
4 Antennae longer and slender, with segments 5-9 almost twice as long as broad2. *bini* Olmi
— Antennae shorter, distally more broadened, with segments 5-9 approximately as long as broad.....6. *botswanensis* n. sp.

MALES

- 1 Notaulices incomplete.....6. *botswanensis* n. sp.
— Notaulices distinct and complete.....2
2 Genitalia with volsella slightly shorter than the gonoforceps (Fig. 13 in Olmi 1987c).....4. *watshami* Olmi
— Genitalia with volsella much shorter than the gonoforceps (Fig. 30 D).....
.....7. *zimbabwensis* n. sp.

GENUS *BOCCHUS*: ORIENTAL REGION

Bocchus viet n. sp.

Female: unknown

Male: fully winged; length 2,93 mm; black; mandibles testaceous; antennae and

legs brown, antennae not distally thickened; antennal segments in following proportions: 13:6:9:8:8:8:8:7:6:10; head dull, fully reticulate rugose; frontal line complete, forming a prominent pointed carina between the antennal toruli (Fig. 30 E); occipital carina complete; POL = 3; OL = 2; OOL = 9; OPL = 9; TL = 6; scutum, scutellum and metanotum fully reticulate rugose, dull; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than POL (11:3); petiole very short; fore wing with distal half weakly darkened; radial vein curvilinear, with distal part approximately as long as proximal part; tibial spurs 1, 1, 2.

Locus typicus: Fyan (m 1200, Viet Nam).

Typical material: holotype M! in B; 1 paratype M! in OL.

Distribution: VIET NAM: Fyan (m 1200), B! Dalat (m 1500), OL!

Notes: the holotype was collected by N.R. Spencer on July 11 - August 9, 1961; the paratype was collected by C.M. Yoshimoto on September 26-27, 1960

Bocchus beckeri n. sp.

Female: fully winged; length 3,32-4,18 mm; head brown-reddish or brown-black or reddish, with mandibles and clypeus testaceous; occasionally also genae and anterior margin of frons testaceous; thorax and propodeum brown or reddish; abdomen brown or reddish; legs testaceous; antennae testaceous, with segments 4-10 or 9-10 darkened; antennae not distally thickened; antennal segments in following proportions: 14:8:8:7:6:7:7:5:10; head shiny, punctate, without sculpture among the punctures; occasionally head more or less granulated and dull; frons more or less sculptured by irregular keels; frontal line complete; occipital carina complete; POL = 1,5; OL = 2; OOL = 7,5; OPL = 9; TL = 7; pronotum very short, crossed by a transversal furrow; scutum shiny, finely punctate, without sculpture among the punctures; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median and lateral areas sculptured by transversal keels; propodeum with two lateral points; fore wing with two dark transversal bands; distal part of radial vein approximately as long as proximal part; petiole very long, much shorter than the abdomen (6:21); fore tarsal segments in following proportions: 15:3:2:13:15; enlarged claw (Fig. 30 F) with 1 tooth and 1 long bristle; segment 5 of front tarsus (Fig. 30 F) with a preapical lamella, 2 bristles and a proximal distinct prominence; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Pasoh Forest Reserve (Negri S., Malaya, Malaysia).

Typical material: holotype F! and 16 paratypes FF! in TW; 1 paratype F! in B; 3 paratypes FF! in OL.

Distribution: MALAYSIA: Pasoh Forest Reserve (Negri S., Malaya), TW! OL! VIET NAM: 6 Km S Dalat (m 1400-1500), B!

Notes: the species is named in honor of the collectors of the typical series from Malaya, P. & M. Becker; the holotype was collected on April 26, 1978; the paratypes were collected in secondary and primary forest in very different dates: IV.24.78; XI.20.78; X.20.78; X.23.78; II.26.79; IV.28.80; IX.23.78; X.7.78; III.3.79; VI.28.79; III.5.79; VI.10.79; VII.8.79; IX.26.78; VIII.14.78; IV.7.79; VII.4.78; X.8.78;

VI.26.79; the paratype from Viet Nam was collected by N.R. Spencer on June 9 - July 7, 1961.

Bocchus levis n. sp.

Female: unknown

Male: fully winged; length 2-3 mm; head black, with clypeus ferruginous and mandibles testaceous; antennae yellow, with segments 8-10 darkened; thorax, propodeum and abdomen brown-ferruginous; petiole yellow; legs yellow; occasionally thorax, petiole and propodeum more or less darkened; antennae not distally thickened; antennal segments in following proportions: 10:5:5.5:7:7:6.5:6:6:6:8; head dull, granulated; frons occasionally with tracks of weak irregular keels; frontal line complete; occipital carina complete; POL = 2; OL = 2; OOL = 7; OPL = 5; TL 3,5; scutum dull, granulated, with tracks of weak irregular keels; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (6:3); scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with areolae very wide; posterior surface of propodeum with two longitudinal keels; median area almost fully smooth; fore wing with two dark transversal bands; pterostigma lanceolate; distal part of radial vein shorter than proximal part (15:18); petiole very long, shorter than abdomen (9:17); genitalia in fig. 31 A; tibial spurs 1, 1, 2.

Locus typicus: Pasoh Forest Reserve (Negri S., Malaya, Malaysia).

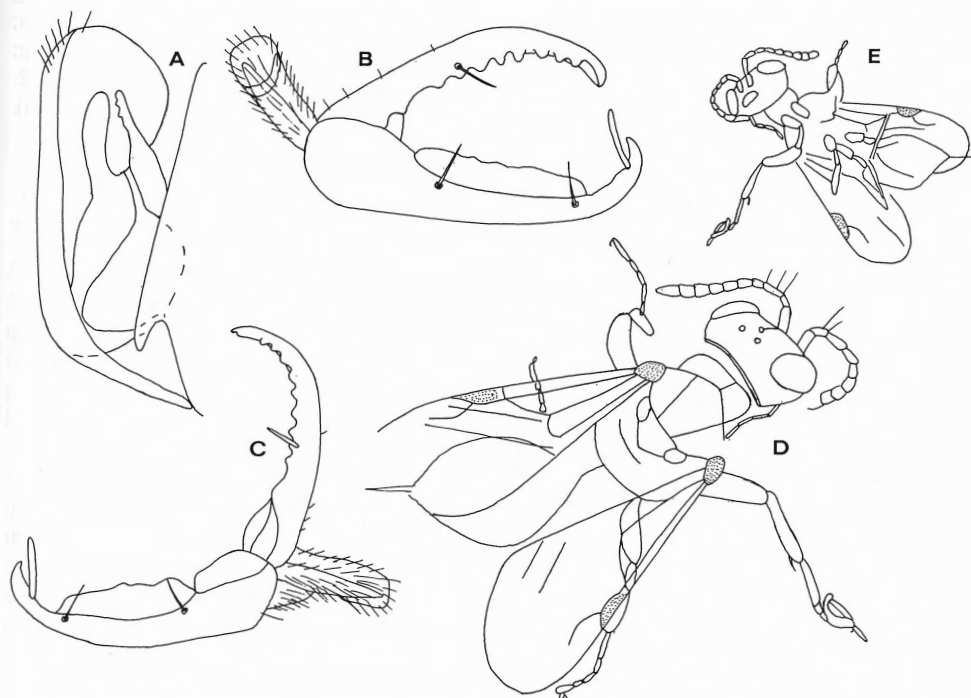


Fig. 31 - Male genitalia of *Bocchus levis* n. sp. (holotype) (A); chela of *Bocchus ruber* n. sp. (holotype) (B) and *Bocchus colombianus* n. sp. (holotype) (C); female of *Bocchus vetustus* n. sp. in amber: holotype in dorsal (D) and ventral view (E).

Typical material: holotype M! and 6 paratypes MM! in TW; 3 paratypes MM! in OL.
Distribution: only known from the typical locality.

Notes: the holotype was collected by P. & M. Becker in primary forest on February 25, 1979; the typical series was collected by the same collectors both in primary and in secondary forest on VI.26.78; XII.4.78; II.26.79; VI.7.79; II.21.79; XI.16.79; IX.15.79; XI.10.79; II.23.80.

Bocchus achterbergi n. sp.

Female: unknown

Male: fully winged; length 2,5 mm; head black, with mandibles testaceous; antennae testaceous; thorax and propodeum black; petiole testaceous; abdomen brown; legs testaceous, with coxae and fore femora brown; antennae not distally thickened; antennal segments in following proportions: 9:6:6:8:8:8:7,5:7:6:8; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 3; OL = 2; OOL = 6,5; OPL = 6; TL = 6; scutum dull, reticulate rugose; notaulices absent; scutellum shiny, smooth, without sculpture, weakly granulated near the anterior margin; metanotum humped, shiny, smooth, without sculpture; propodeum reticulate rugose, with two longitudinal keels on posterior surface; median area smooth, without sculpture; propodeum reticulate rugose, with two longitudinal keels on posterior surface; median area smooth, without sculpture; fore wing with two dark transversal bands beneath the pterostigma and on the basal cells; distal part of radial vein shorter than proximal part (18:21); petiole very long; abdomen approximately three times as long as petiole (34:10); tibial spurs 1, 1, 2. *Locus typicus:* 00°44'N 124°27'E (Gn. Ambang N. R., m 1400, N Sulawesi, Indonesia).

Typical material: holotype M! in LE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, C. van Achterberg; the holotype was collected by a malaise trap on a hilltop on November 3-8, 1985.

After the descriptions of the above new species a new key to the Oriental *Bocchus* can be proposed, as follows:

FEMALES

- 1 Fore wing with 1 dark transversal band.....1. *laotianus* Olmi
- Fore wing with 2 dark transversal bands.....2
- 2 Fore wing with radial vein weakly curved (Fig. 416 A in Olmi 1984); segment 5 of front tarsus without a distinct proximal prominence (Fig. 418 in Olmi 1984); enlarged claw with a row of teeth (Fig. 418 in Olmi 1984).....
-2. *muluensis* Olmi
- Fore wing with radial vein more strongly curved (Fig. 416 B in Olmi 1984); segment 5 of front tarsus with a distinct proximal prominence (Figs. 419, 422 in Olmi 1984; Fig. 30 F); enlarged claw with 1 tooth (Figs. 419, 422 in Olmi 1984; Fig. 30 F).....3

- 3 Head with OL more than twice as long as POL; head, thorax and propodeum reddish-light.....4. *rubricus* (Fouts)
- Head with OL not much longer than POL; head, thorax and propodeum reddish-brown or brown.....4
- 4 Notaulices complete.....3. *pedunculatus* Nagy
- Notaulices incomplete.....8. *beckeri* n. sp.

MALES

- 1 Notaulices absent.....2
- Notaulices complete or almost complete.....3
- 2 Fore wing hyaline, without dark transversal bands; petiole very short.....5. *indicus* Olmi
- Fore wing with two dark transversal bands; petiole very long; abdomen approximately three times as long as petiole.....10. *achterbergi* n. sp.
- 3 Head granulated, not reticulate rugose, or only with tracks of weak keels on frons.....9. *levis* n. sp.
- Head fully reticulate rugose.....4
- 4 Scutellum and metanotum not reticulate rugose.....3. *pedunculatus* Nagy
- Scutellum and metanotum fully reticulate rugose.....5
- 5 Minimum distance between the notaulices slightly longer than POL; POL approximately as long as OOL.....6. *asper* Olmi
- Minimum distance between the notaulices at least twice as long as POL; OOL at least twice as long as POL.....7. *viet* n. sp.

GENUS *BOCCHUS*: NEOTROPIC REGION

***Bocchus boharti* n. sp.**

Female: unknown

Male: fully winged; length 2,18 mm; head black, with mandibles testaceous; antennae brown; thorax and propodeum black; abdomen black; legs brown, with tarsi whitish; antennae not distally thickened; antennal segments in following proportions: 9:5:6:6:5:5:5:6:5:8; head dull, granulated, with some weak irregular keels; frontal line complete, occipital carina complete; POL = 5; OL = 3; OOL = 6,5; OPL = 4,5; TL = 6; scutum, dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (6:2,5); scutellum dull, granulated; metanotum dull, rugose; propodeum reticulate rugose; posterior surface of propodeum with two longitudinal keels; median area almost fully smooth, shiny, without sculpture; fore wing hyaline, without dark transversal; distal part of radial vein shorter than proximal part (6:9); tibial spurs 1, 1, 2.

Locus typicus: Santa Cruz (Santa Cruz Prov., Bolivia).

Typical material: holotype M! in HS.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, G.E. Bohart; the holotype was collected on September 28, 1972.

Bocchus ruber n. sp.

Female: fully winged; length 3 mm; head reddish-testaceous, with ocellar triangle darkened; antennae brown, with segment 1 testaceous; thorax and propodeum reddish-testaceous, with dorsal surface of propodeum and ventral side of mesothorax and metathorax black; abdomen brown; legs brown, with coxae, trochanters fore tibiae and fore tarsi testaceous; antennae distally thickened; antennal segments in following proportions: 12:7:13:8:8:7:7:6:5:10; head dull, granulated and reticulate rugose; frontal line complete; two lateral keels are visible around the orbits; occipital carina complete; POL = 3; OL = 2; OOL = 10; OPL = 9; TL = 9; head flat, hairy; pronotum crossed by a strong transversal impression, dull, hairy, reticulate rugose; pronotal tubercles reaching tegulae; scutum dull, hairy, granulated and sculptured by numerous longitudinal striae; notaulices complete, slightly visible near the posterior margin of the scutum, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (10:3); scutellum dull, sculptured by some longitudinal striae; metanotum rugose; propodeum reticulate rugose, posterior surface with two longitudinal keels; median area as rugose as lateral areas; fore wing with two dark transversal bands; radial cell open; distal part of radial vein shorter than proximal part (11:13); fore tarsal segments in following proportions: 14:3:4:13:16; enlarged claw (Fig. 31 B) with a row of 8 teeth and 1 bristle; segment 5 of front tarsus (Fig. 31 B) with a preapical lamella and 2 bristles; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 11°00'N 85°33'W (Cerro el Hacha, m 300, NW Volcán Orosí, Guanacaste National Park, Guanacaste Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in 1989.

Bocchus colombianus n. sp.

Female: fully winged; length 3,93 mm; head reddish-testaceous; antennae testaceous; prothorax reddish-testaceous, except for pronotal tubercles brown; mesothorax, metathorax and propodeum black; petiole testaceous; abdomen brown; fore legs testaceous; mid and hind legs brown, with tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 10:7:10:8:7:7:6:6:5:7; head shiny, weakly granulated, slightly rugose on the sides of the frons and near clypeus; frontal line complete; frons with two lateral keels around the orbits; occipital carina complete; POL = 2; OL = 2; OOL = 10; OPL = 8; TL = 6; pronotum hairy, crossed by a strong transversal impression; pronotal tubercles reaching tegulae; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (8:2); scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface of propodeum with two longitudinal keels; median area as rugose as lateral areas; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein shorter than proximal part (8:12); fore tarsal segments in following proportions: 15:2:3:10:13; enlarged claw (Fig. 31 C) with a row of 9 teeth and 1 bristle; segment 5 of front tarsus (Fig. 31 C) with a preapical lamella and 2 bristles; tibial spurs 1, 1, 1.

Male: unknown

Locus typicus: Finca San Luis (m 1010, Mun. Candelaria, Valle Dept., Colombia).

Typical material: holotype F! in DE.

Distribution: only known from the typical locality.

Notes: the holotype was collected in a tropical dry forest by a malaise trap by R.C. Wilkerson on September 30, 1975.

***Bocchus vetustus* n. sp.**

(fossil)

Female (Figs. 31 D, 31 E): fully winged; length 2,93 mm; apparently brown, with antennae, part of the legs and margins of scutellum light; antennae 10-segmented, distally thickened, densely hairy; hairs very short, much shorter than the breadth of the antennae; antennal segments in following proportions (length) 12:3,5:6:4:4:4:4:4:5:4:6; (breadth) 3:2:2,2:2,5:3:3,5:3,5:4:4:4; antennae more than twice as long as head (length of head in dorsal view from occipital carina behind the ocelli to apex of mandibles): 52:20; antennal sockets touching margins of clypeus; clypeus with ventral margin apparently rounded, not bidentate; mandibles with teeth not well visible; eyes apparently bare; malar space without furrow joining lower corner of eye to base of mandibles; occipital carina complete; temples distinct, prominent; eyes normally protruding; POL = 3; OL = 2; OOL = 6; OPL = 6,5; TL = 7; frons with a complete median keel; head apparently granulated; pronotum crossed by a transversal furrow; pronotal tubercles reaching tegulae; pronotum shorter than scutum (5:17); scutum granulated, with notaulices complete and posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (6:2); scutellum granulated, shorter than scutum (8:17); metanotum shorter than scutellum (4:8); sculpture of metanotum not well visible; shape of scutum, scutellum, metanotum and propodeum usual for *Bocchinae*; propodeum not visible through the amber, because of the thickness of the amber and because the wings are hiding the propodeum; petiole very long and slender, shorter than abdomen (11:45); fore wing with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (6:8); fore wing with the normal venation of the *Bocchinae*; radial cell open; pterostigma narrow, much longer than broad (11:3,5); fore wing with the three usual basal cells clearly enclosed (costal, median and submedian cells); hind wings apparently hyaline, without dark transversal bands; shape of the hind wings usual for *Bocchinae*; segments of the fore legs in following proportions: 11 (coxae): 9 (trochanters): 20 (femora): 20 (tibiae): 12 (tarsal segment 1): 3 (tarsal segment 2): 1 (tarsal segment 3): 7 (tarsal segment 4): 12 (tarsal segment 5); fore tarsal segment 3 bearing a long apical bristle; shape of the chela usual for *Bocchus*; rudimentary claw present; enlarged claw and fore tarsal segment 5 not well visible; fore trochanters three times as long as broad (9:3); segments of mid legs in following proportions: 8 (coxae): 5 (trochanters): 19 (femora): 17 (tibiae): 9 (tarsal segment 1): 3 (tarsal segment 2): 2,5 (tarsal segment 3): 3 (tarsal segment 4): 4 (tarsal segment 5); segments of hind legs in following proportions: 10 (coxae): 5 (trochanters): 25 (femora): 25 (tibiae): 8 (tarsal segment 1): 5 (tarsal segment 2): 3 (tarsal segment 3): 3 (tarsal segment 4): 5 (tarsal segment 5); maxillary palpi with 6 segments; labial palpi with 3 segments; shape, length and breadth of wings usual for *Bocchinae*; shape and morphology of the body usual for *Bocchinae*.

Male: unknown

Typical material: holotype F! in amber from El Valle mine (Dominican Republic), CA!

Notes: *Bocchus vetustus* n. sp. is the only fossil species belonging to the subfamily *Bocchinae*.

After the descriptions of the above new species a new key to the Neotropic *Bocchus* can be proposed, as follows:

FEMALES

(not fossil species)

- 1 Scutum fully sculptured by longitudinal striae; body almost fully reddish3. *ruber* n. sp.
— Scutum granulated, occasionally partly reticulate rugose, not sculptured by longitudinal striae; body almost fully black or partly black and partly reddish-testaceous2
2 Head and prothorax almost fully black1. *neotropicus* Olmi
— Head and prothorax reddish-testaceous4. *colombianus* n. sp.

The female of *Bocchus boharti* n. sp. is unknown.

MALES

(not fossil species)

Only the male of *Bocchus boharti* n. sp. is known.

GENUS *BOCCHUS*: AUSTRALIAN REGION

***Bocchus gressitti* n. sp.**

Female: unknown

Male: fully winged; length 1,62-2,18 mm; black; mandibles testaceous; antennae and legs brown, with tarsi testaceous; antennae not distally thickened, with segment 5 slightly longer than broad (5,5:4); antennal segments in following proportions: 11:5:6:6:5,5:6:6:5,5:8; head dull, swollen, granulated; frontal line complete; occipital carina complete; POL = 6; OL = 2,5; OOL = 6; OPL = 2; TL = 2; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices much longer than OL (7:2,5); scutellum weakly granulated; metanotum shiny, without sculpture; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; median and lateral areas smooth, shiny, without areolae or keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (6:10); tibial spurs 1, 1, 2.

Locus typicus: Maningrida (Arnhem Land, Northern Territory, Australia).

Typical material: holotype M! and 5 paratypes MM! in B; 3 paratypes MM! in

OL; 1 paratype M! in TW; 5 paratypes MM! in CB.

Distribution: AUSTRALIA: Maningrida (Arnhem Land, Northern Territory), B! OL! Larrimah (Northern Territory), CB! Normanton (Queensland), TW! 15°17'S 145°13'E (1 Km N Rounded Hill, nr Hope Vale Mission, Queensland), CB! 31°05'S 141°42'E (Fowlers Gap Res. Stn., New South Wales), CB! Broome (Western Australia), CB!

Notes: the species is named in honor of the collector of the holotype, L. Gressitt; the typical series from Maningrida was collected by a malaise trap on March 20-23, 1961; the two paratypes from Rounded Hill were collected by J.C. Cardale on October 5-6, 1980; the paratype from Fowlers Gap Res. Stn. was collected ex yellow trays by I.D. Naumann and J.C. Cardale on November 29 - December 2, 1980; the paratype from Broome was collected by R.I. Storey and E.M. Exley on December 14-18, 1975; the paratype from Larrimah was collected by E.F. Riek on October 8, 1972; the paratype from Normanton was collected on March 21 - April 4.

***Bocchus inanis* n. sp.**

Female: unknown

Male: fully winged; length 2,31-3,00 mm; black; mandibles testaceous; antennae brown; abdomen and legs brown; propodeum occasionally with brown nuances; antennae not distally thickened; antennal segment 5 more than three times as long as broad (8:2); antennal segments in following proportions: 9:6:8:8:8:7:6:9; head dull, granulated and reticulate rugose; frontal line complete; occipital carina complete; POL = 2; OL = 1; OOL = 6; OPL = 5; TL = 4; scutum dull, fully reticulate rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than POL (9:2); scutellum shiny, weakly granulated; metanotum shiny, without sculpture; propodeum reticulate rugose, with a strong transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; median area shiny, weakly rugose; fore wing fully hyaline or with weak dark bands; distal part of radial vein shorter than proximal part (13:17); radial cell open; petiole approximately 0,5 as long as abdomen (14:29); tibial spurs 1, 1, 2.

Locus typicus: Nabire (S Geelvink Bay, Irian, New Guinea).

Typical material: holotype M! and 1 paratype M! in B; 2 paratypes MM! in OL; 3 paratypes MM! in CB.

Distribution: NEW GUINEA: Nabire (S Geelvink Bay, Irian), B! Waris (S of Hollandia, Irian), B! Jimmi Valley (Papua), OL! AUSTRALIA: 12°44'S 143°14'E (3 Km ENE Mt. Tozer, Queensland), CB!, 12°43'S 143°18'E (11 Km ENE Mt. Tozer, Queensland), OL! Crystal Cascades (Cairns, Queensland), CB! 15°50'S 145°20'E (Gap Ck., 5 Km ESE Mt. Finnigan, Queensland), CB!

Notes: the holotype was collected by J.L. Gressitt on July 2-9, 1962; the paratype from 3 Km ENE Mt. Tozer was collected by J.C. Cardale on June 28 - July 4, 1986; the paratype from 11 Km ENE Mt. Tozer was collected by J.C. Cardale on July 11-16, 1986; the paratype from Crystal Cascades was collected by D.H. Colless on April 19, 1967; the paratype from Gap Ck. was collected by I.D. Naumann on May 13-16, 1981; the paratype from Waris was collected by sweeping by T.C. Maa on August, 16-23, 1959; the paratype from Jimmi Valley was collected by J. Sedlacek on February 7 - March 2, 1979. The last paratype was identified previously as *Bocchus guineensis* Olmi and originally designated as paratype of that species (see Olmi 1984, p. 658). That determination however was not correct and it's now modified.

Bocchus naumanni n. sp.

Female: fully winged; length 4,37-5,62 mm; reddish-testaceous; occasionally abdomen black, antennal segments 3-10 brown and legs partly brown; antennae distally thickened; antennal segments in following proportions: 17:9:16:13:13:11:10:10:10:13; head dull, convex, fully reticulate rugose, except for the region in front of the anterior ocellus granulated; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 6; OPL = 12; TL = 11; pronotum crossed by a strong transversal impression, shiny, transversely striate; pronotal tubercles reaching tegulae; scutum dull, granulated, with anterior third reticulate rugose; occasionally scutum reticulate rugose, but with posterior half of median region granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (10:4); scutellum and metanotum shiny, weakly granulated; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels, with lateral areas reticulate rugose; median area faintly rugose; fore wing with a weak dark transversal band beneath the pterostigma; distal part of radial vein shorter than proximal part (8:13); fore tarsal segments in following proportions: 27:3,5:2,5:21:22; enlarged claw (Fig. 32 A) with a row of 13-14 teeth; segment 5 of front tarsus (Fig. 32 A) without preapical lamella and without teeth and bristles, with an inner broad band wrapping the apex of segment 5; tibial spurs 1, 1, 2.

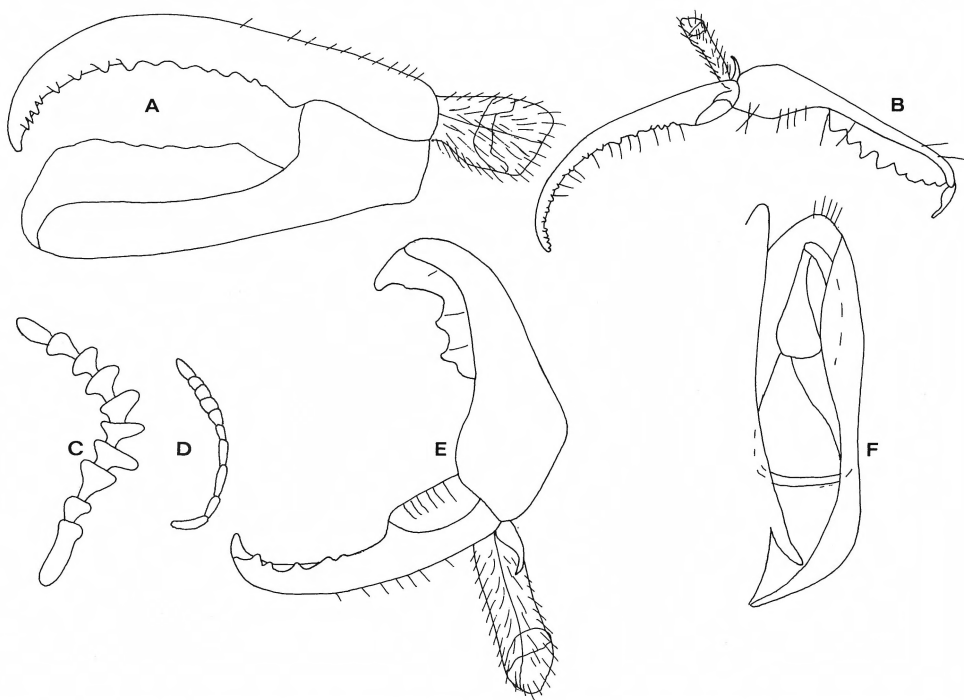


Fig. 32 - Chela of *Bocchus naumanni* n. sp. (holotype) (A), *alamellatus* n. sp. (holotype) (B) and *casuarinensis* n. sp. (holotype) (E); antenna of male of *Bocchus alamellatus* n. sp. (paratype from Numbuwah Rock) (C) and *cardaleae* n. sp. (holotype) (D); male genitalia of *Bocchus cookensis* n. sp. (holotype) (F).

Male: unknown

Locus typicus: 31°05'S 141°42'E (Fowlers Gap Res. Stn., New South Wales, Australia).

Typical material: holotype F! and 4 paratypes FF! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 31°05'S 141°42'E (Fowlers Gap Res. Stn., New South Wales), CB! 16°28'S 136°09'E (46 Km SSW of Borroloola, Northern Territory), OL! Springsure (Queensland), CB! 15°18'S 145°00'E (Isabella Creek, 32 Km NW by W of Cooktown, m 230, Queensland), CB! 15°17'S 145°13'E (1 Km N Rounded Hill, nr Hope Vale Mission, Queensland), CB! 14°49'S 126°49'E (Carson escarpment, Western Australia), CB!

Notes: the species is named in honor of one of the collectors of the typical series, I.D. Naumann; the holotype was collected at light by I.D. Naumann and J.C. Cardale on December 8-9, 1982; the paratype from Northern Territory was collected by J.C. Cardale on October 28, 1975; the paratype from Western Australia was collected by I.F.B. Common and M.S. Upton on August 9-15, 1975; the paratype from Rounded Hill was collected at light by J.C. Cardale on October 5-6, 1980; the paratype from Isabella Creek was collected by I.F.B. Common and E.D. Edwards on May 22, 1977; the paratype from Springsure was collected by E.F. Riek on April 3, 1957.

***Bocchus cardaleae* n. sp.**

Female: unknown

Male: fully winged; length 3,12 mm; black, mandibles testaceous; antennae black, with segments 1-4 testaceous; legs testaceous; antennae distally thickened; antennal segments in following proportions: 12:6:8:7:5:5:4:4:6; antennal segment 5 slightly longer than broad (5:4); head shiny, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 4; OL = 3; OOL = 7; OPL = 9; TL = 9; scutum dull, granulated, with weak tracks or irregular keels on anterior half; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (9:2,5); scutellum and metanotum dull, granulated; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface with broad areolae; posterior surface with two longitudinal keels; median and lateral areas dull and reticulate rugose; fore wing weakly darkened on distal half; distal part of radial vein shorter than proximal part (12:10); petiole short, much shorter than half of abdomen (8:50); tibial spurs 1, 1, 2.

Locus typicus: 17°41'S 145°26'E (Millstream Falls Nat. Park, Queensland, Australia).

Typical material: holotype M! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of one of the collectors of the holotype, J.C. Cardale; the holotype was collected also by I.D. Naumann on May 24-25, 1980.

***Bocchus alamellatus* n. sp.**

Female: fully winged; length 3,25-4,37 mm; head, prothorax and scutum reddish-testaceous; antennae fully testaceous or with segments 3-10 darkened; scutellum

reddish-testaceous or brown; metanotum and median region of propodeum brown; sides of pronotum more or less darkened; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 14:5:10:9:7:6:5:5:4,5:7; head dull, fully reticulate rugose or more or less granulated; occasionally with frons almost fully granulated; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 9; OPL = 8; TL = 12; scutum dull, fully reticulate rugose or more or less granulated; occasionally granulated and only with anterior third reticulate rugose; in other cases posterior half of median surface granulated and lateral areas reticulate rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (10:3); scutellum and metanotum shiny, weakly granulated; propodeum with wide areolae on dorsal surface; posterior surface with two longitudinal keels; median area rugose; fore wing hyaline or with a dark spot beneath the pterostigma; distal part of radial vein shorter than proximal part (7:8); fore tarsal segments in following proportions: 17:3:2:23:22; enlarged claw (Fig. 32 B) with a row of approximately 17 teeth and numerous bristles; segment 5 of front tarsus (Fig. 32 B) without preapical lamella and with a broad inner band not wrapping the apex of the segment; tibial spurs 1, 1, 2.

Male: fully winged; length 3,93 mm; black; mandibles, antennae and legs fully testaceous; antennae distally thickened, with segments 2-9 laterally broadened (Fig. 32 C); antennal segments in following proportions: 19:7:8:7:6:6:7:7:13; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 9; OL = 5; OOL = 11; OPL = 11; TL = 14; scutum, scutellum and metanotum fully reticulate rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (10:4); propodeum reticulate rugose, with two longitudinal keels on posterior surface; median area rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein slightly longer than proximal part (8:7); tibial spurs 1, 1, 2.

Locus typicus: 30 Km S Cunnamulia (Queensland, Australia).

Typical material: holotype F! and 3 paratypes (2 FF, 1 M)! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 30 Km S Cunnamulia (Queensland), CB! 18°22'S 122°53'E (85 Km SE by E Broome, Western Australia), CB! 12°18'S 133°17'E (15 Km SW by S of Nimbuwah Rock, Northern Territory), CB! Mt. Barr (24 Km SSE of Abminga, South Australia), OL!

Notes: the holotype was collected by E.F. Riek on October 24, 1957; the paratype from Western Australia was collected by I.F.B. Common on August 14, 1976; the paratypes (1 F, 1 M) from Northern Territory were collected by J.C. Cardale on November 10-11, 1972; the paratype from Mt. Barr was collected by Z. Liepa on September 25, 1972.

***Bocchus casuarinensis* n. sp.**

Female: fully winged; length 3,87 mm; head reddish-testaceous; antennae brown, with segments 1-3 testaceous; thorax and propodeum reddish-testaceous; abdomen black; legs brown, with coxae, trochanters and part of tarsi and femora testaceous; antennae distally thickened; antennal segments in following proportions: 13:7:12:8:8:7:6:6:8; head dull, granulated and weakly reticulate rugose; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 8; OPL

= 7; TL = 10; scutum dull, granulated and weakly reticulate rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (8:3); scutellum dull, granulated; metanotum small, smooth, shiny; propodeum reticulate rugose, with two longitudinal keels on the posterior surface; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein shorter than proximal part (6:10); fore tarsal segments in following proportions: 18:3:3:10:10; enlarged claw (Fig. 32 E) with a row of 6 teeth; segment 5 of front tarsus (Fig. 32 E) without preapical lamellae and without teeth, with some bristles, with an inner band very broad and wrapping the apex of the segment; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 15°03'S 145°15'E (4 Km SW of Casuarina Hill, Queensland, Australia).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected in heath by I.D. Naumann on April 30 - May 2, 1981.

***Bocchus cookensis* n. sp.**

Female: unknown

Male: fully winged; length 2,56-2,81 mm; black; mandibles testaceous; antennae testaceous, with segments 3-10 darkened; legs testaceous, with fore clubs of femora partly darkened; antennae distally thickened; antennal segments in following proportions: 12:6:7:7:7:7:6:6:5,5:9; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 6; OL = 3; OOL = 6; OPL = 5; TL = 5; scutum dull, granulated and partly rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (6:3); scutellum weakly or strongly granulated; metanotum rugose; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface with broad areolae; posterior surface with two longitudinal keels; lateral and median areas rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (13:6); genitalia in fig. 32 F; tibial spurs 1, 1, 2.

Locus typicus: 15°29'S 145°16'E (Mt. Cook Nat. Park, Cooktown, Queensland, Australia).

Typical material: holotype M! and 1 paratype M! in CB.

Distribution: AUSTRALIA: 15°29'S 145°16'E (Mt. Cook Nat. Park, Cooktown, Queensland), CB! 15°17'S 145°13'E (1 Km N Rounded Hill, nr Hope Vale Mission, Queensland), CB!

Notes: the holotype was collected by J.C. Cardale on October 11-12, 1980; the paratype was collected by J.C. Cardale on October 5-6, 1980.

***Bocchus bicolor* (Dodd 1913) n. comb.**

= *Anteonella bicolor* Dodd 1913: 182.

= *Anteonella bicolor* Dodd: Kieffer 1914b: 214.

= *Bocchus robustus* (Dodd) *partim*: Olmi 1984: 660.

Female: fully winged; length 5,62-6,87 mm; black, with mandibles testaceous; legs and abdomen reddish-testaceous; antennae brown, with segments 1-5 or 1-7 testaceous; occasionally coxae and fore femora black; antennae distally thickened; antennal segments in following proportions: 20:8:17:12:10:9:9:8:7:11; head shiny, punctate, without sculpture among the punctures; temples and region behind the ocelli reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 5; OOL = 12; OPL = 15; TL = 10; pronotum crossed by a strong transversal impression, shiny, punctate, without sculpture among the punctures, except for some transversal keels; pronotal tubercles reaching tegulae; scutum shiny, punctate, without sculpture among the punctures, except for numerous areolae near the anterior margin; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (11:4); scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with two longitudinal keels on posterior surface; fore wing with distal half crossed by a dark transversal band; distal part of radial vein as long as proximal part; fore tarsal segments in following proportions: 28:3:6:30:38; enlarged claw (Fig. 33 A) with a long row of approximately 30 teeth; segment 5 of front tarsus (Fig. 33 A) without preapical lamella, with two proximal bristles and with a broad inner band wrapping the apex of the segment; segment 3 of front tarsus produced into a hook; tibial spurs 1, 1, 2.

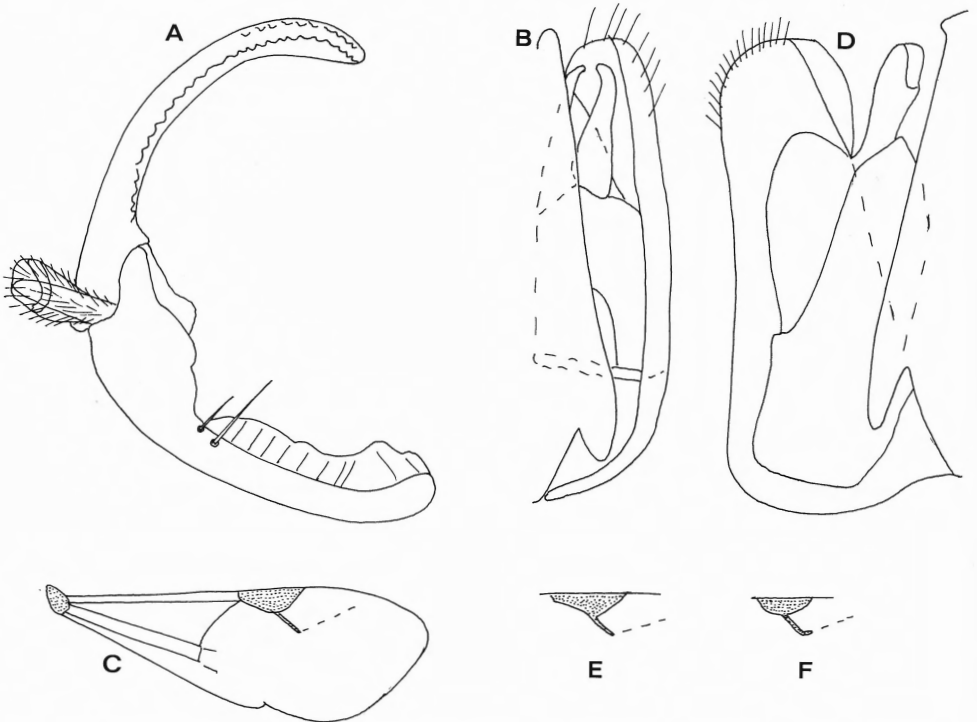


Fig. 33 - Chela of *Bocchus bicolor* (Dodd) from Sir Graham Moore I. (A); male genitalia of *Bocchus australiae* Olmi from Walsh Point (B) and *Mirodryinus atlanticus* Olmi from Tarhazoute (D); fore wing of male of *Mirodryinus atlanticus* Olmi from Tarhazoute (C); right (E) and left (F) radial vein of female of *Mirodryinus atlanticus* Olmi from Agdz.

Male: unknown

Locus typicus: Townsville (Queensland, Australia).

Typical material: holotype F! in AD.

Distribution: AUSTRALIA: Townsville (Queensland), AD! Blunder Cr. (Brisbane, Queensland), UQ! Koongarra (15 Km E of Mt. Cahill, Northern Territory), CB! 14°30'S 132°15'E (3 Km SSW of Katherine, Northern Territory), CB! Sir Graham Moore Island (Western Australia), OL!

Notes: *Bocchus bicolor* (Dodd) was considered synonym of *Bocchus robustus* (Dodd) in Olmi (1984). After a study of numerous material kept in CB, I revalued the differences between the two species (scutum reticulate rugose in *robustus* and punctate in *bicolor*; head reticulate rugose in *robustus* and almost fully punctate in *bicolor*) and now I'm considering the two species separated. In Olmi (1984, p. 660) the drawing of the chela of *B. robustus* is incorrect, because, it shows a preapical lamella; this preapical lamella is however absent, as in *B. bicolor*.

Bocchus australiae OLMi 1984

Bocchus australiae Olmi was described only on the basis of female specimens. In the last years male and female specimens from Australia were examined. The following description of the male can be proposed:

Male: fully winged; length 1,81-2,37 mm; black; mandibles testaceous; abdomen brown; legs brown, with tarsi light; antennae distally thickened; antennal segments in following proportions: 10:5:5:5:5:5:5:5:6; head dull, granulated, weakly rugose; frontal line complete; occipital carina complete; POL = 7; OL = 3; OOL = 3,5; OPL = 3; TL = 3; scutum dull, granulated and rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (8:3,5); scutellum and metanotum weakly or strongly granulated, dull or shiny; propodeum with a strong keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels; lateral areas rugose; median area shiny, partly smooth; fore wing hyaline, without dark transversal bands; distal part of radial vein as long as proximal part (6:6); genitalia in fig. 33 B; tibial spurs 1, 1, 2.

Bocchus australiae Olmi is known from the following localities: AUSTRALIA: Mt. Tibrogargan (Queensland), CB! Woogaroo, QU! 15°03'S 145°09'E (1 Km NE Mt. Webb, Queensland), CB! 14°35'S 125°45'S (9 Km W by S Walsh Point, Western Australia), CB!

After the description of the above species a new key to the Australian *Bocchus* can be proposed, as follows:

FEMALES

- 1 Notaulices incomplete.....2. *guineensis* Olmi
- Notaulices complete.....2
- 2 Segment 5 of front tarsus without preapical lamella (Figs. 32 A, 32 B, 32 E, 33 A).....3

- Segment 5 of front tarsus with a preapical lamella (Figs. 433, 435, 437 in Olmi 1984); occasionally apparently without lamella, but only because the lamella is broken off (it often happens when the chela is in activity); in this case it's visible the track of the insertion of the lamella; it's advisable in this case to observe also the other chela; because rarely the preapical lamella is missing in both chelae.....7
- 3 Segment 5 of front tarsus with inner band less broad and not wrapping the apex of the segment (Fig. 32 B).....10. *alamellatus* n. sp.
- Segment 5 of front tarsus with inner band very broad and wrapping the apex of the segment (Figs. 32 A, 32 E, 33 A).....4
- 4 Scutum shiny, almost fully punctate and without sculpture among the punctures, only with anterior region reticulate rugose.....12. *bicolor* (Dodd)
- Scutum dull, fully reticulate rugose or partly granulated, not partly punctate and without sculpture among the punctures.....5
- 5 Enlarged claw and segment 5 of front tarsus short (Fig. 32 E); enlarged claw with a short row of teeth (Fig. 32 E).....11. *casuarinensis* n. sp.
- Enlarged claw and segment 5 of front tarsus long (Fig. 436 in Olmi 1984; Fig. 32 A); enlarged claw with a long row of teeth (Fig. 436 in Olmi 1984; Fig. 32 A).....6
- 6 Head, thorax and propodeum reddish-testaceous; head and scutum reticulate rugose, but at least partly granulated.....8. *naumanni* n. sp.
- Head, thorax and propodeum black, except for mandibles testaceous; head and scutum reticulate rugose, not granulated.....4. *robustus* (Dodd)
- 7 Enlarged claw with a short row of teeth located on distal half (Fig. 433 in Olmi 1984); segment 5 of front tarsus with an inner distinct proximal prominence (Fig. 433 in Olmi 1984).....1. *australiae* Olmi
- Enlarged claw with a long row of teeth located on the whole length (Figs. 435, 437 in Olmi 1984); segment 5 of front tarsus without inner proximal prominence (Figs. 435, 437 in Olmi 1984).....8
- 8 Head fully reticulate rugose.....5. *bouceki* Olmi
- Head more or less granulated; at least with frons almost fully granulated3. *minimus* Olmi

MALES

- 1 Petiole very long, approximately 0,5 as long as abdomen; scutum granulated and reticulate rugose; antennal segment 5 more than three times as long as broad; antennae not distally thickened.....2
- Petiole very short, much shorter than half of abdomen; scutum granulated; antennal segment 5 slightly longer than broad; antennae distally thickened3
- 2 Head fully granulated.....2 *guineensis* Olmi
- Head granulated and reticulate rugose.....7. *inanis* n. sp.
- 3 Head with POL much shorter than OPL and TL.....4
- Head with POL longer than OPL and TL.....5
- 4 Antennal segments 2-9 laterally broadened (Fig. 32 C).....10. *alamellatus* n. sp.
- Antennal segments 2-9 laterally not broadened (Fig. 32 D).....9. *cardaleae* n. sp.

- 5 Head with POL slightly longer than OPL and TL.....13. *cookense* n. sp.
 — Head with POL at least twice as long as OPL and TL.....6
 6 Head fully granulated.....6. *gressitti* n. sp.
 — Head granulated and rugose.....7
 7 Scutum granulated.....3. *minimus* Olmi
 — Scutum granulated and rugose.....1. *australiae* Olmi

GENUS *MIRODRYINUS*: PALAEARCTIC REGION

***Mirodryinus atlanticus* OLMI 1984**

Mirodryinus atlanticus Olmi was described only on the basis of a female specimen. In 1990 during some researches in Morocco a series of female and male specimens was reared by me from *Opsius* spp. (*Cicadellidae*) living on *Tamarix* spp.. The following description of the male can be proposed:

Male: fully winged; length 2,56-2,81 mm; head black, with mandibles and anterior margin of clypeus testaceous; thorax and propodeum black; legs brown, with fore tibiae and fore tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 8:3:11:10:10:10:9:8:7:9; head shiny, swollen, punctate, without sculpture among the punctures; frontal line absent; occipital carina complete; POL = 7; OL = 3; OOL = 7; OPL = 7; TL = 10; scutum shiny, smooth, punctate, without sculpture among the punctures; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum shiny, smooth, without sculpture among the punctures; metanotum shiny, smooth, without sculpture, swollen; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing with a distal dark transversal band; radial vein (Fig. 33 C) only composed of the proximal part; distal part absent; genitalia in fig. 33 D; tibial spurs 1, 1, 2.

Mirodryinus atlanticus Olmi is now known from the following localities: CANARY ISLANDS: Gran Tarajal (Fuerteventura I.), HE! MOROCCO: Tarhazoute (20 Km N Agadir), OL! Sidi Benziane (Oued Massa mouth, Massa, 70 Km S Agadir), OL! Agdz (Draa Valley, Zagora), OL!

The female specimens of *M. atlanticus* reared in Morocco showed a length of 2,18-2,81 mm and a colour very variable, as follows: head fully reddish or with vertex darkened; rarely head fully black, with mandibles, clypeus, genae and anterior margin of frons testaceous; antennae brown or black, with segments 1-3 testaceous; pronotum, scutum and scutellum reddish; metanotum black or reddish-darkened; propodeum black; mesopleura and metapleura reddish; occasionally metapleura darkened; abdomen brown-dark; legs testaceous. The radial vein was composed usually of the only proximal part; a female specimen from Agdz however showed, in the left fore wing, a short distal part, whereas the right fore wing was normal (Figs 33 E, 33 F).

After the above description of the male of *M. atlanticus* and after the above news on the variability of the females, a new key to the Palearctic *Mirodryinus* can be proposed, as follows:

FEMALES

- 1 Fore wing with radial vein curved, with distinct proximal and distal parts (Fig. 33 F); thorax and propodeum fully black or partly reddish.....2

- Fore wing with radial vein straight, only with a distinct proximal part (Figs 438, 439 in Olmi 1984; Fig. 33 E); thorax and propodeum fully or partly reddish4
- 2 Fore wing hyaline, with distal part of radial vein longer than proximal part.....6. *tussaci* Olmi
- Fore wing crossed by a dark transversal band, with distal part of radial vein shorter than proximal part.....3
- 3 Thorax and propodeum fully black.....1. *gobiensis* Ponomarenko
- Thorax and propodeum partly reddish and partly black.....
-4. *atlanticus* Olmi
- 4 Thorax and propodeum fully reddish.....2. *xerophilus* (Benoit)
- Thorax and propodeum partly reddish or brown or black.....5
- 5 Scutum brown.....3. *ungulatus* Ponomarenko
- Scutum reddish.....6
- 6 Metapleura reddish (occasionally partly darkened); radial vein longer (Fig. 33 E).....4. *atlanticus* Olmi
- Metapleura black; radial vein shorter (Fig. 448 A in Olmi 1984.....
-5. *ponomarenkoae* Olmi

MALES

- 1 Radial vein with a long proximal part and with a very reduced distal part (Fig. 2 in Olmi 1990); propodeum strongly reticulate rugose.....6. *tussaci* Olmi
- Radial vein only with a proximal part (Fig. 3 in Olmi 1990; Fig. 33 C); distal part absent.....2
- 2 Propodeum fully and strongly reticulate rugose.....4. *atlanticus* Olmi
- Propodeum weakly and irregularly sculptured by keels, not fully and strongly reticulate rugose.....2. *xerophilus* (Benoit)

BOCCHOPSIS, NEW GENUS

Type species: Bocchopsis naumanni n. sp.

Female: unknown

Male (Figs 34, 35): fully winged; maxillary palpi with 6 segments (Fig. 36 A); labial palpi with 3 segments (Fig. 36 B); mandibles with 4 teeth, with a rudimentary tooth between the two posterior teeth (Fig. 36 C); occipital carina complete; areolae of the propodeum at least partly as wide as tegulae; temples very long, much longer than eyes (Fig. 34); antennae very long, much longer than the body (Figs 34, 35); tibial spurs 1, 1, 2.

Distribution: Australian

Hosts: unknown

Species: 1

Bocchopsis naumanni n. sp.

Female: unknown

Male (Figs 34, 35): fully winged; length 1,37-2,81 mm; black; mandibles testaceous; antennae brown, with segments 1-2 testaceous; legs testaceous, with mid and hind

coxae and hind clubs of femora brown or darkened; antennae very slender and long, much longer than the body, not distally thickened (Figs 34, 35); antennal segments in following proportions: 6:6:13:13:14:14:12:12:10:10; head convex, shiny, punctate, without sculpture among the punctures; in large specimens head almost

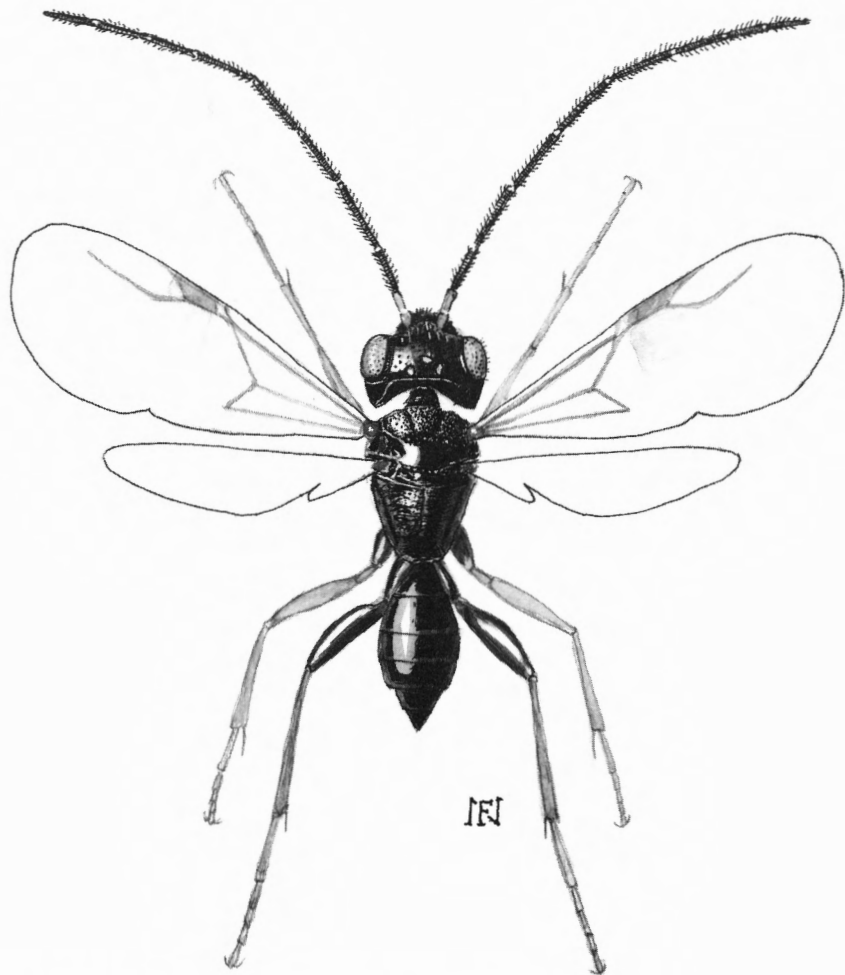


Fig. 34 - Male of *Bocchopsis naumanni* n. sp. (holotype).

fully granulated; occiput smooth, without sculpture; frontal line complete or absent; occipital carina complete; POL = 4; OL = 2; OOL = 3; OPL = 1; TL = 9; temples very long, much longer than the eyes (9:6); occiput very concave; scutum shiny, with anterior half reticulate rugose and with posterior half punctate and without sculpture among the punctures; in large specimens scutum fully granulated and reticulate rugose; notaulices complete, posteriorly separated; minimum

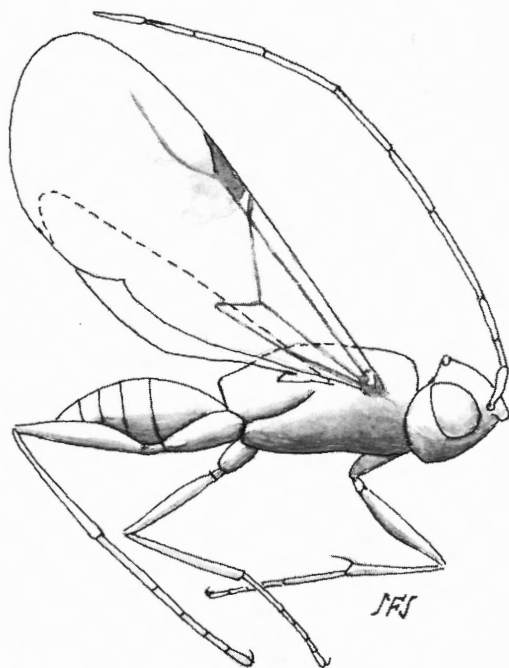


Fig. 35 - Male of *Bocchopsis naumanni* n. sp. (holotype).

distance between the notaulices as long as breadth of the ocelli (3:3); scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with areolae at least partly as large as tegulae; fore wing with a dark transversal band; distal part of radial vein longer than proximal part (19:10) (Fig. 36 D); radial cell open; hind wing with a dark transversal band; gonoforceps with an inner subapical and pointed process (Fig. 36 E); the volsellae are located between the gonoforceps and the distal process; basivolsella with distal apex parallel to distivolsella; maxillary palpi with 6 segments; labial palpi with 3 segments; tibial spurs 1, 1, 2.

Locus typicus: Kuranda Range State Forest (N Queensland, Australia)

Typical material: holotype M! and 7 paratypes MM! in CB; 2 paratypes MM! in TW; 1 paratype M! in AL; 3 paratypes MM! in OL.

Distribution: AUSTRALIA: Mt. Lewis Rd. (m 1000, Queensland), TW! 20 Km SW Mossman (m 400, Mt. Lewis, Queensland), AL! Kuranda Range State Forest (N Queensland), CB! Mossman Gorge (N Queensland), CB! Mt. Edith Forest Road (1 mi. off Danbulla Road, N Queensland), OL! Monga (New South Wales), OL! Clyde Mtn. (New South Wales), CB! 33 mi. Dorrigo - Coramba Rd. (New South Wales), CB! Black Mtn. (A.C.T.), CB! Karlo Ck. (21 Km E by N Cann River, Victoria), CB! OL!

Notes: the species is named in honor of one of the collectors of the typical series, I.D. Naumann; the holotype was collected by D.H. Colless on April 20, 1967; the paratypes from Mt. Lewis Road (in TW) were collected along the edge of a rain forest by L. Masner on March 17-24, 1984; the paratype from 20 Km SW Moss-

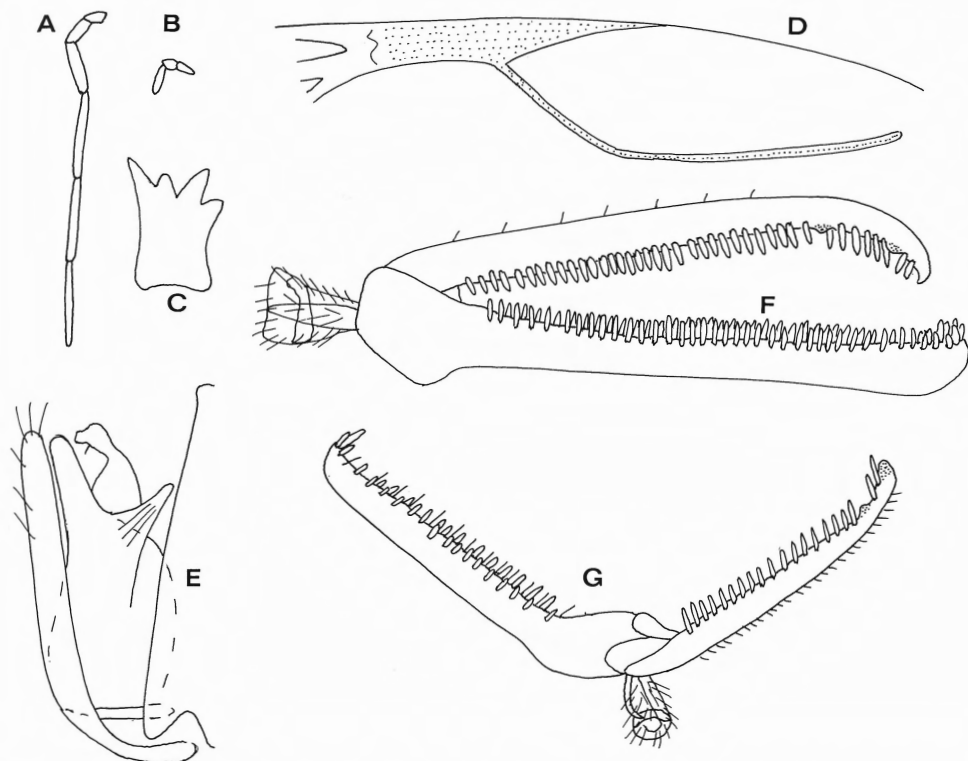


Fig. 36 - Maxillary palp (A), labial palp (B), mandible (C), radial cell (D) and male genitalia (E) of *Bocchopsis naumanni* n.sp. (holotype); chela of *Thaumatotryinus beckeri* n. sp. (holotype) (F) and *pasohensis* n. sp. (holotype) (G).

man was collected by S. & J. Peck on June 26 - August 1, 1982; the paratype from Monga was collected by D.H. Colless on July 19, 1962; the 3 paratypes from Karlo Ck. were collected by I.D. Naumann & J.C. Cardale on February 25, 1980; the paratype from Mossman Gorge was collected by D.H. Colless on April 23, 1967; the two paratypes from Black Mtn. were collected by I.D. Naumann & J.C. Cardale in April, 1982; the paratype from Clyde Mtn. was collected by D.H. Colless on a landslip on May 5, 1965; the paratype from Dorrigo - Coramba Rd. was collected by D.H. Colless on April 18, 1970; the paratype from Mt. Edith Forest Road was collected by D.H. Colless on May 6, 1967.

The new genus *Bocchopsis* can be inserted in the key to the genera of *Bocchiniae* (in Olmi 1984, p. 601) near *Bocchus* Ashmead, as follows:

- 3 Propodeum with areolae very small, less wide than tegulae (Fig. 440 in Olmi 1984).....4. *Mirodryinus* Ponomarenko
- Propodeum with at least part of the areolae very wide, at least as wide as tegulae (Fig. 402 in Olmi 1984).....4
- 4 Temples much longer than eyes; antennae much longer than the body (Figs 34, 35).....7. *Bocchopsis* n. gen.
- Temples at most as long as eyes; antennae much shorter than the body (Figs 402, 403 in Olmi 1984).....3. *Bocchus* Ashmead

SUBFAMILY *THAUMATODRYININAE*
GENUS *THAUMATODRYINUS*: ORIENTAL REGION

***Thaumatodryinus beckeri* n. sp.**

Female: fully winged; length 9,37 mm; head black, with mandibles, clypeus, genae and anterior region of frons near clypeus testaceous; antennae testaceous, with segments 3-10 darkened; prothorax black, with sides and posterior margin of the pronotum reddish; mesothorax, metathorax and propodeum black; abdomen testaceous; legs testaceous, with clubs of fore and hind femora brown; antennae not distally thickened; antennal segments in following proportions: 27:9:55:70:71:78:50:20:14:16; head dull, reticulate rugose; frons with a track of median keel; occipital carina incomplete, laterally not reaching eyes; POL = 6; OL = 2,5; OOL = 18; OPL = 5; TL = 4; pronotum hairy, dull, with a strong transversal furrow, sculptured by transversal keels; pronotal tubercles reaching tegulae; scutum dull, rugose, irregularly sculptured by keels; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum and metanotum smooth, dull, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (50:32); fore tarsal segments in following proportions: 59:8:16:53:76; enlarged claw (Fig. 36 F) with 2 subapical teeth and with a row of approximately 40 lamellae; segment 5 of front tarsus (Fig. 36 F) with two rows of approximately 65 lamellae; apex with a group of approximately 15 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Pasoh Forest Reserve (Negri S., Malaya, Malaysia)

Typical material: holotype F! in TW

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collectors of the holotype, P. & M. Becker; the holotype was collected on September 8, 1978.

***Thaumatodryinus pasohensis* n. sp.**

Female: fully winged; length 3,18-4,12 mm; fully reddish-testaceous; in a paratype propodeum, metanotum, mesopleura and metapleura black; antennae not distally thickened; antennal segments in following proportions: 12:6:23:28:28:30:24:15:11:11; head dull, granulated and reticulate rugose; frontal line absent; occipital carina complete; POL = 5; OL = 2; OOL = 10; OPL = 4; TL = 4; pronotum dull, crossed by a strong transversal furrow, rugose, hairy; pronotal tubercles reaching tegulae; collar of pronotum smooth and not rugose; scutum dull, rugose; notaulices incomplete, reaching approximately 0,8 length of scutum; scutellum shiny, weakly rugose; metanotum rugose; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein longer than proximal part (27:15); fore tarsal segments in following proportions: 26:4:6:18:27; enlarged claw (Fig. 36 G) with 1 preapical tooth and with a row of approximately 20 lamellae; segment 5 of front tarsus (Fig. 36 G) with two rows of approximately 34 lamellae; apex with a group of approximately 6 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Pasoh Forest Reserve (Negri S., Malaya, Malaysia)

Typical material: holotype F! and 1 paratype F! in TW

Distribution: only known from the typical locality.

Notes: the typical series was collected by P. & M. Becker on January 16, 1979 (holotype) and on May 10, 1978 (paratype).

After the description of the above new species the key to the Oriental *Thaumatomyia* (see Olmi 1987a, p. 417) can be modified as follows:

FEMALES

- 1 Occipital carina incomplete.....2
- Occipital carina complete.....3
- 2 Notaulices complete; antennal segment 3 less than 1,5 times as long as segment 1.....1. *asiaticus* Olmi
- Notaulices incomplete; antennal segment 3 more than 1,5 times as long as segment 1.....5. *beckeri* n. sp.
- 3 Head with OOL slightly longer than POL.....1. *philippinus* Olmi
- Head with OOL at least twice as long as POL.....4
- 4 Head with OOL at least three times as long as POL.....3. *malayanus* Olmi
- Head with OOL twice as long as POL.....5
- 5 Fore wing hyaline, without dark transversal bands.....4. *alienus* Olmi
- Fore wing crossed by a dark transversal band.....6. *pasohensis* n. sp.

SUBFAMILY DRYININAE GENUS DRYINUS LATREILLE

- = *Richardsidryinus* Moczar 1965: 376; n. syn.
- = *Richardsidryinus* Moczar: Olmi 1984: 907.

Richardsidryinus Moczar is here considered synonym of *Dryinus* Latreille because the only difference (number of tibial spurs: 1, 1, 2 in *Dryinus*; 1, 1, 1 in *Richardsidryinus*) is a variable character; in fact in female specimens of *R. corsicus* (Marshall) and *R. erraticus* (Turner) I ascertained both cases of tibial spurs 1, 1, 1 and 1, 1, 2. Tibial spurs 1, 1, 2 are visible in a female specimen of *R. corsicus* from S.te Jalle (Drôme, France) kept in LE.

GENUS DRYINUS: PALAEARCTIC REGION

Dryinus turcicus n. sp.

Female: fully winged; length 4,37 mm; head black, with mandibles and part of clypeus testaceous; antennae brown, with segments 1-2 testaceous; thorax, propodeum and abdomen black; legs testaceous, with coxae and part of clubs of femora brown-black; antennae distally thickened, with rhinaria on segments 6-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 10:6:20:12:10:9:7:7:6:8; head dull, fully reticulate rugose; frontal line complete occipital carina complete; POL = 6; OL = 4; OOL = 10; OPL = 4; TL = 10; pronotum almost flat, with a very weak anterior transversal impression; disc almost flat; posterior collar absent; anterior collar shiny, smooth, without sculpture; disc dull and rugose; pronotal tubercles not reaching tegulae; scutum, scutellum and metanotum reticulate rugose; notaulices incomplete, reaching approximately 0,5 length of scutum; propodeum dull, reticulate rugose, with

two complete longitudinal keels on posterior surface; dorsal surface of propodeum much shorter than posterior surface (14:30); fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein shorter than proximal part (3:8); fore tarsal segments in following proportions: 25:4:6:12,5:20; enlarged claw (Fig. 37 A) with a subapical tooth and a row of 4 lamellae; segment 5 of front tarsus (Fig. 37 A) with a row of 8 lamellae; apex with a group of approximately 10 lamellae; tibial spurs 1, 1, 2.

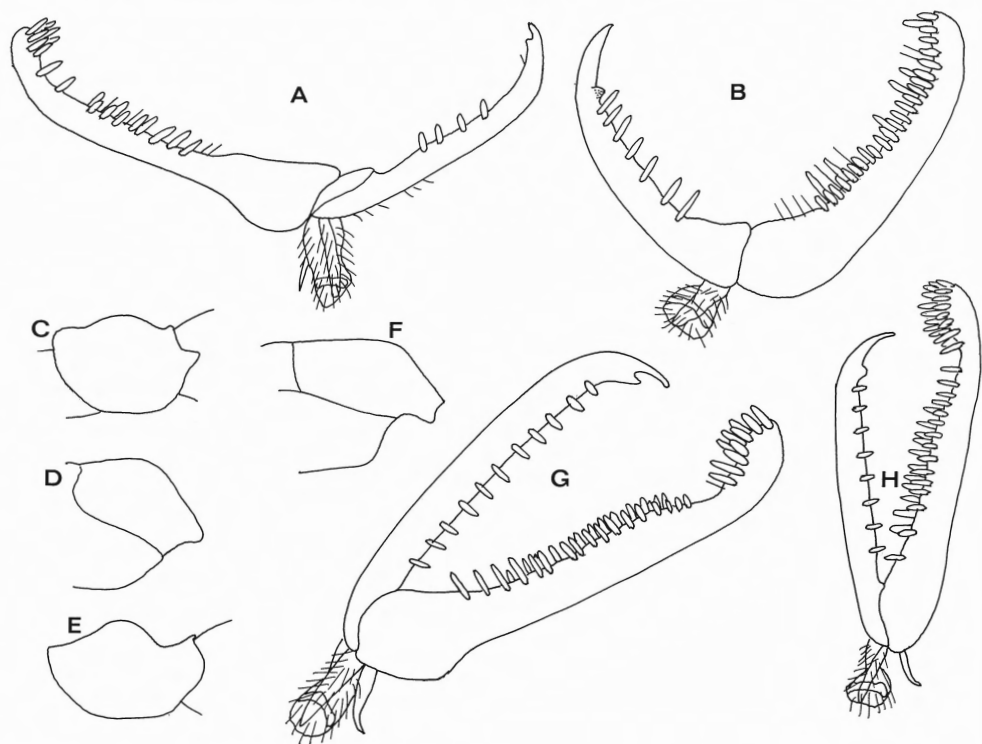


Fig. 37 - Chela of *Dryinus turcicus* n. sp. (holotype) (A), *tussaci* n. sp. (holotype) (B), *paulyi* n. sp. (holotype) (G), *achterbergi* n. sp. (holotype) (H); pronotum (in lateral view) of female of *Dryinus canariensis* (Ceballos) (C) and *collaris* (L.) from France (E); propodeum (in lateral view) of female of *Dryinus canariensis* (Ceballos) (D) and *collaris* (L.) from France (F).

Male: unknown

Locus typicus: Hakkari (m 1750, Hakkari Dist., Turkey)

Typical material: holotype ♀ in LE

Distribution: only known from the typical locality.

Notes: the holotype was collected by R. Hensen on July 9, 1987.

Dryinus tussaci n. sp.

Female: fully winged; length 6,75 mm; head black, with mandibles, clypeus, lower face and a small region along orbits ferruginous; antennae ferruginous, with segments 6-9 brown and 10 whitish; prothorax and scutum reddish-ferruginous;

mesothorax, metathorax and propodeum black; abdomen black, with a reddish spot on first tergite; fore legs ferruginous, with tibiae darkened; mid and hind legs black, with tarsi and articulations between coxae and trochanters light; antennae distally thickened; antennal segments in following proportions: 11:6:26:17:12:10:9:8:7:10; head dull, fully reticulate rugose; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 10; OPL = 2; TL = 5; pronotum shiny, without sculpture or weakly granulated, with disc humped and with two transversal furrows; anterior furrow very weak; posterior furrow strong; posterior collar short; pronotal tubercles not reaching tegulae; scutum shiny, almost fully reticulate rugose, except for median area between notaulices granulated; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum shiny, without sculpture or weakly granulated; metanotum reticulate rugose; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (15:7); fore tarsal segments in following proportions: 22:3:5:13:20; enlarged claw (Fig. 37 B) with a subapical tooth and a row of 7 lamellae; segment 5 of front tarsus (Fig. 37 B) with two rows of 5 (long) + 28 (short) lamellae; apex with a group of approximately 6 lamellae; tibia spurs 1, 1, 1.

Male: unknown

Locus typicus: Tarhazoute (20 Km N Agadir, Morocco)

Typical material: holotype F! in P

Distribution: only known from the typical locality.

Notes: the holotype was collected on *Cynodon* sp. by Hubert Tussac on May 4, 1989.

Because of the new synonymy with *Richardsidryinus* Moczar all the old species of *Richardsidryinus* are now belonging to the genus *Dryinus*. In the Palaearctic region they are *R. albrechti* Olmi, *R. maroccanus* Olmi and *R. corsicus* (Marshall).

There are however few old species of *Dryinus* which now are belonging to the genus *Alphadryinus* Olmi (see Olmi 1990, p. 138). They are *D. sanderi* Olmi and *D. balearicus* Olmi.

The key to the Palaearctic *Dryinus* must be so strongly modified, as follows:

FEMALES

- 1 Occipital margin incomplete, only dorsally visible (Fig. 499 A in Olmi 1984)5. *koreanus* (Moczar)
- Occipital margin complete (Fig. 492 in Olmi 1984).....2
- 2 Distal part of radial vein much shorter than proximal part; segment 5 of front tarsus with 1 row of lamellae (Fig. 37 A).....11. *turcicus* n. sp.
- Distal part of radial vein much longer than proximal part; segment 5 of front tarsus with 2 rows of lamellae (Fig. 496 in Olmi 1984; Fig. 37 B).....3
- 3 Segment 5 of front tarsus with a row of some very long lamellae, in addition to another row of numerous shorter lamellae (Fig. 37 B); segment 1 of front tarsus approximately twice as long as segment 4.....4
- Segment 5 of front tarsus with lamellae approximately same length (Figs 486, 493 in Olmi 1984); segment 1 of front tarsus approximately as long as, or slightly shorter, or slightly longer than segment 4.....6
- 4 Head fully granulated, not reticulate rugose.....8. *maroccanus* (Olmi)
- Head fully reticulate rugose.....5
- 5 Scutum and prothorax fully reddish-ferruginous.....10. *tussaci* n. sp.
- Scutum and prothorax almost fully black.....9. *corsicus* (Marshall)

- 6 Pronotum with a weak posterior transversal impression and with a short posterior collar (Fig. 37 C); posterior surface of propodeum approximately as long as dorsal surface (Fig. 37 D).....7
— Pronotum with a strong posterior transversal impression and with a long posterior collar (Fig. 37 E); posterior surface of propodeum much shorter than dorsal surface (Fig. 37 F).....8
7 Head and prothorax fully testaceous-ferruginous 1. *canariensis* (Ceballos)
— Head and prothorax almost fully black.....7. *albrechti* (Olm)
8 Metanotum flat and smooth; transversal furrow between metanotum and propodeum narrow (Fig. 488 A in Olmi 1984); metanotum at least five times as long as breadth of this furrow (Fig. 488 A in Olmi 1984).....
.....2. *collaris* (Linnaeus)
— Metanotum rugose and swollen; transversal furrow between metanotum and propodeum broad (Fig. 488 B in Olmi 1984); metanotum approximately three-four times as long as breadth of this furrow (Fig. 488 B in Olmi 1984)..9
9 Temples more prominent (Fig. 492 A in Olmi 1984); TL slightly longer than OL (Fig. 492 A in Olmi 1984).....3. *nepalensis* Olmi
— Temples less prominent (Fig. 492 B in Olmi 1984); TL approximately twice as long as OL (Fig. 492 B in Olmi 1984).....4. *tarraconensis* Marshall

MALES

- 1 Antennae very slender, with segment 3 more than ten times as long as broad2. *collaris* (Linnaeus)
— Antennae less slender, with segment 3 less than six times as long as broad2
2 Head without frontal line or with frontal line short and only visible in front of the anterior ocellus.....3
— Head with frontal line complete.....4
3 Posterior ocelli almost touching the occipital carina; OPL shorter than the half of the breadth of the posterior ocelli.....4. *tarraconensis* Marshall
— Posterior ocelli farther from the occipital carina; OPL at least 0,5 as long as the breadth of the posterior ocelli.....9. *corsicus* Marshall
4 Notaulices reaching approximately 0,5-0,6 length of scutum.....
.....5. *koreanus* (Moczar)
— Notaulices reaching at least 0,7 length of scutum.....5
5 Gonoforceps much shorter than penis (Fig. 487 in Olmi 1984).....
.....1. *canariensis* (Ceballos) or 7. *albrechti* Olmi
— Gonoforceps approximately as long as penis (Fig. 494 in Olmi 1984).....
.....3. *nepalensis* Olmi

GENUS *DRYINUS*: ETHIOPIAN REGION

Dryinus paulyi n. sp.

Female: fully winged; length 6,25 mm; head black, with mandibles and part of clypeus testaceous; antennae brown, with segments 1-2 and 7-10 testaceous; thorax and propodeum black; abdomen brown; legs black, with part of fore coxae, part of fore trochanters and part of mid and hind tarsi testaceous; antennae distally thickened; antennal segments in following proportions: 12:7:50:28:19:13:12:

11:9,5:13; head excavated, dull, granulated or sculptured by small areolae; frontal line complete; occipital carina complete; posterior ocelli (dorsally viewed) placed in front of the imaginary straight line joining posterior edges of eyes; POL = 4; OL = 3; OOL = 10; OPL = 2; TL = 3; temples weakly visible; pronotum crossed by a strong anterior transversal impression and by a strong posterior transversal impression; disc humped; pronotum sculptured by numerous longitudinal keels; posterior collar very short; pronotal tubercles not reaching tegulae; scutum shiny, with lateral regions sculptured by numerous parallel and longitudinal keels; median region partly smooth and partly sculptured by irregular keels; notaulices apparently complete and posteriorly separated; the notaulices near the posterior margin of the scutum are not well visible among the longitudinal keels; scutellum and metanotum shiny, smooth, punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, without transversal or longitudinal keels; dorsal surface of propodeum slightly longer than posterior surface (30:25); fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (19:14); fore tarsal segments in following proportions: 28:4:10:23:36; segment 3 of front tarsus produced into a hook; enlarged claw (Fig. 37 G) with a subapical tooth and with a row of 11 lamellae; segment 5 of front tarsus (Fig. 37 G) with two rows of 13 + 15 lamellae; apex with a group of approximately 22 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Kango (Gabon)

Typical material: holotype F! in GX

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Alain Pauly; the holotype was collected on November 17, 1985.

After the description of the above new species and because of the insertion of the species belonging in the past of the genus *Richardsidryinus* Moczar (now synonym of *Dryinus*) (*R. erraticus* (Turner), *R. cariniceps* (Cameron), *R. undulatus* (Benoit)), the key to the Ethiopian *Dryinus* must be modified as follows:

FEMALES

- 1 Posterior collar of pronotum invisible.....1. *bisulcatus* (Benoit)
- Posterior collar of pronotum visible (Figs 503 B, 519, 522 in Olmi 1984)..... 2
- 2 Enlarged claw much shorter than segment 5 of front tarsus; subapical tooth very small (Fig. 504 in Olmi 1984).....2. *seyrigi* Benoit
- Enlarged claw approximately as long as segment 5 of front tarsus or slightly shorter; subapical tooth big (Figs 506, 508 in Olmi 1984).....3
- 3 Head (dorsally viewed) with posterior ocelli placed behind the imaginary straight line joining posterior edges of eyes (Fig. 505, 507 in Olmi 1984).....4
- Head (dorsally viewed) with posterior ocelli placed in front of the imaginary straight line joining posterior edges of eyes or on this line (Figs 514, 524 in Olmi 1984)..... 11
- 4 Head with posterior margin of vertex excavated (Fig. 505 A in Olmi 1984); head excavated; posterior ocelli touching occipital carina (Fig. 505 A in Olmi 1984)3. *alticolus* (Benoit)
- Head with posterior margin of vertex convex (Figs 505 B, 507 B in Olmi 1984); head flat; posterior ocelli not touching occipital carina (Fig. 505 B, 507 B in Olmi 1984)..... 5
- 5 At least the propodeum black or brown.....6

- Species fully testaceous or reddish or reddish-testaceous, with petiole black...9
- 6 Head almost fully black.....7
- Head almost fully reddish ore testaceous-ferruginous.....8
- 7 Head with TL more than twice as long as POL; pronotum almost fully black
.....25. *undulatus* (Benoit)
- Head with TL less than twice as long as POL; pronotum reddish-brown-dark
.....7. *sierranus* Olmi
- 8 Head fully granulated.....8. *pretorianus* Olmi
- Head granulated and with numerous irregular keels.....
.....24. *cariniceps* Cameron
- 9 Scutum punctate, without sculpture among the punctures, rugose only near
scutellum.....21. *dayi* Olmi
- Scutum fully granulated or granulated and with irregular keels or striae.....10
- 10 Head with posterior margin of vertex very convex (Fig. 507 B in Olmi 1984)
.....4. *spangleri* Olmi
- Head with posterior margin of vertex less convex (Fig. 507 A in Olmi 1984)
.....5. *deceptor* (Turner)
- 11 Species fully testaceous, with petiole black and occasionally abdomen brownish;
scutum shiny, weakly punctate.....6. *mahensis* Kieffer
- Species at least partly black; scutum shiny or dull, punctate or granulated, usually
with more or less short irregular keels.....12
- 12 Posterior ocelli touching occipital carina (Fig. 514 A in Olmi 1984).....13
- Posterior ocelli not touching occipital carina (Figs 514 B, 524 in Olmi 1984)..14
- 13 Notaulices reaching approximately 0,65 length of scutum.....
.....9. *saussurei* (Ceballos)
- Notaulices reaching approximately 0,3 length of scutum.....
.....10. *hova* (Ceballos)
- 14 Temples prominent (Figs 514 B, 524 A in Olmi 1984); rarely temples weakly promi-
nent, but in this case head with posterior margin of vertex excavated (Figs 514
B, 524 A in Olmi 1984).....15
- Temples invisible (Fig. 524 B, C in Olmi 1984); head with posterior margin of ver-
tex convex (Fig. 524 B, C in Olmi 1984).....25
- 15 Fore wing with distal part of radial vein approximately three times as long as
proximal part.....11. *basilewskyi* Benoit
- Fore wing with distal part of radial vein less than three times as long as prox-
imal part.....16
- 16 Scutum punctate, not granulated, without keels.....12. *chamaeleo* Benoit
- Scutum granulated or reticulate rugose or sculptured by keels.....17
- 17 Head granulated, sculptured by irregular or regular keels.....18
- Head granulated, not sculptured by keels.....23
- 18 Propodeum long, with dorsal surface more than twice as long as posterior sur-
face.....19
- Propodeum short, with dorsal surface less than twice as long as posterior sur-
face.....20
- 19 Pronotum with anterior impression stronger (Fig. 519 A in Olmi 1984); head mostly
reddish.....13. *schoutedeni* (Benoit)
- Pronotum with anterior impression weaker (Fig. 519 B in Olmi 1984); head most-
ly black.....14. *mayogo* (Benoit)
- 20 Head with POL approximately 1,5 times as long as OL.....
.....20. *hararianus* Olmi

- Head with POL approximately as long as OL or slightly shorter or slightly longer.....21
- 21 Scutum with lateral regions strongly sculptured by numerous parallel and longitudinal keels.....26. *paulyi* n. sp.
- Scutum granulated and partly rugose, not sculptured by numerous longitudinal keels.....22
- 22 Enlarged claw with tooth small (Fig. 622 in Olmi 1984).....23. *erraticus* (Turner)
- Enlarged vlaw with a big subapical tooth (Fig. 523 in Olmi 1984).....15. *orophilus* (Benoit)
- 23 Scutum granulated, with posterior half reticulate rugose.....17. *incertus* Olmi
- Scutum fully granulated, not reticulate rugose.....24
- 24 Enlarged claw with subapical tooth very near apex (Fig. 525 in Olmi 1984).....16. *modestus* Olmi
- Enlarged claw with subapical tooth farther from the apex (Fig. 6 in Olmi 1989b).....22. *evertsi* Olmi
- 25 Pronotum with anterior impression very weak (Fig. 522 B in Olmi 1984)..18. *burgeoni* Benoit
- Pronotum with anterior impression stronger (Fig. 522 A in Olmi 1984).....19. *afer* (Olmi)

GENUS *DRYINUS*: ORIENTAL REGION

***Dryinus achterbergi* n. sp.**

Female: fully winged; length 4 mm; head black, with mandibles and part of clypeus testaceous; antennae testaceous; thorax and propodeum black, with sides of pronotum reddish; abdomen brown; legs testaceous, with hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 8:5:28:14:11:7:7:6:6,5:10; head dull, flat, granulated and with numerous longitudinal keels on frons; frontal line incomplete, not visible near clypeus; occipital carina complete; POL = 2,5; OL = 2; OOL = 7; OPL = 2; TL = 2; pronotum shiny, crossed by a weak anterior transversal impression and by a strong posterior transversal impression; posterior collar short; pronotum without sculpture, except for numerous longitudinal keels on disc and on the sides of the disc; pronotal tubercles not reaching tegulae; scutum dull, granulated; notaulices almost complete, almost reaching the posterior margin of the scutum; scutellum shiny, smooth, weakly granulated; metanotum dull, rugose; propodeum reticulate rugose, with two longitudinal keels on posterior surface; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (18:9); enlarged claw (Fig. 37 H) with a subapical tooth and a row of 8 lamellae; segment 5 of front tarsus (Fig. 37 H) with two rows of 12 + 14 lamellae; apex with a group of approximately 20 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 2,50-4,18 mm; head black, with mandibles testaceous; antennae testaceous, with segments 3-10 darkened; thorax and propodeum black; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 8:5:16:10:10:10:9:9:8:10; head dull, fully reticulate rugose; frontal line complete; occipital carina complete, laterally reaching the

eyes; POL = 6; OL = 2; OOL = 3; OPL = 3; TL = 0,5; temples absent; vertex with a smooth ovoidal area between each posterior ocellus and the eyes; scutum dull, granulated and reticulate rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (7:3,5); scutellum dull, granulated; metanotum rugose; propodeum reticulate rugose, with a median longitudinal keel on posterior surface; fore wing fully weakly darkened; distal part of radial vein shorter than proximal part (12:15) genitalia in Fig. 38 A; tibial spurs 1, 1, 2.

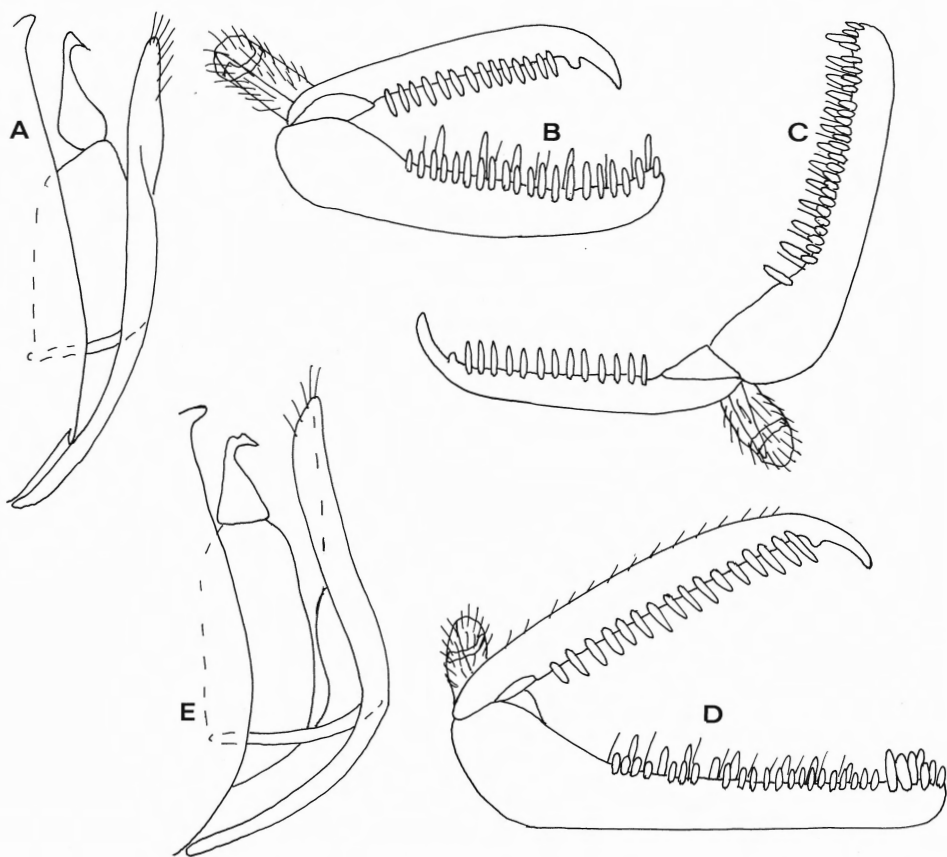


Fig. 38 - Male genitalia of *Dryinus achterbergi* n. sp. (paratype) (A) and *citricolus* Olmi from Rainbow Bay (E); chela of *Dryinus kabanus* n. sp. (holotype) (B), *guerrerensis* n. sp. (holotype) (C), *eberhardi* n. sp. (holotype) (D).

Locus typicus: Danum Valley Field (SE Sabah, Malaysia)

Typical material: holotype F! and 30 paratypes MM! in LE; 9 paratypes MM! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, C. van Achterberg; the typical material was collected by malaise traps on February 24 - March 18, 1987 (holotype, malaise trap N. 12, m 240), on March 21, 1987

(malaise trap N. 7, m 150), on March 21-25, 1987 (malaise trap N. 7, m 150), on March 20, 1987 (malaise trap N. 11, m. 150), on February 24 - March 18, 1987 (malaise trap N. 11, m 150), on February 24-March 18, 1987 (malaise trap N. 12, m 240), on March 19-26, 1987 (malaise trap N. 12b, m 240), on February 24 - March 24, 1987 (malaise trap N. 13, m 140).

Dryinus pyrillae (KIEFFER 1911)

= *Dryinus lankanus* Olmi 1984: 821; n. syn.

Dryinus pyrillae (Kieffer) was considered a *Richardsidryinus* in the revision of Olmi (1984). Because of the synonymy of *Richardsidryinus* and *Dryinus* previously ascertained in this paper this species is inserted in the genus *Dryinus*.

Dryinus lankanus Olmi must be considered a junior synonym of *Dryinus pyrillae* (Kieffer); the only difference is in fact the number of the tibial spurs (1, 1, 2 in *lankanus* and 1, 1, 1 in *pyrillae*); this character however is variable (this variability is the cause of the synonymy of *Dryinus* and *Richardsidryinus*).

D. pyrillae is now known from the following localities: INDIA: Karnal (Punjab), ND! Uchani (Karnal), BM! Pusa (Bihar), ND! BM! Bengal (Kurian 1954a); Delhi (Punjab) (Kurian 1954a); South India (Kurian 1954a); Haryana, BM! Koothanalur (Madras), BM! Madras (Tamil Nadu), BM! Delhi, BM! Periyar A. Sanc. (Doddagubbi, m 875, nr. Bangalore, Karnataka), LE! PAKISTAN: Lyallpur (Punjab), BM! SRI LANKA: Kibissa (W of Sigiriya, Mate Dist.), WA! Angunakolapelessa (Mon. Dist.), OL! WA! Kandy (Kandy Dist.), WA! Parayanalankulam (25 mi. NW Medawachchiya, Vav. Dist.), WA! Palatupana tank (Ham. Dist.) WA! CHINA: Guangzhou (Kuang tung), BM!

After the description of the above new species and the insertion of *D. pyrillae* (Kieffer) the key to the females of the Oriental *Dryinus* proposed by Olmi (1987a, pp. 429-430) must be modified in the last part, after the number 22, as follows:

- 22 Temples absent (Fig. 16 in Olmi 1987c).....24. *bruneianus* Olmi
- Temples present (Figs 5 C, 5 D in Olmi 1986).....23
- 23 Head with POL more than twice as long as OL; occipital carina behind the ocelli forming a strong corner (Fig. 5 C in Olmi 1986).....
-18. *scaber* Olmi
- Head with POL as long as or slightly longer than OL; occipital carina behind the ocelli regularly curved (Fig. 5 D in Olmi 1986).....24
- 24 Head with OOL at most twice as long as TL.....15. *pyrillae* (Kieffer)
- Head with OOL more than three times as long as TL.....25
- 25 Species large; notaulices reaching approximately 0,8 length o scutum.....
-21. *sinicus* Olmi
- Species smaller; notaulices longer, almost complete, almost reaching the posterior margin of the scutum.....25. *achterbergi* n. sp.

A new key to the males of the Oriental *Dryinus* can be proposed, as follows:

MALES

- 1 Dorsal part of the occipital carina laterally touching the eyes.....2
- Dorsal part of the occipital carina laterally not touching the eyes.....3
- 2 Notaulices incomplete, reaching approximately 0,65 length of scutum.....
-10. *indicus* (Kieffer)

- Notaulices complete.....25. *achterbergi* n. sp.
- 3 Scutellum granulated, not reticulate rugose.....4
- Scutellum reticulate rugose, not granulated.....5
- 4 Head with TL shorter than the breadth of the ocelli.....
-14. *browni* Ashmead
- Head with TL as long as breadth of the ocelli.....15. *pyrillae* (Kieffer)
- 5 Posterior ocelli almost touching the occipital carina.....
-16. *cavifrons* Olmi
- Posterior ocelli farther from the occipital carina.....18. *scaber* Olmi

GENUS *DRYINUS*: NEARCTIC REGION

Because of the insertion in the genus *Dryinus* of the species previously belonging to the genus *Richardsidryinus* (now junior synonym) a new key to the females of the Nearctic *Dryinus* must be proposed, as follows:

- 1 Segment 1 of front tarsus approximately twice as long as segment 4; enlarged claw spatulate (Figs 555, 556 in Olmi 1984).....2
- Segment 1 of front tarsus less than twice as long as segment 4; enlarged claw spatulate (Fig. 629 in Olmi 1984) or not (Fig. 559 in Olmi 1984).....3
- 2 Head with TL longer than POL; head, propectus and pronotum fully reddish-testaceous.....1. *mexicanus* (Perkins)
- Head with TL shorter than POL; head (except for yellow mandibles), propectus and pronotum black.....2. *crawfordi* (Krombein)
- 3 Occipital carina complete.....4
- Occipital carina incomplete.....6
- 4 Scutum sculptured by numerous parallel and longitudinal keels.....
-6. *nearcticus* (Olmi)
- Scutum granulated and partly or fully reticulate rugose, without longitudinal keels.....5
- 5 Prothorax reddish or reddish-brown, occasionally with brown spots.....
-5. *halsteadi* Olmi
- Prothorax black, with posterior collar of pronotum partly reddish.....
-7. *wetmorei* (Olmi)
- 6 Head (dorsally viewed) with posterior ocelli placed on or in front of the imaginary straight line joining posterior edges of eyes (Fig. 557 A in Olmi 1984).....
-3. *americanus* (Ashmead)
- Head (dorsally viewed) with posterior ocelli placed behind the imaginary straight line joining posterior edges of eyes (Fig. 557 B in Olmi 1984).....
-4. *alatus* (Cresson)

The only Nearctic *Richardsidryinus* not present in the above key is *R. canadensis* (Ponomarenko), because it's a fossil species whose holotype is not well visible through the amber.

GENUS *DRYINUS*: NEOTROPIC REGION

***Dryinus kabanus* n. sp.**

Female: fully winged; length 6,25 mm; head black, with palps, mandibles and

clypeus testaceous; antennae testaceous with segments 4-5 darkened; thorax and propodeum black, with pronotal tubercles brown; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 12:7:33:16:12:10:8:8:7:10; antennal segment 4 approximately eight times as long as broad (16:2); head dull, hairy, reticulate rugose; occipital carina complete; frontal line complete; POL = 3,5; OL = 2,5; OOL = 8,5; OPL = 1; TL = 1,5; pronotum dull, granulated, with a short posterior collar; anterior transversal impression weak; posterior transversal impression strong; pronotal tubercles not reaching tegulae; scutum dull, granulated and with numerous areolae or irregular keels; notaulices slightly visible, complete, posteriorly separated; minimum distance between the notaulices twice as long as POL (7:3,5); scutellum and metonotum dull, weakly granulated; propodeum dull, reticulate rugose, without transversal or longitudinal keels; dorsal surface approximately as long as posterior surface; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (20:10); fore tarsal segments in following proportions: 23:3:7:16:26; enlarged claw (Fig. 38 B) with a subapical tooth and a row of 14 lamellae; segment 5 of front tarsus (Fig. 38 B) with two rows of approximately 23 lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 05°14' N 55°44' W (Kabo, Saramaca Dist., Suriname)

Typical material: holotype F! in BE

Distribution: only known from the typical locality.

Notes: the holotype was collected by a Moericke trap in a mixed mesophytic upland forest by K. Ernst Neering on June 19-24, 1978.

Dryinus guerrenderis n. sp.

Female: fully winged; length 4,12 mm; head black, with mandibles and clypeus testaceous; antennae testaceous; propectus black; pronotum reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen brown-testaceous; mid and hind legs brown; antennae distally thickened; antennal segments in following proportions: 12:6:24:12:10:8:7:6,5:6:9; head dull, granulated, partly reticulate rugose and with irregular longitudinal keels; occipital carina complete; frontal line incomplete; POL = 4; OL = 2; OOL = 9; OPL = 1; TL = 5; pronotum dull, granulated, with anterior and posterior transversal impressions weak; posterior collar short; pronotal tubercles not reaching tegulae; scutum dull, granulated, with posterior third of median and lateral regions reticulate rugose; notaulices incomplete, reaching approximately 0,6 length of scutum, interrupted by the posterior areolae; scutellum and metanotum dull, granulated; propodeum reticulate rugose, without transversal or longitudinal keels; fore wing with three dark transversal bands; distal part of radial vein longer than proximal part (15:7); fore tarsal segments in following proportions: 19:3:5:13:20; enlarged claw (Fig. 38 C) with a subapical tooth and a row of 13 lamellae; segment 5 of front tarsus (Fig. 38 C) with two rows of approximately 40 lamellae, without interruption to the apex; the shortest row is composed of 11 very long lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 6 mi. E Xochipala (Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the holotype was collected by Jones and Schaffner on July 13, 1985; this

species is very near *D. antilleanus* (Evans): the only difference is the colour of the pronotum.

***Dryinus eberhardi* n. sp.**

Female: fully winged; length 6,5 mm; head black, with mandibles and clypeus testaceous; antennae testaceous, with segment 1 lighter; thorax and propodeum black; abdomen brown; legs testaceous, with clubs of femora brown and with coxae partly black; antennae distally thickened; antennal segments in following proportions: 13:7:44:22:17:14:12:10:9:12; head dull, flat, granulated and with irregular keels on frons; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 10; OPL = 2,5; TL = 5; pronotum dull, granulated, with some longitudinal keels on pronotal tubercles; pronotum crossed by an anterior weak transversal impression and by a posterior weak transversal impression; disc little humped; posterior collar very short; pronotal tubercles not reaching tegulae; scutum dull, with lateral regions reticulate rugose and with median region granulated, except for the area near the posterior margin which is reticulate rugose; notaulices little visible in the posterior region, but probably complete and posteriorly separated; minimum distance between the notaulices longer than the breadth of the posterior ocelli (6:3); scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; dorsal surface much longer than posterior surface (32:20); fore wing with a dark transversal band beneath the pterostigma and with two dark spots on the basal cells; distal part of radial vein much longer than proximal part (25:10); fore tarsal segments in following proportions: 28:4:6:18:27; fore tarsal segment 3 produced into a hook; enlarged claw (Fig. 38 D) with a subapical tooth and a row of 16 lamellae; segment 5 of front tarsus (Fig. 38 D) with two rows of 31 lamellae; the second row is composed of 9 longer lamellae; apex with a group of approximately 9 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Bajo Hondura (m 1000, San José Prov., Costa Rica)

Typical material: holotype F! in OL

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, W. Eberhard; the holotype was collected in August, 1987.

***Dryinus citricolus* OLMÍ 1984**

Dryinus citricolus Olmi was described only on the basis of female specimens. In the last years a series of male and female specimens from the Bahamas was examined. The following description of the male can be proposed:

Male: fully winged; length 1,56-2,25 mm; head reddish-testaceous, with ocellar triangle darkened; antennae testaceous, with segments 3-10 darkened; thorax and propodeum reddish-testaceous, with scutellum and metanotum darkened; occasionally also dorsal surface of propodeum darkened; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 5:5:11:8:9:8:7:7:6:8; head dull, granulated; frontal line absent; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; occipital carina not directed towards the eyes, but towards the temples; POL = 8; OL = 3; OOL = 3; OPL = 0,5; TL = 3; scutum, scutellum and metanotum granulated, dull; notaulices incomplete, reaching approximately 0,3 length of scutum;

notaulices often very weak, almost invisible; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (14:7); radial cell open; genitalia in Fig. 38 E; tibial spurs 1, 1, 2.

D. citrocolus is now known from the following localities: PUERTO RICO: Lajas, WA! Manati, OL! VIRGIN ISLANDS: Maho Bay (St. John), CM! OL! BAHAMAS ISLANDS: Rainbow Bay (Eleuthera), DE! OL!

After the descriptions of the above new species a new key to the Neotropic *Dryinus* can be proposed, as follows:

FEMALES

- 1 Occipital carina invisible.....1. *constans* Olmi
- Occipital carina complete or incomplete.....2
- 2 Thorax and propodeum fully or almost fully testaceous.....3
- Thorax and propodeum fully or mostly black.....4
- 3 Head with POL longer than OL; occipital carina complete.....
-2. *citricolus* Olmi
- Head with POL almost 0,5 as long as OL; occipital carina incomplete.....
-3. *flavoniger* Olmi
- 4 Scutum fully sculptured by more or less numerous longitudinal keels.....5
- Scutum without keels or partly sculptured by longitudinal keels, fully reticulate rugose or partly granulated.....14
- 5 Pronotum fully granulated, without keels, except for some short keels on posterior transversal impression; occipital carina complete.....4. *wellingensis* Olmi
- Pronotum differently sculptured, with numerous irregular keels; occipital carina incomplete.....6
- 6 Posterior ocelli farther from occipital carina (Fig. 566 A in Olmi 1984); head with OPL approximately as long as POL (Fig. 566 A in Olmi 1984).....
-5. *surinamensis* Olmi
- Posterior ocelli nearer occipital carina (Fig. 566 B in Olmi 1984); head with OPL much shorter than POL (Fig. 566 B in Olmi 1984).....7
- 7 Segment 1 of front tarsus shorter than segment 4.....8
- Segment 1 of front tarsus slightly or much longer than segment 4.....9
- 8 Prothorax mostly black.....6. *striatus* (Fenton)
- Prothorax fully or mostly reddish.....7. *argentinus* Olmi
- 9 Antennae less slender, with segment 4 approximately twice as long as broad; prothorax fully testaceous.....8. *caraibicus* Olmi
- Antennae slenderer, with segment 4 approximately five-nine times as long as broad; prothorax fully or partly reddish.....10
- 10 Dorsal surface of propodeum sculptured by numerous longitudinal keels..
-16. *kimseyae* Olmi
- Dorsal surface of propodeum fully reticulate rugose.....11
- 11 Fore tibiae approximately twice as long as fore trochanters.....12
- Fore tibiae less than twice as long as fore trochanters.....13
- 12 Head fully reddish-testaceous; scutum more strongly sculptured by longitudinal keels; notaulices weakly visible among the keels.....9. *grandis* (Ogloblin)
- Head partly black and testaceous; scutum with weak longitudinal keels; notaulices clearly distinct among the keels.....10. *alvarenganus* Olmi
- 13 Head partly black.....11. *sinopensis* Olmi

- Head fully reddish-testaceous.....12. *belizensis* Olmi
- 14 Scutum laterally sculptured by longitudinal keels, medially reticulate rugose
.....18. *snellingi* Olmi
- Scutum differently sculptured.....15
- 15 Scutum granulated, with or without areolae on lateral regions and on posteri-
or half of median region.....16
- Scutum fully reticulate rugose.....19
- 16 Occipital carina incomplete.....19. *pecki* Olmi
- Occipital carina complete.....17
- 17 Pronotum fully reddish-testaceous.....21. *guerrerensis* n. sp.
- Pronotum black, occasionally with sides and posterior collar reddish-testaceous
.....18
- 18 Propodeum with dorsal surface approximately as long as posterior surface;
scutellum and metanotum granulated.....13. *antilleanus* (Evans)
- Propodeum with dorsal surface much longer than posterior surface; scutel-
lum and metanotum without sculpture.....22. *eberhardi* n. sp.
- 19 Antennal segment 4 less slender, approximately twice as long as broad....
.....8. *caraibicus* Olmi
- Antennal segment 4 slenderer, at least five times as long as broad.....20
- 20 Posterior ocelli farther from the occipital carina (Fig. 580 A in Olmi 1984)
.....14. *teutoniae* Olmi
- Posterior ocelli nearer occipital carina (Fig. 580 B in Olmi 1984).....21
- 21 Antennal segment 3 less than four times as long as 2...15. *catarinae* Olmi
- Antennal segment 3 more than four times as long as 2.....
.....20. *kabanus* n. sp.

In the above key *Dryinus napensis* Olmi 1984 and *Dryinus opacifrons* Olmi 1984 are not inserted, because they were transferred to the genus *Alphadryinus* Olmi (see Olmi 1990, p. 138).

MALES

- 1 Frontal line absent.....2
- Frontal line complete or incomplete.....3
- 2 Head and scutum reticulate rugose; notaulices complete; body mostly black;
vertex of the head with occipital carina directed towards the eyes.....
.....5. *surinamensis* Olmi
- Head and scutum granulated; notaulices incomplete, occasionally almost in-
visible; body mostly testaceous; vertex of the head with occipital carina not
directed towards the eyes, but towards the temples.....2. *citricolus* Olmi
- 3 Frontal line complete; notaulices incomplete, reaching approximately 0,5 length
of scutum; scutum granulated, not reticulate rugose.....
.....13. *antilleanus* (Evans)
- Frontal line incomplete, only visible on posterior half of frons; notaulices com-
plete, posteriorly separated; scutum reticulate rugose...6. *striatus* (Fenton)

GENUS *DRYINUS*: AUSTRALIAN REGION

***Dryinus swartensis* n. sp.**

Female: fully winged; length 3,12 mm; black; sides of clypeus and mandibles testa-

ceous; antennae brown-testaceous; sides of pronotum testaceous; legs brown; antennae distally thickened; antennal segments in following proportions: 8:5:24:12:10:8:7:6,5:5:7; head flat, dull, granulated, with tracks of weak keels on frons; frontal line complete; occipital carina incomplete, visible behind and on the sides of the posterior ocelli, not reaching the eyes; posterior ocelli almost touching the occipital carina; POL = 1,5; OL = 1; OOL = 10; occiput and temples strongly sculptured by short and longitudinal keels; temples distinct; pronotum dull, with disc prominent; anterior transversal furrow weak; posterior transversal furrow strong; posterior collar distinct; pronotal tubercles not reaching tegulae; disc sculptured by numerous irregular and longitudinal keels; scutum dull, granulated and rugose; notaulices incomplete, reaching approximately 0,7 length of scutum; scutellum and metonotum dull, reticulate rugose; propodeum dull, strongly transversely striate, without longitudinal keels; dorsal surface of propodeum longer than posterior surface (17:12); fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (12:7); fore tarsal segments in following proportions: 16:3:5:16:23; enlarged claw (Fig. 39 A) with a subapical tooth and a row of 14 lamellae; segment 5 of front tarsus (Fig. 39 A) with two rows of approximately 22 lamellae; apex with a group of approximately 11 lamellae; tibial spurs 1, 1, 2.

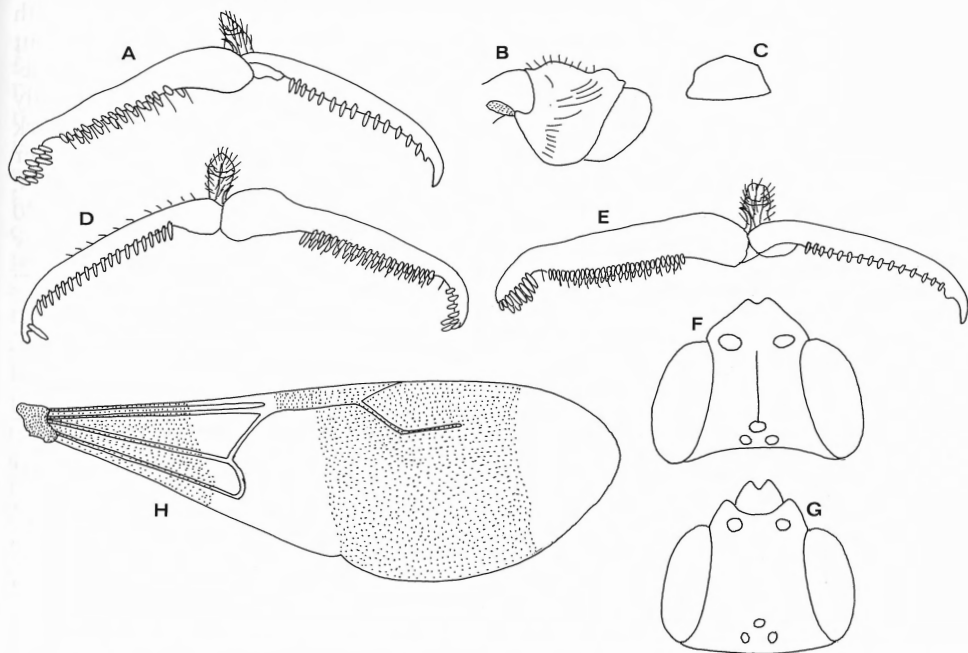


Fig. 39 - Chela of *Dryinus swartensis* n. sp. (holotype) (A), *cardaleae* n. sp. (holotype) (D), *aliceanus* n. sp. (holotype) (E); pronotum (in lateral view) (B) and scutellum (C) of female of *Dryinus cardaleae* n. sp. (holotype); head of female of *Dryinus tozerensis* n. sp. (holotype) (F) and *venator* (Perkins) from Bundaberg (G); fore wing of female of *Dryinus tozerensis* n. sp. (holotype) (H).

Male: unknown

Locus typicus: Karubaka (m 1450, Swart Valley, Papua, New Guinea)

Typical material: holotype F! in B

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.L. Gressitt on November 12, 1958.

***Dryinus cardaleae* n. sp.**

Female: fully winged; length 4,37-4,70 mm; reddish-testaceous, with petiole black; antennae not distally thickened; antennal segments in following proportions: 20:8:30:27:22:18:14:10:9:8; head dull, swollen, fully reticulate rugose; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle, laterally reaching the temples; POL = 7; OL = 2; OOL = 11; OPL = 2; TL = 6; pronotum shiny, without sculpture, except for some longitudinal striae around the disc; pronotum transversely excavated (Fig. 39 B); the furrow is separating the anterior collar from the posterior disc; no posterior collar and no posterior furrow is visible; pronotal tubercles reaching tegulae; scutum shiny, with lateral regions dull and reticulate rugose; median region shiny, with anterior half without sculpture and with posterior half granulated and strongly punctate, with few areolae near posterior margin; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (6:4); scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; anterior margin of the scutellum showing a median angle, not straight or regularly curved (Fig. 39 C); propodeum dull, fully reticulate rugose, without longitudinal or transversal keels; fore wing with a dark spot beneath the pterostigma; radial vein curved; distal part of radial vein longer than proximal part (24:11); fore tarsal segments in following proportions: 23:4:11:19:37; enlarged claw (Fig. 39 D) with a subapical tooth and a row of 20 lamellae; segment 5 of front tarsus (Fig. 39 D) with two rows of approximately 36 lamellae; apex with a group of approximately 7 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 15°17'S 145°13'E (1 Km N Rounded Hill, nr. Hope Vale Mission, Queensland, Australia)

Typical material: holotype F! and 3 paratypes FF! in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: 15°17'S 145°13'E (1 Km N Rounded Hill, nr. Hope Vale Mission, Queensland), CB! OL! 14°39'S 126°57'E (Drysdale River, Western Australia), CB! 14°49'S 126°4'E 126°49'E (Carson escarpment, Western Australia), CB!

Notes: the species is named in honor of one of the collectors of the typical series, J.C. Cardale; the typical series from the typical locality was collected by J.C. Cardale at light on October 5-6, 1980; the paratype from Drysdale River was collected by I.F.B. Common and M.S. Upton on August 18-21, 1975; the paratype from Carson escarpment was collected by I.F.B. Common and M.S. Upton on August 9-15, 1975.

***Dryinus aliceanus* n. sp.**

Female: fully winged; length 5,25 mm; head black, with clypeus and mandibles testaceous; antennae testaceous; prothorax reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen brown; legs reddish-testaceous, with mid and hind tibiae and mid and hind tarsi brown; antennae distally thickened; antennal segments in following proportions: 10:8:38:24:18:11:10:8:7:9; head dull, strongly punctate and rugose, with some weak longitudinal striae on frons; frontal line complete; occipital carina complete; POL = 5,5; OL = 2,5; OOL = 10; OPL =

1; TL = 6; pronotum shiny, with a weak anterior transversal furrow and with a strong posterior transversal furrow; disc humped; posterior collar long; pronotal tubercles not reaching tegulae; pronotum smooth, without sculpture, except for few striae and areolae on the sides; scutum dull, reticulate rugose; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum strongly punctate, without sculpture among the punctures; metanotum finely punctate, without sculpture among the punctures; propodeum reticulate rugose; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (16:9); enlarged claw (Fig. 39 E) with a subapical tooth and a row of 15 lamellae; segment 5 of front tarsus (Fig. 39 E) with two rows of approximately 44 lamellae; apex with a group of approximately 21 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 23°32'S 133°38'E (30 Km NW by W of Alice Springs, Northern Territory, Australia)

Typical material: holotype F! in CB

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.C. Cardale on October 7, 1978.

Dryinus tozerensis n. sp.

Female: fully winged; length 7,5 mm; head black, with mandibles and anterior region of clypeus testaceous; antennae brown, with segment 1 partly whitish; thorax and propodeum black; abdomen black; legs testaceous, with articulations whitish, hind coxae partly black and tarsi partly whitish; antennae distally thickened; antennal segments in following proportions: 14:6:50:26:23:16:12:10:8:11; head dull, hairy, fully reticulate rugose; occiput excavated (Fig. 39 F); frontal line complete; occipital carina complete; POL = 4; OL = 2,5; OOL = 11; OPL = 1; TL = 1; pronotum dull, very hairy, with a disc very humped; anterior transversal impression weak; posterior transversal impression strong; posterior collar long; pronotal tubercles not reaching tegulae; pronotum sculptured by longitudinal striae around the disc and on the disc; scutum dull, strongly sculptured by longitudinal keels; notaulices slightly visible among the keels, complete and posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (11:3); scutellum and metanotum reticulate rugose; propodeum dull, fully covered with long white hairs, fully reticulate rugose, without longitudinal or transversal keels; fore wing with two broad dark transversal bands (Fig. 39 H); distal part of radial vein longer than proximal part (23:16); fore tarsal segments in following proportions: 25:5:10:25:38; enlarged claw (Fig. 40 B) with a subapical tooth and a row of 16 lamellae; segment 5 of front tarsus (Fig. 40 B) with two rows of approximately 30 lamellae; apex with a group of approximately 18 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus. 12°43'S 143°18'E (11 Km ENE Mt. Tozer, Queensland, Australia)

Typical material: holotype F! in CB

Distribution: only known from the typical locality.

Notes: the holotype was collected ex yellow trays by J.C. Cardale on July 11-16, 1986.

Dryinus minutus n. sp.

Female: fully winged; length 3,18 mm; head black, with clypeus and mandibles testaceous; antennae testaceous, with segments 7-10 darkened; prothorax reddish-

testaceous, with two black spots on the sides of the anterior transversal impression; mesothorax, metathorax and propodeum black; abdomen brown; fore legs testaceous; mid and hind legs brown; antennae distally thickened; antennal segments in following proportions: 8:5:19:10:9:7:5:5:4,5:7; head dull, swollen, fully reticulate rugose; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; POL = 5; OL = 2; OOL = 8; OPL = 1; temples distinct; pronotum shiny, finely punctate, without sculpture among the punctures; pronotal tubercles not reaching tegulae; disc humped; anterior transversal impression strong; posterior transversal impression weak; posterior collar short; scutum fully reticulate rugose, dull; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum hairy and rugose; propodeum dull, reticulate rugose, except for a central area on posterior surface smooth, shiny and without sculpture; no transversal or longitudinal keels on posterior surface; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (12:6); fore tarsal segments in following proportions: 18:3:5:12:18; enlarged claw (Fig. 40 C) with a subapical tooth and a row of 10

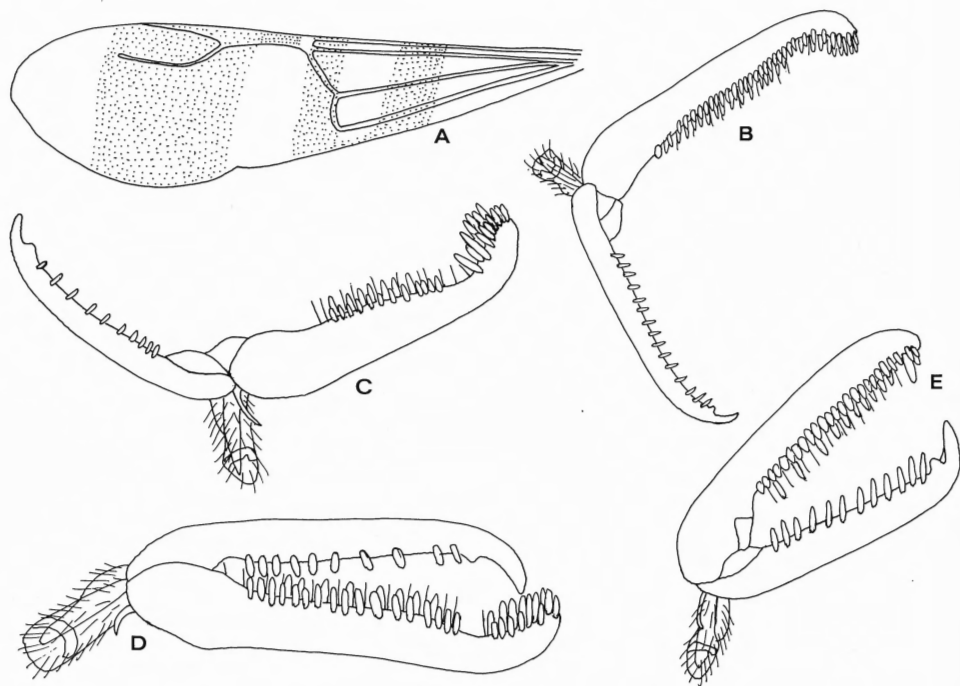


Fig. 40 - Fore wing of female of *Dryinus venator* (Perkins) from Bundaberg (A); chela of *Dryinus tozerensis* n. sp. (holotype) (B), *Dryinus minutus* n. sp. (holotype) (C), *Tridryinus afer* n. sp. (holotype) (D) and *Tridryinus chiapasensis* n. sp. (holotype) (E).

lamellae; segment 5 of front tarsus (Fig. 40 C) with two rows of approximately 20 lamellae; apex with a group of approximately 16 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 23°41'S 134°15'E (39 Km E of Alice Springs, Northern Territory, Australia)

Typical material: holotype F! in CB

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.C. Cardale on October 5, 1978.

Dryinus pallidus (PERKINS 1905)

Olmi (1982) designated the lectotype F and 5 paralectotypes (4 MM, 1 F) of *D. pallidus* (Perkins): they are kept in B; other 3 paralectotypes (2 MM, 1 F) were designated afterwards by Olmi (1984): they are kept in BM. Recently I have seen in CB other two specimens (1 F, 1 M) belonging to the typical series; the female specimen is labelled as follows: «Mulgrave, bred, 4.IX.04, Cairns, Q., Austr., 1904, Paratype, *Chlorodryinus pallidus* F Perkins». The male specimen is labelled as follows: «Mulgrave, bred, 17.VIII.04, Cairns, Q., Austr., 1904, Paratype, *Chlorodryinus pallidus* M Perkins». The labels of both specimens are in Perkins' handwriting. These two specimens are here designated as paralectotypes.

Dryinus koebelei (PERKINS 1905)

Olmi (1982) designated the lectotype F and 4 paralectotypes FF of *D. koebelei* (Perkins): they are kept in B, Recently I have seen in CB other two specimens (1 F, 1 M) belonging to the typical series; the female specimen is labelled as follows: «Sandhills, 24.XI.04, bred., 19.XI.04, Bundaberg, Q., Austr., 1904, Paratype, *Paradryinus koebelei* F Perkins». The male specimen is labelled as follows: «Collected at Bundaberg, 1.X.04, Bundaberg, Q., Austr., 1904, Paratype, *Paradryinus koebelei* M Perkins». The labels of both specimens are in Perkins' handwriting. These two specimens are designated as paralectotypes.

Dryinus venator (PERKINS 1905)

Olmi (1982) designated the lectotype F and 3 paralectotypes FF of *D. venator* (Perkins): they are kept in B. Recently I have seen in CB two other specimens (1 F, 1 M) belonging to the typical series. The female specimen is labelled as follows: «Sandhills, bred, 14.XII.04, Bundaberg, Q., Austr., 1904, Paratype, *Paradryinus venator* F Perkins». The male specimen is labelled as follows: «Sandhills, bred, 24.XI.04, Bundaberg, Q., Austr., 1904, Paratype, *Paradryinus venator* M Perkins». The labels of both specimens are in Perkins' handwriting. These two specimens are here designated as paralectotypes.

After the descriptions of the above new species a new key to the females of the Australian *Dryinus* must be proposed. In the new key *Richardsidryinus trilineatus* (Dodd 1914), now belonging to the genus *Dryinus* (the two genera are synonyms), must be inserted.

FEMALES

- 1 Pronotum excavated, not humped (Fig. 39 B); pronotal tubercles reaching tegulae.....26. *cardaleae* n. sp.
— Pronotum more or less humped (Fig. 589 in Olmi 1984).....2
2 Fore wing hyaline, without dark transversal bands.....1. *pallidus* (Perkins)

- Fore wing crossed by dark transversal bands.....3
- 3 Propodeum not reticulate rugose, with numerous parallel (transversal or longitudinal) keels at least on anterior half; occasionally with weak areolae among the keels.....4
- Propodeum reticulate rugose at least on anterior half.....6
- 4 Propodeum with numerous parallel longitudinal keels....2. *speciosus* (Dodd)
- Propodeum with numerous parallel transversal keels.....5
- 5 Pronotum with posterior transversal impression very broad, approximately three times as long as pronotal tubercles (Fig. 589 A in Olmi 1984); species reddish-testaceous, with petiole black and abdomen darkened.....
-3. *subtilis* Olmi
- Pronotum with posterior transversal impression narrow, approximately as long as pronotal tubercles (Fig. 589 B in Olmi 1984); species mostly black.....
-4. *pacificus* Olmi
- 6 Occipital carina incomplete.....7
- Occipital carina complete.....12
- 7 Head excavated or flat.....8
- Head swollen.....10
- 8 Head shiny, punctate, without sculpture among the punctures.....
-5. *montanus* Olmi
- Head dull, reticulate rugose or granulated; occasionally temples and occiput sculptured by longitudinal keels.....9
- 9 Head reticulate rugose; temples and occiput not sculptured by short and longitudinal keels.....24. *aestivus* Olmi
- Head granulated, with tracks of weak keels, not reticulate rugose; temples and occiput sculptured by short and longitudinal keels.....
-25. *swartensis* n. sp.
- 10 Head reticulate rugose.....29. *minutus* n. sp.
- Head granulated or punctate, not reticulate rugose.....11
- 11 Occipital carina only visible behind the posterior ocelli; head granulated..
-6. *pseudophanes* (Perkins)
- Occipital carina visible behind and on the sides of the ocellar triangle; head punctate, not granulated.....7. *insularis* (Dodd)
- 12 Head fully or mostly reddish.....13
- Head fully or mostly black.....15
- 13 Scutum not reticulate rugose, with numerous longitudinal keels.....
-9. *koebelei* (Perkins)
- Scutum fully reticulate rugose, without longitudinal keels.....14
- 14 Head fully reticulate rugose; pronotum with numerous striae around the disc
-8. *bouceki* Olmi
- Head fully granulated, with weak longitudinal striae, not reticulate rugose; pronotum granulated, without striae around the disc.30. *trilineatus* (Dodd)
- 15 Frons and vertex almost fully sculptured by numerous strong longitudinal and irregular keels among the areolae.....16
- Frons and vertex without longitudinal keels or with few keels on a narrow surface.....18
- 16 Posterior ocelli touching the occipital carina.....10. *guineensis* Olmi
- Posterior ocelli not touching the occipital carina.....17
- 17 Pronotum dull, sculptured by numerous longitudinal striae around and on the disc; scutellum reticulate rugose.....11. *gigas* (Perkins)

- Pronotum shiny, smooth, almost fully without sculpture, except for some striae and areolae on the sides; scutellum punctate, without sculpture among the punctures.....27. *aliceanus* n. sp.
- 18 Metapleura with a narrow or wide region smooth, shiny and hairless, without sculpture; pronotum (occasionally also head and scutum) fully smooth, shiny, hairless, without sculpture, occasionally only with some keels on the sides of the pronotum.....19
- Metapleura without a region smooth, shiny and hairless; pronotum, head and scutum usually not smooth and shiny.....21
- 19 Head excavated.....15. *montanus* Olmi
- Head flat.....20
- 20 Scutum shiny, smooth, without sculpture.....13. *aterrimus* (Dodd)
- Scutum dull, with numerous longitudinal keels.....14. *biaki* Olmi
- 21 Scutum almost fully reticulate rugose.....22
- Scutum not reticulate rugose or with few areolae (occasionally only near posterior margin).....24
- 22 Pronotum, frons and vertex of the head not reticulate rugose; frons smooth, punctate; pronotum with weak keels around the disc....15. *punctatus* Olmi
- Frons and vertex of the head as reticulate rugose as scutum.....23
- 23 Pronotum as reticulate rugose as scutum.....16. *areolatus* Olmi
- Pronotum with keels around the disc, not as reticulate rugose as scutum.....17. *leptias* (Perkins)
- 24 Scutum without keels or with very short keels near scutellum.....25
- Scutum almost fully sculptured by longitudinal keels.....26
- 25 Posterior ocelli touching the occipital carina; head with TL shorter than POL.....18. *quatei* Olmi
- Posterior ocelli not touching the occipital carina; head with TL longer than POL.....19. *dahmsi* Olmi
- 26 Pronotum smooth, shiny, almost hairless, without sculpture or with few keels around the disc.....27
- Pronotum not smooth and shiny, but sculptured by numerous keels around the disc.....28
- 27 Head with OPL as long as POL; posterior collar of pronotum yellow.....20. *glaber* Olmi
- Head with OPL shorter than POL (posterior ocelli very near the occipital carina); posterior collar of pronotum black.....21. *australianus* Olmi
- 28 Head with frons and vertex reticulate rugose.....29
- Head with frons and vertex punctate and with some keels, not reticulate rugose.....30
- 29 Occiput straight (Fig. 39 G); fore wing with three dark transversal bands (Fig. 40 A).....22. *venator* (Perkins)
- Occiput excavated (Fig. 39 F); fore wing with two broad dark transversal bands (Fig. 39 H).....28. *tozerensis* n. sp.
- 30 Posterior ocelli farther from the occipital carina (Fig. 598 B in Olmi 1984); head with frons and vertex smooth, hairless, finely punctate, with weak keels connecting ocelli to frons; scutellum punctate, without numerous longitudinal keels.....12. *bismarcki* Olmi
- Posterior ocelli nearer occipital carina (Fig. 598 A in Olmi 1984); head with frons and vertex smooth, hairless, weakly punctate, without keels connecting ocelli to frons; scutellum with numerous longitudinal keels.....23. *papuanus* Olmi

GENUS *TRIDRYINUS*: ETHIOPIAN REGION

Tridryinus afer n. sp.

Female: fully winged; length 4,37 mm; head, antennae, prothorax, abdomen and legs reddish-testaceous; mesothorax, metathorax and propodeum black; antennae distally thickened; antennal segments in following proportions: 7:7:32:14:13:10:8:7:6:8; head dull, excavated, fully granulated; frontal line complete; occipital carina complete; POL = 2; OL = 3; OOL = 11; OPL = 1; TL = 6; occiput excavated; pronotum dull, with a weak anterior transversal furrow and with a strong posterior transversal furrow; posterior collar long; pronotal tubercles not reaching tegulae; disc humped; pronotum granulated, with few weak striae on the lateral surfaces; scutum hairy, dull, granulated and weakly rugose; notaulices invisible; scutellum dull, granulated; metanotum dull, reticulate rugose; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing almost fully hyaline, only with two weak dark spots beneath the pterostigma and on the basal cells; distal part of radial vein longer than proximal part (14:6); fore tarsal segments in following proportions: 20:3:7:15:25; enlarged claw (Fig. 40 D) with a subapical tooth and a row of 10 lamellae; segment 5 of front tarsus (Fig. 40 D) with two rows of approximately 25 lamellae; apex with a group of approximately 20 lamellae; tibial spurs 1, 1, 1.

Male: unknown

Locus typicus: 30 Km E Nylstroom (Transvaal, South Africa)

Typical material: holotype F! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by H. and A. Howden on November 15 - December 17, 1984.

After the description of the above new species a new key to the females of the Ethiopian *Tridryinus* can be proposed, as follows:

- 1 Species almost fully black; head with OOL slightly longer than POL.....1. *ugandanus* Olmi
- Species mostly or almost fully reddish-testaceous; head with OOL at least twice as long as POL.....2
- 2 Head fully reticulate rugose, with OOL twice-three times as long as POL.....2. *ampuliciformis* (Turner)
- Head fully granulated, with OOL approximately five times as long as POL.....3. *afer* n. sp.

GENUS *TRIDRYINUS*: NEOTROPIC REGION

Tridryinus chiapasensis n. sp.

Female: fully winged; length 3,56 mm; head black, with mandibles and clypeus testaceous; antennae testaceous with segments 8-10 darkened; thorax and propodeum black, except for margins of pronotum and dorsal side of propectus reddish-testaceous; abdomen brown; legs testaceous, with coxae partly black; antennae distally thickened; antennal segments in following proportions: 8:5:17:8:7:6:6:5:6; head dull, granulated and with irregular longitudinal keels on frons and vertex; frontal line complete; occipital carina complete; POL = 3; OL = 2; OOL = 7;

OPL = 1; TL = 3,5; pronotum dull, granulated, crossed by a very weak anterior transversal impression and by a strong posterior transversal impression; posterior collar short; pronotal tubercles not reaching tegulae; scutum granulated; propodeum reticulate rugose, with some longitudinal keels on dorsal surface; posterior surface of propodeum without longitudinal keels; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (13:6); front tarsal segment 3 produced into a hook; fore tarsal segments in following proportions: 16:2:4:10:15; enlarged claw (Fig. 40 E) with a subapical tooth and a row of 12 lamellae; segment 5 of front tarsus (Fig. 40 E) with two rows of approximately 33 lamellae; the shortest row is composed of 10 very long lamellae; apex with a group of approximately 4 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Palenque (Chiapas, Mexico)

Typical material: holotype F! in HS

Distribution: only known from the typical locality.

Notes: the holotype was collected by G. Bohart and W. Hanson on September 10, 1974.

Tridryinus hansonii n. sp.

Female: fully winged; length 4,06 mm; head black, with mandibles, genae, anterior half of frons, occiput and temples reddish-testaceous; clypeus reddish-testaceous, with a dark spot; antennae testaceous, with segments 7-9 brown; prothorax black, with margins of pronotum reddish-testaceous; mesothorax, metathorax, propodeum and abdomen black; legs brown, with trochanters, tarsi and fore and hind coxae testaceous; antennae distally thickened; antennal segments in following proportions: 10:5:16:8:7:7:6:6:5,5:8; head shiny, smooth, without sculpture, except for an incomplete frontal line (only visible in front of the anterior ocellus) and for few transversal keels (visible in the central area of the anterior half of the frons); occipital carina complete; POL = 1; OL = 5; OOL = 7; OPL = 0,5; TL = 3; pronotum shiny, smooth, without sculpture, with a weak anterior transversal impression and with a strong posterior transversal impression; disc humped; posterior collar absent; pronotal tubercles not reaching tegulae; scutum shiny, smooth, without sculpture, hairy; notaulices invisible; scutellum shiny, smooth, without sculpture; metanotum rugose; propodeum dull, reticulate rugose, without transversal keels; dorsal surface with numerous longitudinal and parallel keels, separating the areolae; posterior surface with two incomplete longitudinal keels; dorsal surface of propodeum approximately as long as posterior surface; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (11:8); radial cell open; radial vein curvilinear, not forming an angle between distal and proximal part; segment 3 of front tarsus produced into a hook; fore tarsal segments in following proportions: 17:3:5:13:19; enlarged claw (Fig. 41 A) with a subapical tooth and a row of 5 lamellae; segment 5 of front tarsus (Fig. 41 A) with two rows of approximately 14 lamellae; apex with a group of at least 12 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 10°09'N 83°55'W (16 Km W Guápiles, m. 400, Limón Prov., Costa Rica)

Typical material: holotype F! in OL

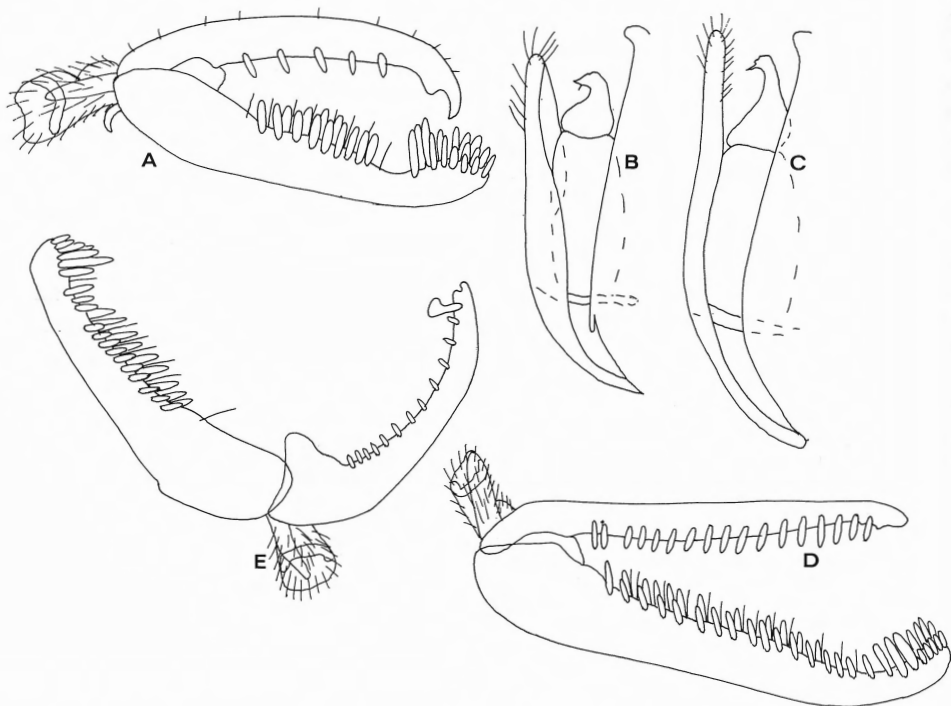


Fig. 41 - Chela of *Tridryinus hansonii* n. sp. (holotype) (A), *Alphadryinus botswanensis* n. sp. (holotype) (D) and *Alphadryinus atrox* n.sp. (holotype) (E); male genitalia of *Tridryinus gibbosus* Olmi from Curaçao (B) and *Alphadryinus sanderi* (Olm) from Giaglione (C).

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Paul Hanson; the holotype was collected by a malaise trap in April-May, 1989.

***Tridryinus gibbosus* OLM 1984**

Tridryinus gibbosus Olmi was described only on the basis of female specimens. In the last years a series of female and male specimens from Curaçao was examined. The following description of the male can be proposed:

Male: fully winged; length 3,25-3,87 mm; head black, with mandibles, clypeus, part of genae and a narrow region of frons near clypeus testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 6:6:17:11:11:9:8:7:9; head dull, flat, granulated and reticulate rugose; frontal line incomplete, only shortly visible in front of the anterior ocellus; occipital carina incomplete, not visible behind the temples; POL = 6; OL = 2; OOL = 3; posterior ocelli touching the occipital carina; ocelli very large: their maximum breadth longer than OL (5:2); scutum dull, granulated and reticulate rugose; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum granulated; metanotum rugose and granulated, with sides without sculpture; propodeum dull, reticulate rugose, with two longitudinal keels on the posterior surface; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than

proximal part (10:12); genitalia in Fig. 41 B; tibial spurs 1, 1, 2.

Tridryinus gibbosus Olmi is now known from the following localities: TRINIDAD: St. Augustine (St. George), BM! SURINAME: Krepi (Charlesburg, Paramaribo), LE! PERU: Tingo Maria (Monzón Valley), CA! BOLIVIA: At mouth of Rio Baures (Rio Itenez, Beni Dept.), AM! Rio Itenez (Beni Dept.), OL! DUTCH ANTILLES: Willemstad (Curacao), HS! COSTA RICA: Esparta (Puntarenas Prov.), WA! Ciudad Colon (m 800, San José Prov.), GC! 11°00'N 85°33'W (Cerro el Hacha, m 300, NW Volcán Orosí, Guanacaste National Park, Guanacaste Prov.), OL!

Tridryinus hansonii n. sp. can be inserted in the key to the females of the Neotropic *Tridryinus* (Olm 1984, p. 947) at the number 7, near *T. maximus* Olmi, as follows:

- 7 Scutum smooth, fully without sculpture.....14. *hansonii* n. sp.
- Scutum fully reticulate rugose.....7'
- 7' Radial vein weakly curvilinear (Fig. 648 A in Olmi 1984); pronotum almost fully black.....4. *maximus* Olmi
- Radial vein strongly S-shaped (Fig. 648 B in Olmi 1984); pronotum fully reddish-testaceous.....8

Tridryinus chiapasensis n. sp. can be inserted in the key to the females of the Neotropic *Tridryinus* (Olm 1984, p. 947) at the number 11, near *T. piscens* Olmi, as follows:

- 11 Disc of pronotum shiny, testaceous, not granulated, with some striae around the disc.....7. *nigroflavus* Olmi
- Disc of pronotum dull, black, granulated and with some striae around the disc.....11'
- 11' Enlarged claw with a long row of lamellae (Fig. 40 E).....13. *chiapasensis* n. sp.
- Enlarged claw with a row of bristles and few apical lamellae (Fig. 656 in Olmi 1984).....10. *piscens* Olmi

The male of *Tridryinus gibbosus* Olmi can be inserted in the key to the males of the Neotropic *Tridryinus* (Olm 1984, p. 948) at the number 1, near *T. striaticeps* (Kieffer), as follows:

- 1 Notaulices visible, complete or incomplete; occipital carina incomplete, not visible behind the temples.....1'
- Notaulices invisible; occipital carina complete.....2
- 1' Notaulices complete; posterior surface of propodeum with a median longitudinal keel.....5. *striaticeps* (Kieffer)
- Notaulices incomplete; posterior surface of propodeum with two longitudinal keels.....12. *gibbosus* Olmi

GENUS ALPHADRYINUS: PALAEARCTIC REGION

In the Palearctic region there are three species of *Alphadryinus*: *A. ibericus* Olmi 1990, *A. balearicus* (Olm 1987) and *A. sanderi* (Olm 1984). *A. balearicus* and *A. sanderi* were described as *Dryinus* and afterwards transferred to *Alphadryinus* (Olm 1990).

Alphadryinus sanderi (OLMI 1984)

A. sanderi was described only on the basis of female specimens. In the last years a series of male and female specimens from Giaglione (Italy) was examined. The following description of the male can be proposed:

Male: fully winged; length 3,75 mm; black; mandibles partly testaceous; legs black, with tarsi and fore tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 8:6:10:9:12:13:12:12:11:15; antennal segment 3 less than six times as long as broad (10:3); head dull, granulated and rugose; frontal line incomplete, only visible in front of the anterior ocellus; occipital carina complete; POL = 8; OL = 3; OOL = 6; OPL = 0,5; TL = 1; scutum dull, granulated and rugose, mostly on the posterior third; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (15:12); genitalia in Fig. 41 C; tibial spurs 1, 1, 2.

Many thanks to Mr. Graziano Bassi and Mr. Pier Luigi Scaramozzino for the gift of their material from Giaglione.

Alphadryinus sanderi (Olmi) is now known from the following localities: BULGARIA: Melnik, OL! ITALY: Giaglione (Susa, Torino), OL! CYPRUS: Ayia Napa (10 Km W of Cape Gréko), CO!

The following key to the males of the Palaearctic *Alphadryinus* can be proposed:

- 1 Head with an incomplete frontal line, only visible in front of the anterior ocellus.....5. *sanderi* (Olmi)
- Head without frontal line.....4. *balearicus* (Olmi)

The males of *Alphadryinus ibericus* Olmi, *A. bruesi* Olmi and *A. balticus* Olmi are unknown.

GENUS *ALPHADRYINUS*: ETHIOPIAN REGION

Alphadryinus botswanensis n. sp.

Female: fully winged; length 5,12 mm; head black, with mandibles, clypeus and small spots on the genae ferruginous; antennae ferruginous, with segments 6-9 darkened; prothorax black, with sides and posterior margin reddish; mesothorax, metathorax, propodeum and abdomen black, with apex of propodeum reddish; legs ferruginous, with coxae partly black; clubs of femora partly darkened; antennae distally thickened; antennal segments in following proportions: 14:6:28:14:11:9:7:6:5:9; head flat, dull, granulated, with irregular keels on vertex and frons; frontal line complete; occipital carina complete; POL = 5; OL = 3; OOL = 9; TL = 4; posterior ocelli touching the occipital carina; pronotum crossed by two transversal furrows; anterior furrow weak; posterior furrow strong; posterior collar short; pronotal tubercles not reaching tegulae; pronotum shiny, alutaceous; disc humped; scutum dull, reticulate rugose; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum dull, granulated; metanotum dull, rugose; propodeum reticulate rugose, without longitudinal or transversal keels; fore wing with three dark transversal bands; distal part of radial vein longer than proximal part (15:9); fore tarsal segments in following proportions: 20:5:9:20:33;

segment 3 of front tarsus produced into a hook; enlarged claw (Fig. 41 D) with two small subapical teeth and a row of 18 lamellae; segment 5 of front tarsus (Fig. 41 D) with two rows of approximately 28 lamellae; apex with a group of approximately 30 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Farmer's Brigade (Serowe, Botswana)

Typical material: holotype F! in WA

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Per Forchhammer in September, 1988.

After the description of the above new species a new key to the females of the Ethiopian *Alphadryinus* can be proposed, as follows:

- 1 Scutum granulated, not reticulate rugose; enlarged claw short, sickle-shaped, with few lamellae (Fig. 666 in Olmi 1984).....1. *aberrans* (Benoit)
- Scutum reticulate rugose; enlarged claw long, straight, with many lamellae (Fig. 41 D).....2. *botswanensis* n. sp.

GENUS *ALPHADRYINUS*: NEOTROPIC REGION

Alphadryinus atrox n. sp.

Female: fully winged; length 7,5 mm; head testaceous, with ocellar triangle and most part of occiput black; antennae testaceous, with segments 4-6 and part of 3 and 7 brown; prothorax black, with sides of pronotum and posterior margin of pronotum testaceous; mesothorax, metathorax and propodeum black; abdomen brown; legs mostly brown, with tarsi, fore tibiae and mid and hind trochanters light; antennae distally thickened; antennal segments in following proportions: 16:7:35:17:15:12:10:9:7:10; head flat, shiny, hairy, weakly and irregularly rugose; frontal line incomplete, only visible in front of the anterior ocellus; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; pronotum with a strong anterior transversal impression and with a strong posterior transversal impression; disc humped; posterior collar invisible; pronotum shiny, smooth, without sculpture, except for disc weakly granulated; pronotal tubercles not reaching tegulae; scutum shiny, irregularly rugose, without sculpture among the irregular keels; notaulices incomplete, reaching approximately 0,6 length of scutum, composed of a series of areolae; scutellum shiny, smooth, punctate, without sculpture among the punctures; metanotum shiny, with some longitudinal keels; propodeum reticulate rugose, with two incomplete longitudinal keels on posterior surface; fore wing with three dark transversal bands; distal part of radial vein longer than proximal part (30:10); radial cell open; fore tarsal segments in following proportions: 25:4:9:18:30; enlarged claw (Fig. 41 E) with a subapical tooth, a broad apical lamella and a row of 12 small lamellae; segment 5 of front tarsus (Fig. 41 E) with three rows of approximately 37 lamellae; apex with a group of approximately 26 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Las Cumbres (Panama)

Typical material: holotype F! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected on the ground by H. Wolda on August 8-14, 1982.

Alphadryinus amazonicus n. sp.

Female: fully winged; length 6,25 mm; head testaceous with vertex and a median region of frons black; antennae testaceous; prothorax black, with part of propectus, anterior margin of pronotum, sides of pronotum and disc of pronotum testaceous; mesothorax, metathorax and propodeum black; abdomen brown; legs testaceous, with fore clubs of femora darkened; antennae distally thickened; antennal segments in following proportions: 15:7:40:20:14:12:11:9:8:12; head dull, sculptured by irregular longitudinal keels; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; POL = 2; OL = 10; OOL = 3; posterior ocelli almost touching the occipital carina; pronotum humped, with a strong anterior transversal impression and with a strong posterior transversal impression; posterior collar very short; pronotum shiny, sculptured by numerous striae around the disc, on the anterior collar and on the sides; pronotal tubercles not reaching tegulae; scutum dull, sculptured by numerous parallel longitudinal keels; notaulices not visible among the longitudinal keels; scutellum and metanotum dull, reticulate rugose; propodeum fully reticulate rugose, with two incomplete longitudinal keels on posterior surface; fore wing with two dark transversal bands; distal part of radial vein slightly longer than proximal part (17:16); fore tarsal segments in following proportions: 27:4:11:28:46; enlarged claw (Fig. 42 A) with two subapical teeth and a row of 12 lamellae; segment 5 of front tarsus (Fig. 42 A) with two rows of approximately 31 lamellae; apex with a group of approximately 30 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Manaus (Amazonas, Brazil)

Typical material: holotype F! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected by F.M. Oliveira in June, 1972:

Alphadryinus davidsoni n. sp.

Female: fully winged; length 8,87 mm; head black, with mandibles, clypeus, anterior margin of frons and part of genae testaceous; antennae testaceous; prothorax black, with margins and disc reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen brown-reddish; legs testaceous-reddish; antennae distally thickened; antennal segments in following proportions: 18:10:65:33:26:18:14:11:9:12; head dull, reticulate rugose; frontal line complete; occipital carina complete, laterally touching the eyes; POL = 11; OL = 4; OOL = 6; OPL = 1; pronotum hairy, with a strong anterior transversal impression and with a strong posterior transversal impression; disc humped, rounded; posterior collar invisible; pronotal tubercles not reaching tegulae; pronotum dull, granulated, with numerous transversal striae and with margins smooth and without sculpture; scutum dull, reticulate rugose; notaulices incomplete, only shortly visible near the anterior margin of the scutum; scutellum dull, granulated and punctate; metanotum dull, smooth, with median region rugose; propodeum reticulate rugose, with two complete longitudinal keels on the posterior region; fore wing with two dark transversal bands; radial cell open; distal part of radial vein longer than proximal part (36:18); fore tarsal segments in following proportions: 32:5:13:30:49; enlarged claw (Fig. 42 B) with a row of 12 small teeth and a row

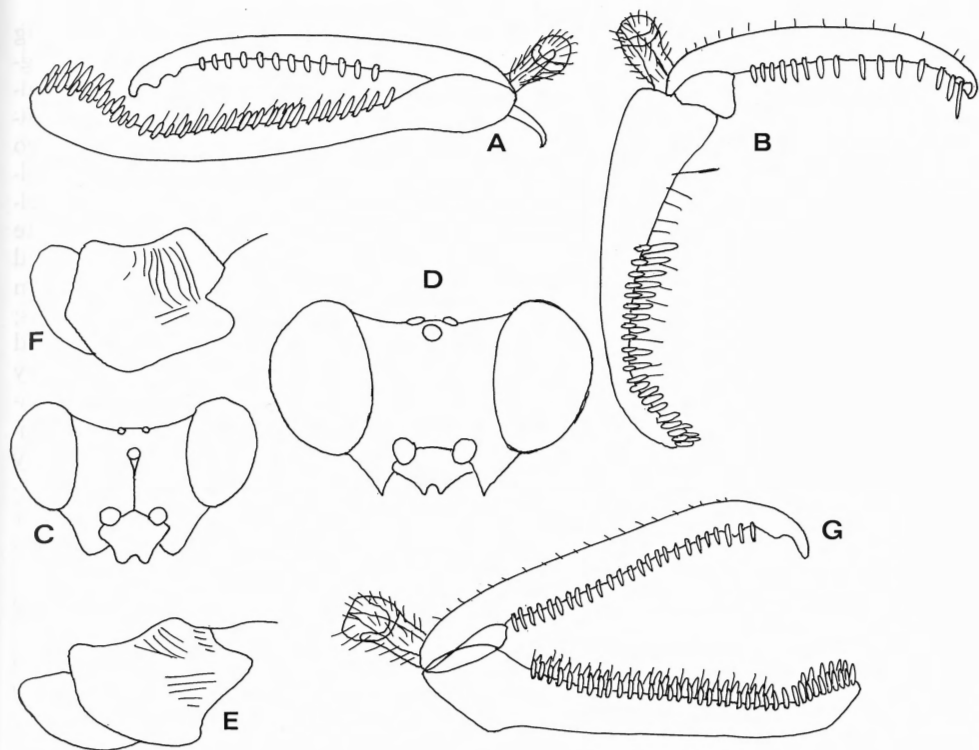


Fig. 42 - Chela of *Alphadryinus amazonicus* n. sp. (holotype) (A), *davidsonii* n. sp. (holotype) (B), *hansonii* n. sp. (holotype) (G); head (in frontal view) of female of *Alphadryinus hansonii* n. sp. (holotype) (C) and *amazonicus* n. sp. (holotype) (D); pronotum (in lateral view) of female of *Alphadryinus amazonicus* n. sp. (holotype) (E) and *hansonii* n. sp. (holotype) (F).

of 15 lamellae; the distal lamella is longer than the other lamellae; segment 5 of front tarsus (Fig. 42 B) with two rows of approximately 24 lamellae; the shortest row is composed of 10 very long lamellae; apex with a group of approximately 30 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Rio de Janeiro (Brazil)

Typical material: holotype F! in GD

Distribution: only known from the typical locality.

Notes: the species is named in honor of Robert L. Davidson of Pittsburgh (Pennsylvania).

***Alphadryinus hansonii* n. sp.**

Female: fully winged; length 10 mm; head fully testaceous; antennae brown, with segment 1 testaceous; propectus testaceous, with ventral side partly black; pronotum, mesothorax, metathorax and propodeum black; abdomen brown; legs black-brown, with hind trochanters, proximal apex of fore trochanters, distal apex of

coxae testaceous; antennae distally thickened; antennal segments in following proportions: 8:3:40:14:10:7:5:4,5:4:5; head very excavated, with eyes unusually bulging (Fig. 42 C); frons and vertex shiny, strongly sculptured by numerous longitudinal and parallel keels, without sculpture among the keels; frontal line complete, but divided into two branches in front of the anterior ocellus; these two branches are directed posteriorly towards the external sides of the anterior ocellus; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; occipital carina laterally not reaching the eyes; clypeus bidentate (this is unusual for *Alphadryinus* females, which have shallowly emarginated clypeus); POL = 1; OL = 5; OOL = 9; OPL = 0,5; temples absent; pronotum shiny, strongly sculptured by transversal keels, without sculpture among the keels; pronotum (Fig. 42 F) crossed by a strong anterior transversal impression and by a strong posterior transversal impression; posterior collar invisible; disc very humped (Fig. 42 F) and pointed; anterior collar long; pronotal tubercles not reaching tegulae; scutum shiny, strongly sculptured by numerous parallel and longitudinal keels; notaulices invisible among the keels; scutellum shiny, sculptured by numerous parallel and longitudinal keels; metanotum rugose, very hairy; propodeum reticulate rugose, without a transversal keel between dorsal and posterior surface; posterior surface with two longitudinal keels; fore wing with a dark transversal band beneath the pterostigma and with two dark spots on the basal cells; distal part of radial vein longer than proximal part (29:19); radial cell open; fore tibiae approximately twice as long as fore trochanters (41:22); fore tarsal segments in following proportions: 45:7:19:35:60; enlarged claw (Fig. 42 G) with two subapical teeth and a row of 25 lamellae; segment 5 of front tarsus (Fig. 42 G) with two rows of approximately 54 lamellae; apex with a group of approximately 30 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 4 Km NE Bribri (m 50, Limón Prov., Costa Rica)

Typical material: holotype F! in OL

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Paul Hanson; the holotype was collected by a malaise trap in September-November, 1989.

***Alphadryinus porteri* n. sp.**

Female: fully winged; length 6,43 mm; head black, with mandibles, clypeus, genae and anterior margin of the frons testaceous; antennae testaceous; prothorax reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen testaceous, with distal half brown; legs testaceous, with femora and tibiae partly brown; antennae distally thickened; antennal segments in following proportions: 15:6,5:44:24:20:16:12:10:8:11; head flat, hairy, reticulate rugose; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; occipital carina laterally touching the eyes; POL = 9; OL = 3; OOL = 5; posterior ocelli touching the occipital carina; temples invisible; pronotum hairy, shiny, without sculpture, crossed by a weak anterior transversal impression and by a strong posterior transversal impression; disc humped; posterior collar absent; pronotal tubercles not reaching tegulae; scutum sculptured by numerous irregular keels; scutum without sculpture among the irregular keels; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum granulated; metanotum shiny, without sculpture, except for the central area hairy

and rugose; propodeum reticulate rugose, without transversal keels; posterior surface with two longitudinal keels; fore wing almost hyaline, weakly darkened beneath the pterostigma; radial cell open; distal part of radial vein longer than proximal part (31:13); fore tarsal segments in following proportions: 24:4:12:23:38; enlarged claw (Fig. 43 A) with a row of 7 small teeth and a row of 12 lamellae; the distal lamella is slightly longer than the other lamellae; segment 5 of front tarsus (Fig. 43 A) with two rows of approximately 20 lamellae; the longest row is composed of 11 very long lamellae; apex with a group of approximately 20 lamellae; tibial spurs 1, 1, 2.

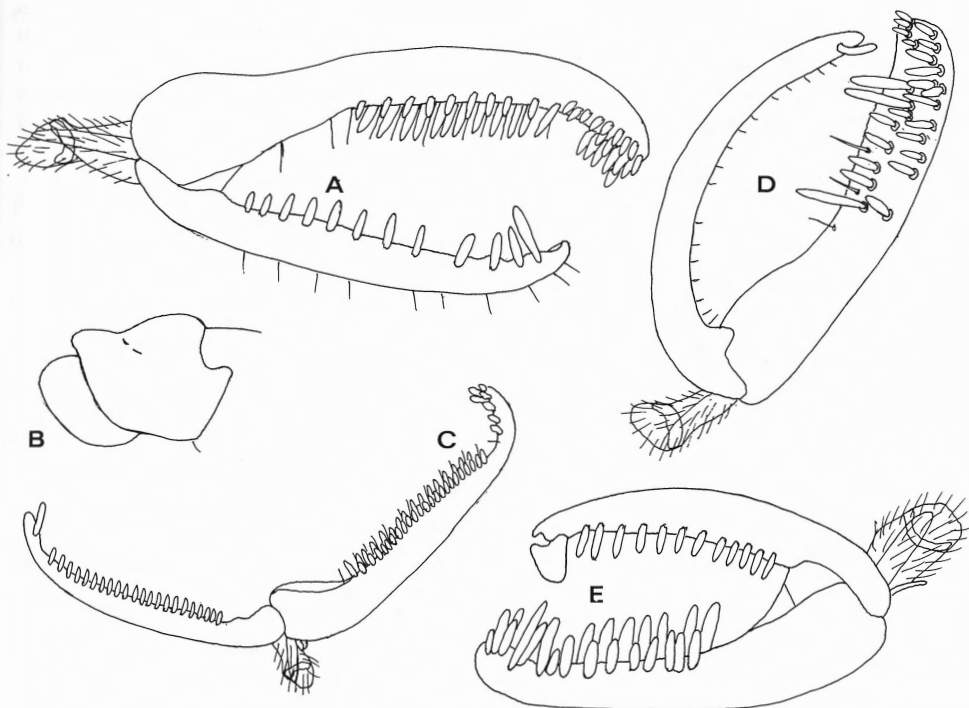


Fig. 43 - Chela of *Alphadryinus porteri* n. sp. (holotype) (A) and *australis* n. sp. (holotype) (C); pronotum of female of *Alphadryinus australis* n. sp. (holotype) (in lateral view) (B); chela of *Mesodryinus californicus* n. sp. (holotype) (D) and *obrieni* n. sp. (holotype) (E).

Male: unknown

Locus typicus: Gral. Saavedra Experimental Station (S. Cruz Dept., Bolivia)

Typical material: holotype F! in DE

Distribution: only known from the typical locality.

Notes: the species is named in honor of one of the collectors of the holotype, C. Porter; the holotype was collected by a malaise trap by C. Porter and L. Stange in August, 1973.

After the descriptions of the above new species a new key to the females of the Neotropic *Alphadryinus* can be proposed, as follows:

- 1 Enlarged claw with an unusual very long lamella (Fig. 669 in Olmi 1984); pronotum excavated, not humped.....1. *lamellatus* Olmi
- Enlarged claw with usual lamellae (Figs 670, 671 in Olmi 1984); pronotum with disc more or less humped.....2
- 2 Radial cell open (if the radial vein is reaching the margin of the wing with a distal part less thick than the proximal part, the cell is considered open).....3
- Radial cell closed.....17
- 3 Enlarged claw with an apical lamella broader than the other lamellae (Figs 671, 672 in Olmi 1984).....4
- Enlarged claw without an apical lamella broader than the other lamellae (Figs 42 B, 43 A).....9
- 4 Head with OL longer than POL.....3. *parvus* Olmi
- Head with OL as long as, or shorter than POL.....5
- 5 Notaulices reaching approximately 0,2 length of scutum.....9. *fiorii* Olmi
- Notaulices reaching at least 0,5 length of scutum.....6
- 6 Scutum rugose, not granulated.....14. *atrox* n. sp.
- Scutum granulated, occasionally also fully or partly rugose.....7
- 7 Scutum black; pronotum partly black and reddish.....4. *pegnai* Olmi
- Scutum fully reddish; occasionally with anterior margin black; pronotum reddish or testaceous, occasionally with sides black.....8
- 8 Occipital carina laterally reaching the eyes.....6 *rufus* Olmi
- Occipital carina laterally not reaching the eyes.....10. *bocainanus* Olmi
- 9 Enlarged claw with an apical lamella much longer than the other lamellae (Fig. 673 in Olmi 1984).....10
- Enlarged claw without an apical lamella longer than the other lamellae (Fig. 670 in Olmi 1984).....12
- 10 Posterior ocelli not touching the occipital carina; notaulices very short, only visible near the anterior margin of the scutum.....16. *davidsoni* n. sp.
- Posterior ocelli touching the occipital carina; notaulices longer, reaching at least 0,4 length of scutum.....11
- 11 Head and scutum reddish-testaceous; scutellum rugose.....5. *brasilianus* Olmi
- Head and scutum black (except for mandibles, clypeus and anterior margin of the frons testaceous); scutellum granulated.....18. *porteri* n. sp.
- 12 Scutum reticulate rugose or sculptured by irregular keels, not sculptured by longitudinal keels.....13
- Scutum fully sculptured by longitudinal keels.....14
- 13 Head with OL approximately three times as long as POL.....2. *panamensis* Olmi
- Head with OL shorter than POL.....18. *porteri* n.sp.
- 14 Head with OL as long as or slightly longer than POL.....13. *opacifrons* (Olmi)
- Head with OL at least two-three times as long as POL.....15
- 15 Head with OL approximately two-three times as long as POL; distal part of radial vein approximately twice as long as proximal part.....12. *napensis* (Olmi)
- Head with OL approximately five times as long as POL; distal part of radial vein approximately as long as or less than twice as long as proximal part.....16

- 16 Head with eyes unusually bulging (Fig. 42 C); disc of pronotum very humped and pointed (Fig. 42 F).....17. *hansoni* n. sp.
— Head with eyes normally bulging (Fig. 42 D); disc of pronotum less humped and not pointed (Fig. 42 E).....15. *amazonicus* n. sp.
17 Head fully ferruginous, with a brown spot on the ocellar region.....
.....7. *ferrugineus* Olmi
— Head black, with clypeus and mandibles testaceous.....8. *piceus* Olmi

I inserted in the above key also *Alphadryinus napensis* (Olmi) and *A. opacifrons* (Olmi), species previously belonging to the genus *Dryinus* and afterwards transferred to *Alphadryinus* (Olmi 1990).

GENUS *ALPHADRYINUS*: AUSTRALIAN REGION

Alphadryinus australis n. sp.

Female: fully winged; length 5,31 mm; ferruginous-testaceous, with petiole black; antennae not distally thickened; antennal segments in following proportions: 20:7:35:30:24:18:14:11:10:8; head dull, rugose, with numerous irregular keels and areolae; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; POL = 7; OL = 2,5; OOL = 12; OPL = 3; temples distinct; pronotum shiny, smooth, hairy; posterior transversal impression not visible (Fig. 43 B); anterior transversal impression very strong (Fig. 43 B); pronotal tubercles reaching tegulae; pronotum without sculpture, except for some irregular striae; scutum shiny, with lateral areas reticulate rugose and with median area finely punctate and without sculpture among the punctures; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli; scutellum and metanotum shiny, smooth, without sculpture; propodeum reticulate rugose, with dorsal surface sculptured by longitudinal and irregular keels; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein longer than proximal part (27:13); fore tarsal segments in following proportions: 25:5:13:20:39; enlarged claw (Fig. 43 C) without subapical teeth and with a row of 22 lamellae, in addition to an apical lamella; segment 5 of front tarsus (Fig. 43 C) with two rows of approximately 38 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: Cannovale (Queensland, Australia)

Typical material: holotype F! in CA

Distribution: only known from the typical locality.

Notes: the holotype was collected by E.S. Ross and D.Q. Cavagnaro on November 15, 1962.

After the description of the above new species the following new key to the females of the Australian *Alphadryinus* can be proposed:

- 1 Notaulices incomplete; pronotum with posterior transversal impression very strong and with anterior transversal impression invisible; disc of pronotum very humped; body mostly black.....1. *planus* Olmi

- Notaulices complete, posteriorly separated; pronotum with anterior transversal impression very strong and with posterior transversal impression invisible; disc of pronotum less humped; body mostly testaceous.....2. *australis* n. sp.

GENUS *MESODRYINUS*: NEARCTIC REGION

Mesodryinus californicus n. sp.

Female: fully winged; length 5,81 mm; head black, with clypeus and mandibles testaceous; antennae testaceous; prothorax testaceous-reddish; mesothorax, metathorax and propodeum black; abdomen brown-reddish; antennae not distally thickened; antennal segments in following proportions: 15:7:30:17:15:10:8:7:6:9; antennae with rhinaria in the segments 5-10 (one per segment, except for segment 10 which has two rhinaria); in other *Mesodryinus* there are no antennal rhinaria; head flat, fully reticulate rugose, hairy; frontal line complete; occipital carina complete; POL = 6; OL = 4; OOL = 8; OPL = 1; TL = 2; pronotum dull, rugose; pronotal tubercles not reaching tegulae; disc humped; anterior transversal impression strong; posterior collar absent; scutum, scutellum and metanotum dull, reticulate rugose; notaulices absent; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (11:9); fore tarsal segments in following proportions: 19:3:7:14:28; enlarged claw (Fig. 43 D) without teeth, with an apical lamella and with a row of hairs; segment 5 of front tarsus (Fig. 43 D) with two rows of approximately 17 lamellae; apex with a group of approximately 8 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 33°39'N 117°13'W (Menifee Vly, Hills on W. end, Riverside Co., California, U.S.A.)

Typical material: holotype F! in OT

Distribution: only known from the typical locality.

Notes: the holotype was collected by John D. Pinto at 1800' by a pan trap mounted under *Erigonum fasciculatum* on August 18-29, 1982.

After the description of the above new species a new key to the females of the Nearctic *Mesodryinus* can be proposed, as follows:

- 1 Occipital carina complete.....5. *californicus* n. sp.
- Occipital carina incomplete.....2
- 2 Scutum granulated, not reticulate rugose; body mostly testaceous-reddish.....3. *solaris* Olmi
- Scutum fully reticulate rugose; body mostly black.....3
- 3 Enlarged claw with 2 subapical teeth (Fig. 698 in Olmi 1984); occipital carina long, almost reaching the eyes.....4. *favreauae* Olmi
- Enlarged clas without subapical teeth (Figs 694, 696 in Olmi 1984); occipital carina short, only visible near posterior ocelli.....4
- 4 Radial cell wide (Fig. 695 A in Olmi 1984).....2. *dorsalis* Olmi
- Radial cell narrow (Fig. 695 B in Olmi 1984).....1. *inconsultus* Olmi

GENUS *MESODRYINUS*: NEOTROPIC REGION

***Mesodryinus obrieni* n. sp.**

Female: fully winged; length 3,81 mm; head black, with mandibles, clypeus, genae, part of the temples and the anterior region of the frons reddish-testaceous; antennae testaceous, with segments 9-10 darkened; prothorax reddish-testaceous; mesothorax, metathorax and propodeum black; abdomen brown; legs brown, with tarsi and trochanters testaceous; antennae distally thickened; antennal segments in following proportions: 12:6:21:10:9:7:6:5:5:7,5; head dull, granulated; frontal line absent; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle, not reaching the eyes; temples distinct, short; POL = 5; OL = 3; OOL = 8; posterior ocelli touching the occipital carina; pronotum dull, with anterior transversal impression strong; disc humped; posterior collar invisible; pronotal tubercles not reaching tegulae; scutum dull, fully granulated; notaulices invisible; scutellum dull, granulated; metanotum rugose; propodeum dull, with dorsal surface granulated; median area of dorsal surface with some longitudinal and parallel keels; some short transversal keels are visible among these longitudinal keels; posterior surface with two complete longitudinal keels; median and lateral areas rugose; fore wing with three dark transversal bands; distal part of radial vein longer than proximal part (16:9); fore tarsal segments in following proportions: 18:3:5:13:19; enlarged claw (Fig. 43 E) with two apical teeth, a big apical lamella and a row of 12 lamellae; segment 5 of front tarsus (Fig. 43 E) with three rows of approximately 25 lamellae; apex with a group of at least 18 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 16 Km E San José de Ocoa (Peravia Prov., Dominican Republic)

Typical material: holotype F! in CA

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, C.W. O'Brien; the holotype was collected on August 8, 1979.

***Mesodryinus mexicanus* n. sp.**

Female: fully winged; length 5,18 mm; head black, with mandibles and clypeus testaceous; antennae testaceous, with segments 5-10 darkened; prothorax reddish-testaceous, with two brown spots on the sides of the propectus and of the anterior collar of the pronotum; mesothorax, metathorax and propodeum black; abdomen black, with basal half reddish-testaceous; legs reddish-testaceous; antennae distally thickened; antennal segments in following proportions: 16:6:26:15:12:8:7:6:6:8; head dull, flat, reticulate rugose; frontal line complete; occipital carina complete; POL = 4; OL = 3; OOL = 9; OPL = 2; TL = 2; pronotum hairy, dull, weakly granulated and with numerous striae around the disc and on the anterior collar; pronotum with anterior and posterior transversal impressions weak; disc rounded; pronotal tubercles not reaching tegulae; scutum, scutellum and metanotum dull, reticulate rugose, hairy; notaulices invisible; propodeum dull, reticulate rugose, without transversal keels; posterior surface with two complete longitudinal keels; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein as long as proximal part; fore tarsal segments in following proportions: 17:2:7:15:32; enlarged claw (Fig. 44 A) with a row of 4 small apical teeth, a row of numerous bristles and an apical lamella; seg-

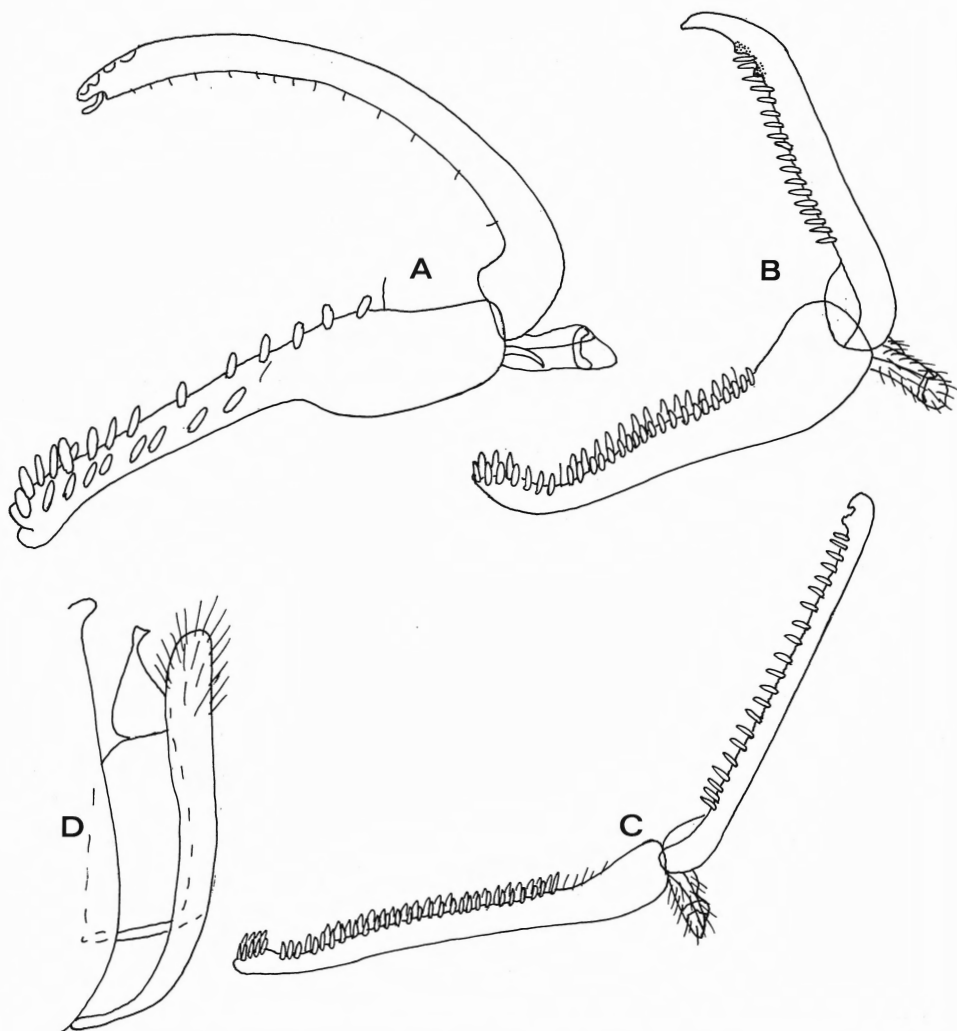


Fig. 44 - Chela of *Mesodryinus mexicanus* n. sp. (holotype) (A), *whartoni* n. sp. (holotype) (B), *veirsi* n. sp. (holotype) (C); male genitalia of *Mesodryinus veirsi* n. sp. (paratype) (D).

ment 5 of front tarsus (Fig. 44 A) with two rows of approximately 26 lamellae, without interruption to the apex; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 2,1 mi. NW of Cacahuamilpa (Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the holotype was collected by Kovarik, Harrison and Schaffner on July 27, 1983.

Mesodryinus whartoni n. sp.

Female: fully winged; length 4,18 mm; head black, with mandibles, genae and a narrow frontal region near orbits testaceous; antennae brown, with ventral side of segment 1 whitish (segments 7-10 missing in the only known specimen); thorax and propodeum black; abdomen brown; legs reddish-testaceous, with mid coxae and stalks of hind femora brown; antennae very slender, with segments in following proportions: 10:5:40:16:13:9 (segments 7-10 missing in the only known specimen); head dull, granulated and with frons and vertex fully sculptured by numerous longitudinal keels; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; temples distinct; POL = 3; OL = 3; OOL = 9; OPL = 1; pronotum dull, crossed by a strong transversal impression; disc humped; anterior collar long and distinct; posterior collar invisible; pronotum granulated and with strong longitudinal keels on the sides; pronotal tubercles not reaching tegulae; scutum, scutellum and metanotum dull, granulated and reticulate rugose; notaulices invisible; propodeum dull, reticulate rugose; posterior surface with two complete longitudinal keels; median area sculptured by transversal keels; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (11:8); fore tarsal segments in following proportions: 20:4:8:17:27; enlarged claw (Fig. 44 B) with two preapical teeth and a row of 18 lamellae; segment 5 of front tarsus (Fig. 44 B) with two rows of approximately 33 lamellae; apex with a group of at least 18 lamellae; tibial spurs 1, 1, 2.

Male: unknown

Locus typicus: 18,2 mi. S Iguala (3000', Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Robert Wharton; the holotype was collected on July 5, 1987.

Mesodryinus veirsi n. sp.

Female: fully winged; length 6,25 mm; head black, with mandibles, clypeus and part of the genae testaceous; antennae testaceous; thorax and propodeum black, with lateral margins of pronotum testaceous; abdomen brown; legs testaceous, with mid and hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 20:9:57:21:17:11:10:9:7:11; head dull, hairy, reticulate rugose; frontal line complete; occipital carina complete; POL = 7; OL = 4; OOL = 10; OPL = 1,5; TL = 3,5; pronotum with a weak anterior transversal impression and with a strong posterior transversal impression; posterior collar invisible; pronotum hairy, shiny, with disc humped, sculptured by numerous striae around and on the disc; pronotal tubercles not reaching tegulae; scutum, scutellum and metanotum hairy, reticulate rugose; notaulices absent; propodeum reticulate rugose, with two complete longitudinal keels on posterior surface; fore wing with two dark transversal bands; distal part of radial vein as long as proximal part; front tarsal segment 1 produced into a hook; fore tarsal segments in following proportions: 26:5:14:28:60; enlarged claw (Fig. 44 C) with two apical teeth and a row of 21 lamellae; segment 5 of front tarsus (Fig. 44 C) with two rows of approximately 34 lamellae; apex with a group of at least 30 lamellae; tibial spurs 1, 1, 2.

Male: fully winged; length 4,5 mm; head black, with mandibles, clypeus and part

of genae testaceous-reddish; thorax and propodeum black; abdomen brown; legs testaceous, with hind coxae partly black; antennae not distally thickened; antennal segments in following proportions: 9:9:27:15:14:15:13,5:12:10:12; head dull, reticulate rugose; frontal line absent; occipital carina almost complete, laterally reaching the eyes, only invisible behind the eyes; temples absent; POL = 8; OL = 3; OOL = 5; OPL = 1; breadth on the ocelli longer than OPL (5:1); scutum, scutellum and metanotum reticulate rugose; notaulices invisible among the areolae or slightly visible (apparently complete and separated); propodeum reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein slightly shorter than proximal part (14:15); genitalia in fig. 44 D; tibial spurs 1, 1, 2.

Locus typicus: 25 mi. NW David (Chiriqui, Panama)

Typical material: holotype F! and 1 paratype M! in HS

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, D.F. Veirs; the typical material was collected on April 13, 1960 (holotype) and on February 18, 1960 (paratype).

After the descriptions of the above species a new key to the females of the Neotropic *Mesodryinus* can be proposed, as follows:

- 1 Head with OL much longer than POL; enlarges claw without an apical row of teeth (Fig. 699 in Olmi 1984).....1. *forestalis* Olmi
- Head with OL approximately as long as or shorter than POL; enlarged claw with an apical row of at least two teeth (Figs 700, 701, 702 in Olmi 1984).....2
- 2 Enlarged claw without a row of lamellae, with a row of bristles; the only lamella is apical (Fig. 44 A).....7. *mexicanus* n. sp.
- Enlarged claw with a row of lamellae (Figs 43 E, 44 B, 44 C).....3
- 3 Enlarged claw without an apical lamella bigger than the other lamellae (Figs 44 B, 44 C).....4
- Enlarged claw with an apical lamella bigger than the other lamellae (Figs 700, 701 in Olmi 1984; Fig. 43 E).....7
- 4 Scutum fully sculptured by numerous longitudinal keels; disc of pronotum pointed (Fig. 47 E).....4. *aterrimus* Olmi
- Scutum fully reticulate rugose; disc of pronotum rounded, not pointed (Fig. 47 F).....5
- 5 Segment 5 of front tarsus more than twice as long as segment 1.....9. *veirsi* n. sp.
- Segment 5 of front tarsus slightly longer than segment 1.....6
- 6 Head reticulate rugose; enlarged claw with teeth located more proximally (Fig. 9 in Olmi 1986).....5. *fiorii* Olmi
- Head sculptured by numerous longitudinal keels, not reticulate rugose; enlarged claw with teeth located more distally (Fig. 44 B).....8. *whartoni* n. sp.
- 7 Posterior surface of propodeum with two complete longitudinal keels.....6. *obrieni* n. sp.
- Posterior surface of propodeum without longitudinal keels.....8
- 8 Propodeum fully reticulate rugose.....2. *carabicus* Olmi
- Propodeum partly smooth and partly sculptured by curvilinear keels, not reticulate rugose.....3. *ruber* Olmi

The male of *Mesodryinus veirsi* n. sp. is the only known male of Neotropic *Mesodryinus*.

GONADRYINUS N. GEN.

Type species: Gonadryinus hansonii n. sp.

Female (Figs 45, 46): fully winged; maxillary palps with 4 segments (Fig. 47 A); labial palps with 2 segments (Fig. 47 B); enlarged claw (Fig. 47 D) without teeth, with a row of lamellae and a group of apical lamellae; enlarged claw shorter than front tibia, much longer than arolium; pronotal tubercles present, not reaching tegulae; occipital carina absent; tibial spurs 1, 1, 2.

Male: unknown

Distribution: Neotropic

Hosts: unknown

Species: 1

Notes: Gonadryinus n. gen. is a genus of transition from *Dryininae* to *Gonatopodiinae*; it's a *Gonatopodine* for the palpal formula (4/2) and for the occipital carina absent; it's a *Dryinine* for the pronotal tubercles and for the tibial spurs 1, 1, 2.

GENUS GONADRYINUS: NEOTROPIC REGION

Gonadryinus hansonii n. sp.

Female (Figs 45, 46): fully winged; length 3,75-5,00 mm; fully testaceous, with petiole black and eyes grey or black; occasionally propodeum, abdomen, metanotum, scutellum and sides of scutum darkened; antennae very long and slender, distally weakly thickened; antennae slightly shorter than the body (4,37:5), with rhinaria on segments 5-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 10:7:50:48:30:13:9:7:7:11; or 8:4:39:36:25:10:8:7:7:10; antennae without tufts of long hairs; head shiny, smooth, very weakly granulated or without sculpture, weakly swollen; frontal line absent; occipital carina absent; POL = 3; OL = 4,5; OOL = 6,5; or POL = 2; OL = 4; OOL = 6; temples distinct, but short; pronotum shiny, smooth, hairy, crossed by two strong transversal impressions; posterior collar short; disc humped; pronotal tubercles not reaching tegulae; pronotum without sculpture, except for some irregular keels on the sides; scutum shiny, smooth, very weakly granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (9:4); occasionally notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum shiny, smooth, weakly granulated or without sculpture; metanotum shiny, smooth, without sculpture, humped; propodeum dull, reticulate rugose, with two complete longitudinal keels on the posterior surface; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (26:12 or 20:10); radial cell open; front tibia longer than enlarged claw (45:32); fore tarsal segments in following proportions: 28:4:9:21:35; enlarged claw (Fig. 47 D) without teeth, with a row of 10-13 lamellae and a group of 2 long lamellae at the apex; segment 5 of front tarsus (Fig. 47 D) with a row of 13-16 lamellae; apex with a group of approximately 7-13 lamellae; rudimentary claw present; maxillary palps with 4 segments (Fig.

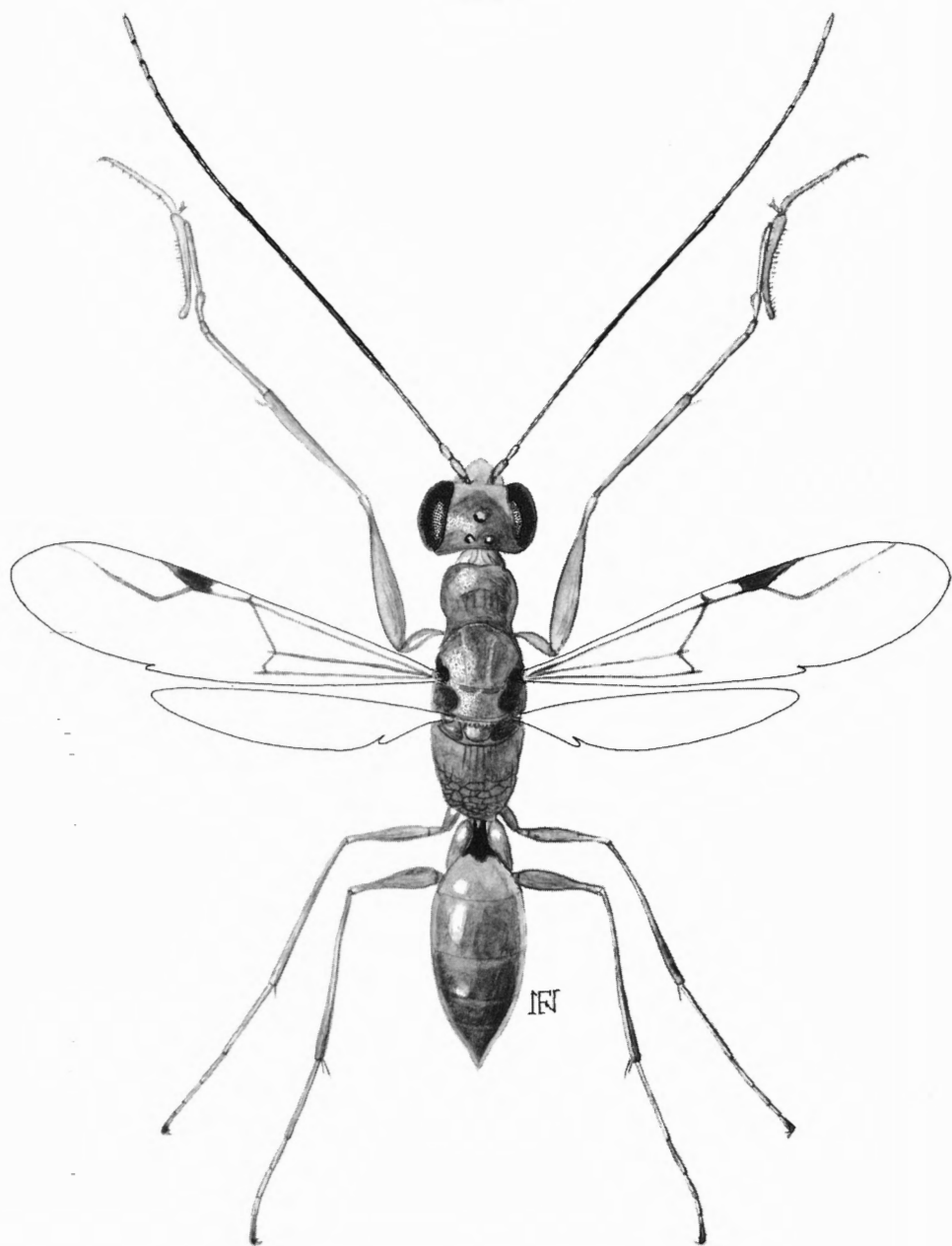


Fig. 45 - Female of *Gonadryinus hansonii* n. sp. (holotype).

47 A); labial palps with 2 segments (Fig. 47 B); fore legs with segments very long and slender, in the following proportions: 40 (coxae): 35 (trochanters): 52 (femora): 45 (tibiae); tibial spurs 1, 1, 2.

Male: unknown

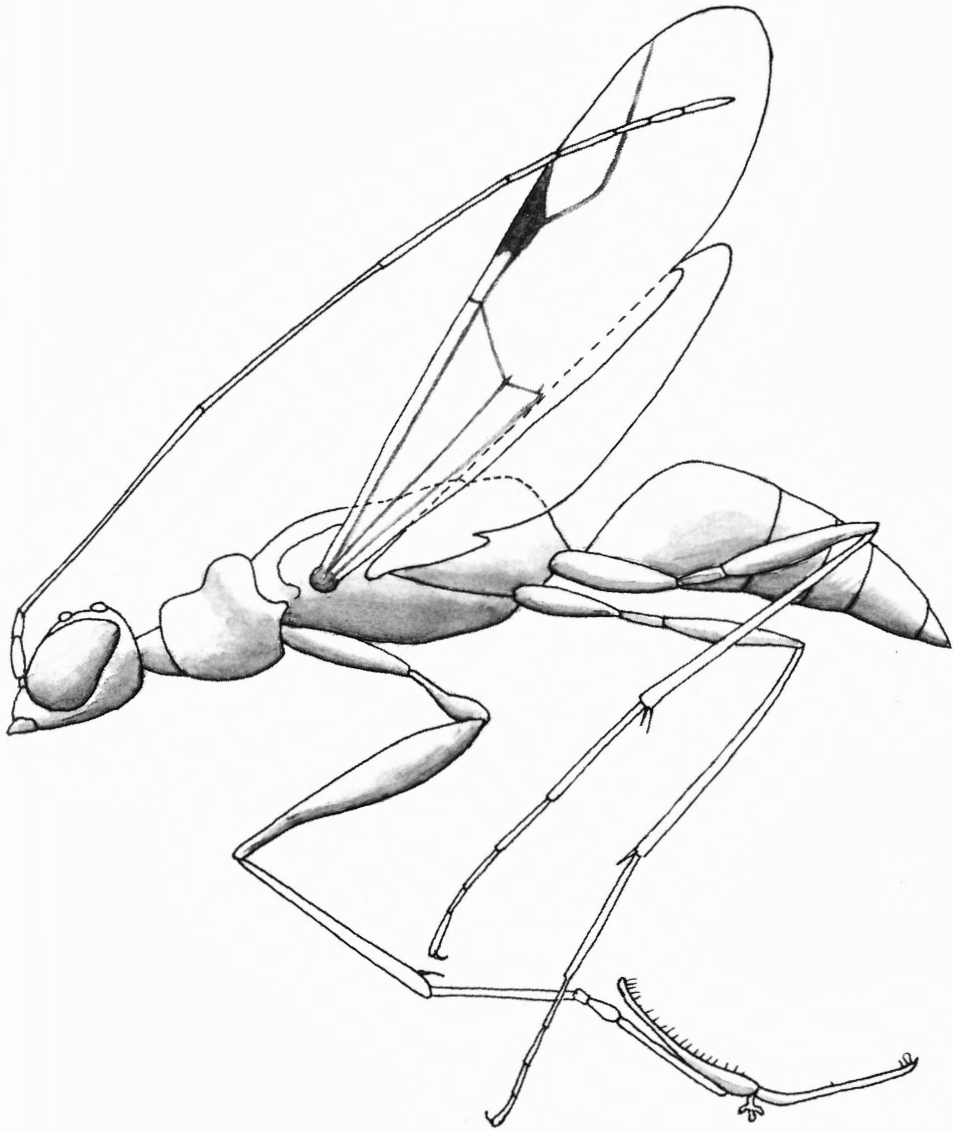


Fig. 46 - Female of *Gonadryinus hansonii* n. sp. (holotype).

Locus typicus: Pipeline Road (Canal Zone, Panama)

Typical material: holotype F! in HS; 1 paratype F! in OL; 1 paratype F! in GC.

Distribution: PANAMA: Pipeline Road (Canal Zone), HS! COSTA RICA: 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! 11°00'N 85°26'W (Estacion Pitilla, m 700, 9 m S Santa Cecilia, Guanacaste National Park, Guanacaste Prov.), GC!.

Notes: the species is named in honor of the collector of the holotype, W.J. Han-

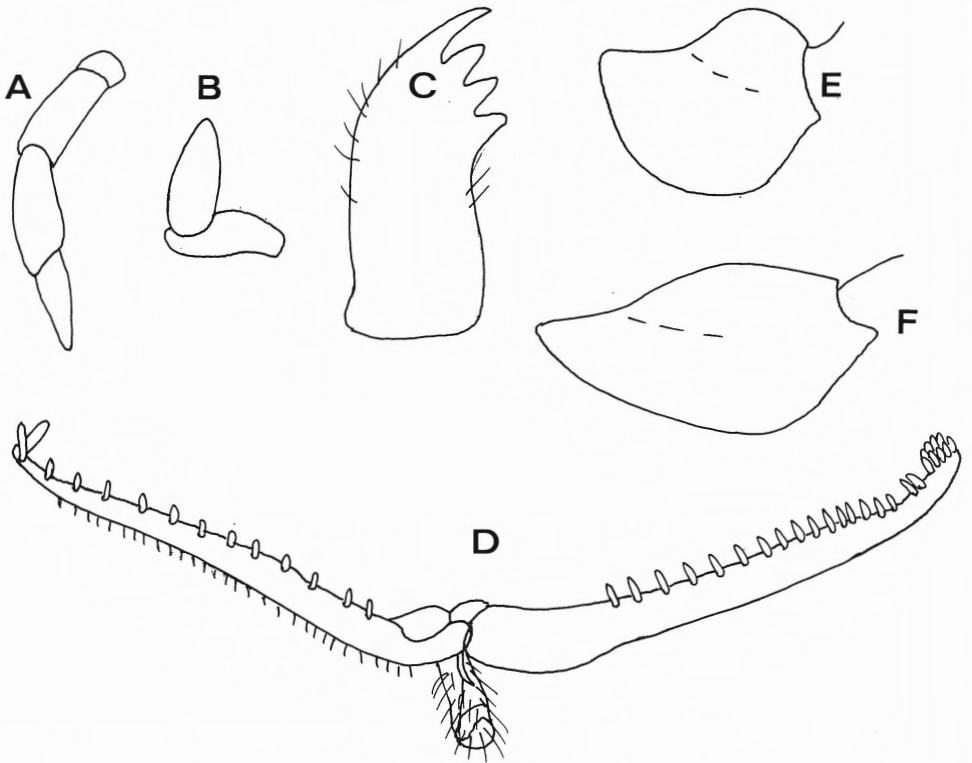


Fig. 47 - Maxillary palp (A), labial palp (B) and mandible (C) of female of *Gonadryinus hansonii* n. sp. (paratype from Piedras Blancas); chela of *Gonadryinus hansonii* n. sp. (holotype) (D); pronotum (in lateral view) of female of *Mesodryinus aterrimus* Olmi (holotype) (E) and *fiorii* Olmi (holotype) (F).

son; the holotype was collected on March 20, 1982; the paratype from Estacion Pitilla was collected by a malaise trap by Paul Hanson in April, 1989; the paratype from 10 Km W Piedras Blancas was collected by a malaise trap by Paul Hanson in February-March, 1989.

After the description of the new genus *Gonadryinus*, the proposal of the new synonymy *Richardsidryinus* Moczar = *Dryinus* Latreille, the proposal of new distinctive characters for *Dryinus* Latreille and *Alphadryinus* Olmi, a new key to the females of *Dryininae* must be proposed, as follows:

- | | |
|---|--------------------------------|
| 1 Palp formula 4/2..... | 8. <i>Gonadryinus</i> n. sp. |
| — Palp formula 6/3..... | 2 |
| 2 Enlarged claw more than three times as long as front tibia (Figs 659, 660 in Olmi 1984)..... | 3. <i>Megadryinus</i> Richards |
| — Enlarged claw as long as or shorter than front tibia (Figs 528, 611, 632 in Olmi 1984)..... | 3 |
| 3 Enlarged claw very reduced, approximately as long as or slightly longer than arolium (Fig. 711 in Olmi 1984)..... | 6. <i>Perodryinus</i> Perkins |
| — Enlarged claw not reduced, much longer than arolium (Fig. 485 in Olmi 1984)..... | 4 |

- 4 Enlarged claw with one subapical tooth (Fig. 486 in Olmi 1984), never with a broad apical lamella (Figs 486, 651, 653 in Olmi 1984).....5
- Enlarged claw without subapical tooth (Fig. 674 in Olmi 1984), or with at least 2 apical teeth (Fig. 702 in Olmi 1984); occasionally with a series of small teeth near apex (Fig. 691 in Olmi 1984); rarely with one only subapical tooth, but then with a very broad apical lamella (Fig. 41 E).....6
- 5 Notaulices at least partly visible.....1. *Dryinus* Latreille
- Notaulices invisible.....2. *Tridryinus* Kieffer
- 6 Notaulices at least partly visible.....4. *Alphadryinus* Olmi
- Notaulices invisible.....5. *Mesodryinus* Kieffer

After the descriptions of males of *Dryininae*, new keys to males of Palaearctic, Oriental and Neotropic *Dryininae* must be proposed, as follows:

MALES OF THE KNOWN PALAEARCTIC *DRYININAE*

- 1 Scutum strongly reticulate rugose; numerous areolae are as wide as ocelli.....2
- Scutum granulated or weakly reticulate rugose; areolae less wide than ocelli.....3
- 2 Posterior ocelli not touching the occipital carina; head with areolae as wide as the areolae of the scutum; antennal segment 3 slightly longer than segment 4, less than three times as long as segment 2; gonoforceps slightly shorter than penis (Fig. 686 in Olmi 1984).....*Mesodryinus niger* (Kieffer)
- Posterior ocelli touching the occipital carina; head with areolae much smaller than the areolae of the scutum; antennal segment 3 approximately twice as long as segment 4, approximately four times as long as segment 2; gonoforceps much shorter than penis (Fig. 684 in Olmi 1984).....*Mesodryinus dayi* Olmi
- 3 Antennae very slender, with segment 3 more than ten times as long as broad.....*Dryinus collaris* (Linnaeus)
- Antennae less slender, with segment 3 less than six times as long as broad.....4
- 4 Head with frontal line complete.....5
- Head without frontal line or with frontal line short and only visible in front of the anterior ocellus.....7
- 5 Notaulices approximately 0,5-0,6 length of scutum.....*Dryinus koreanus* (Moczar)
- Notaulices reaching at least 0,7 length of scutum.....6
- 6 Gonoforceps much shorter than penis (Fig. 487 in Olmi 1984).....*Dryinus canariensis* (Ceballos) or *Dryinus albrechti* Olmi
- Gonoforceps approximately as long as penis (Fig. 494 in Olmi 1984).....*Dryinus nepalensis* Olmi
- 7 Scutellum and metanotum shiny, without sculpture or finely punctate and without sculpture among the punctures.....8
- Scutellum and metanotum dull, granulated or reticulate rugose.....9
- 8 Frontal line absent.....*Alphadryinus balearicus* (Olmi)
- Frontal line short, only visible in front of the anterior ocellus.....*Alphadryinus sanderi* (Olmi)
- 9 Posterior ocelli almost touching the occipital carina; head with OPL shorter than the half of the breadth of the posterior ocelli.....

-*Dryinus tarraconensis* Marshall
 — Posterior ocelli farther from the occipital carina; head with OPL at least 0,5 as long as the breadth of the posterior ocelli.....*Dryinus corsicus* Marshall

MALES OF THE KNOWN ORIENTAL *DRYININAE*

- 1 Dorsal part of the occipital carina touching the eyes.....2
 — Dorsal part of the occipital carina not touching the eyes.....3
 2 Notaulices incomplete, reaching approximately 0,65 length of scutum.....
*Dryinus indicus* (Kieffer)
 — Notaulices complete.....*Dryinus achterbergi* n.sp.
 3 Scutellum reticulate rugose, not granulated.....4
 — Scutellum granulated, not reticulate rugose.....5
 4 Posterior ocelli almost touching the occipital carina.....
*Dryinus cavifrons* Olmi
 — Posterior ocelli farther from the occipital carina (Fig. 5 C in Olmi 1986)
*Dryinus scaber* Olmi
 5 Head with TL shorter than the breadth of the ocelli.....
*Dryinus browni* Ashmead
 — Head with TL as long as breadth of the ocelli.....*Dryinus pyrillae* (Kieffer)

MALES OF THE KNOWN NEOTROPIC *DRYININAE*

- 1 Notaulices invisible.....2
 — Notaulices at least partly visible.....5
 2 Scutum granulated; body mostly reddish-testaceous.....
*Dryinus citricolus* Olmi
 — Scutum reticulate rugose; body mostly black.....3
 3 Posterior ocelli touching the occipital carina.....*Tridryinus ruficauda* Richards
 — Posterior ocelli not touching the occipital carina.....4
 4 Frontal line complete.....*Tridryinus poecilopterae* Richards
 — Frontal line absent.....*Mesodryinus veirsi* n. sp.
 5 Scutum granulated.....6
 — Scutum reticulate rugose.....7
 6 Frontal line complete; body mostly black.....*Dryinus antilleanus* (Evans)
 — Frontal line absent; body mostly reddish-testaceous.....
*Dryinus citricolus* Olmi
 7 Posterior ocelli touching the occipital carina; notaulices incomplete, reaching approximately 0,5 length of scutum.....*Tridryinus gibbosus* Olmi
 — Posterior ocelli not touching the occipital carina; notaulices complete or incomplete; if incomplete, they are almost reaching the posterior margin of the scutum.....8
 8 Head with OPL less than 0,5 as long as the breadth of the ocelli.....9
 — Head with OPL slightly shorter than the breadth of the ocelli.....10
 9 Propodeum with a strong transversal keel between dorsal and posterior surface
*Dryinus striatus* (Fenton)
 — Propodeum without a transversal keel between dorsal and posterior surface
*Mesodryinus veirsi* n. sp.
 10 Distal part of radial vein longer than proximal part.....
*Tridryinus striaticeps* (Kieffer)

- Distal part of radial vein shorter than proximal part.....
.....*Dryinus surinamensis* Olmi

SUBFAMILY *TRANSDRYININAE*
TRANSGONATOPUS N. GEN.

Type species: Transgonatopus australianus n. sp.

Female (Figs 48, 49): fully winged; maxillary palps with 6 segments (Fig. 50 A); labial palps with 3 segments (Fig. 50 B); pronotum crossed by a transversal impression (Fig. 49); pronotal tubercles present, not reaching tegulae (Fig. 49); notaulices distinct; occipital carina invisible; enlarged claw with a subapical tooth and a row of lamellae (Fig. 50 C); tibial spurs 1, 0, 1.

Male: unknown

Distribution: Australian

Hosts: unknown

Species: 1

Notes: *Transgonatopus* n. gen. is a genus of transition from *Dryininae* to *Gonatopodinae*; it's a *Gonatopodine* for the shape of the pronotum, the occipital carina invisible, the tibial spurs 1, 0, 1, the reduced metanotum; it's a *Dryinine* for the pronotal tubercles. *Transgonatopus* n. gen. is the second known genus of the subfamily *Transdryininae*. The following key to the two known genera can be proposed:

FEMALES

- 1 Enlarged claw without teeth (Fig. 714 in Olmi 1984).....
.....1. *Transdryinus* Olmi
— Enlarged claw with a subapical tooth (Fig. 50 C).....
.....2. *Transgonatopus* n. sp.

The males of the *Transdryininae* are unknown.

GENUS *TRANSGONATOPUS*: AUSTRALIAN REGION

***Transgonatopus australianus* n. sp.**

Female (Figs 48, 49): fully winged; length 3,37 mm; head reddish-testaceous, with a black transversal band on the frons; propectus brown; pronotum reddish-testaceous, with disc darkened; mesothorax, metathorax, propodeum and abdomen black; fore legs testaceous; mid and hind legs brown, with tarsi and stalks of femora testaceous; head excavated, shiny, finely punctate, without sculpture among the punctures; frontal line complete, also visible among the ocelli; occipital carina absent; POL = 3; OL = 5; OOL = 11; occiput excavated; pronotum crossed by a strong transversal impression, dull, granulated; pronotal tubercles present, not reaching tegulae; scutum dull, finely reticulate rugose; notaulices incomplete, reaching approximately 0,25 length of scutum; scutellum dull, granulated; metanotum very short, reduced (as in *Gonatopodinae*); propodeum dull, reticulate rugose, without transversal keels, with two short longitudinal keels on posterior surface near petiole; fore wing with two dark transversal bands; distal part of radial vein longer than proximal part (18:7); radial cell open; fore tarsal



Fig. 48 - Female of *Transgonatopus australianus* n. sp. (holotype).

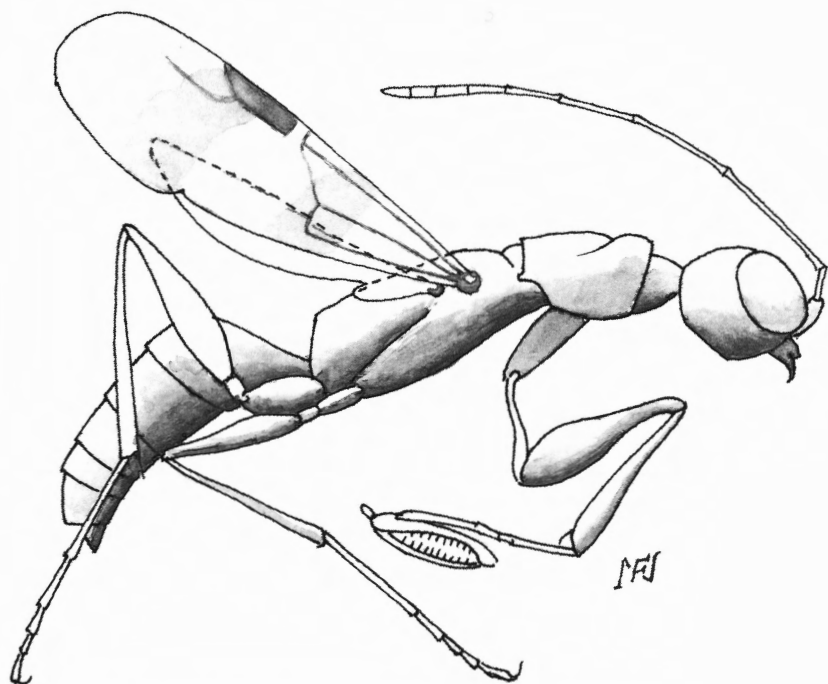


Fig. 49 - Female of *Transgonatopus australianus* n. sp. (holotype).

segments in following proportions: 18:2,5:6:19:29; enlarged claw (Fig. 50 C) with a subapical tooth and a row of 6 lamellae; segment 5 of front tarsus (Fig. 50 C) with two rows of approximately 27 lamellae; apex with a group of approximately 16 lamellae; rudimentary claw absent; maxillary palps with 6 segments (Fig. 50 A); labial palps with 3 segments (Fig. 50 B); mandibles with 4 teeth progressing larger from anterior one to posterior (Fig. 50 D); tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Normanton (Queensland, Australia)

Typical material: holotype F! in TW

Distribution: only known from the typical locality.

Notes: the holotype was collected in March 9-20 (in the label the year of collection and the name of the collector are missing).

SUBFAMILY GONATOPODINAE
GENUS *NEODRYINUS*: ORIENTAL REGION

***Neodryinus reticulatus* (FOUTS 1922)**

N. reticulatus (Fouts) was known only on the basis of female specimens. In the last years a series of female specimens and a male from Danum Valley (Sabah) was examined. The following description of the male can be proposed:

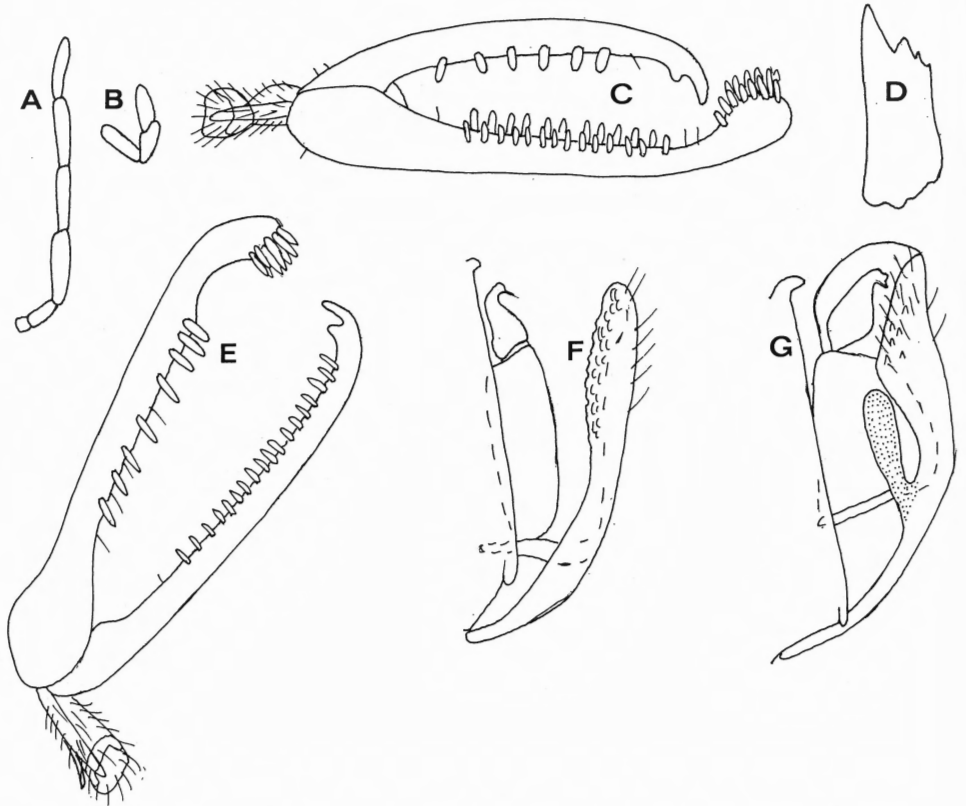


Fig. 50 - Maxillary palp (A), labial palp (B), chela (C) and mandible (D) of female of *Transgonatopus australianus* n. sp. (holotype); chela of *Paraneodryinus malayanus* n. sp. (paratype from The Gap) (E); male genitalia of *Neodryinus reticulatus* (Fouts) from Danum Valley Field C. (F) and *Neodryinus nelsoni* Perkins from Sandhills (paralectotype of *Neodryinus raptor* Perkins) (G).

Male: fully winged; length 2,56 mm; head black, with mandibles testaceous; antennae brown; thorax and propodeum black; abdomen brown; legs brown, with tibiae and tarsi testaceous; antennae not distally thickened; antennal segments in following proportions: 5:6:12:10:9:9:8::8 (segments 9-10 missing in the only known specimen); head dull, flat, granulated and rugose; frontal line incomplete, shortly visible in front of the anterior ocellus; occipital carina incomplete, only visible behind and shortly on the sides of the ocellar triangle; POL = 5; OL = 1,5; OOL = 5; posterior ocelli touching the occipital carina; temples invisible; scutum dull, granulated and rugose; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (5:3); scutellum and metanotum shiny, punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, with a longitudinal median furrow on the dorsal surface; dorsal surface with areolae smaller than the areolae of the posterior surface; fore wing with a dark transversal band beneath the pterostigma; distal part of radial vein longer than proximal part (17:14); genitalia in fig. 50 F; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 1, 2.

Neodryinus reticulatus (Fouts) is now known from the following localities: PHILIPPINES: Los Banos (Luzon), WA! MALAYSIA: Danum Valley Field C. (m 140, SE Sabah), LE!

After the above description of the male of *Neodryinus reticulatus* (Fouts), a new key to the males of the Oriental *Neodryinus* can be proposed, as follows:

- 1 Fore wing with a dark transversal band beneath the pterostigma.....2. *reticulatus* (Fouts)
- Fore wing hyaline, without dark transversal bands.....2
- 2 Scutellum granulated.....7. *javanus* (Roepke)
- Scutellum punctate, without sculpture among the punctures.....9. *diffusus* Olmi

GENUS *NEODRYINUS*: AUSTRALIAN REGION

***Neodryinus nelsoni* PERKINS 1905**

= *Neodryinus raptor* Perkins 1905: 52 (syn. proposed by Olmi 1984).

Olmi (1982) designated the lectotype F and 1 paralectotype M of *Neodryinus nelsoni* Perkins and the lectotype F and 4 paralectotypes (2 FF, 2 MM) of *Neodryinus raptor* Perkins: all the material is kept in B. The two species are synonyms.

Recently I have seen in CB two other specimens of *Neodryinus raptor* Perkins (1 F, 1 M) belonging to the typical series. The female specimen is labelled as follows: «Sandhills, bred, Bundaberg, Q., Austr., 1904, 21.XII.04, Paratype, *Neodryinus raptor* F Perkins». The male specimen is labelled as follows: «Sandhills, bred, Bundaberg, Q., Austr., 1904, XI.04, Paratype, *Neodryinus raptor* M Perkins». The labels of both specimens are in Perkins' handwriting. These two specimens are here designated as paralectotypes.

The male of *Neodryinus nelsoni* Perkins was little known. In my revision of world *Dryinidae* (Olmi 1984) I wrote: «Only the male of *N. koebelei* is known. R.C.L. Perkins (1905) described also the male of *N. raptor* R.C.L. Perkins (= *nelsoni* R.C.L. Perkins). I have studied a male determined as *raptor* by the same R.C.L. Perkins: it's really a male of *Pseudogonatopus nigricans* (R.C.L. Perkins)».

In 1984 I didn't examine the genitalia of the male paralectotypes of *N. nelsoni* and *N. raptor*. The presence of a male paralectotype of *N. raptor* in CB was the occasion for a new study. This study demonstrated that this male is really of *Neodryinus*. I can so propose the following description of the male of *Neodryinus nelsoni* Perkins:

Male: fully winged; length 2 mm; black; mandibles testaceous; antennal segments 1-6 brown (other segments missing in the only examined specimen); abdomen brown; legs brown, with tarsi testaceous; antennal segments in following proportions: 4:4:8:8:8:8 (segments 7-10 missing in the only examined specimen); head dull, reticulate rugose; frontal line absent; occipital carina absent; POL = 7; OL = 2,5; OOL = 4; temples not distinct; scutum dull, fully reticulate rugose; notaulices apparently complete, posteriorly separated; the posterior part of the notaulices, however, is almost obsolete and not well visible; minimum distance between the notaulices longer than the breadth of the ocelli (4:3); scutellum dull, rugose; metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands;

distal part of radial vein as long as proximal part (9:9); gonoforceps very broad, wrapping the volsellae (Fig. 50 G); tibial spurs 1, 1, 2.

After the description of the male of *Neodryinus nelsoni* Perkins, the following key to the males of Australian *Neodryinus* can be proposed:

- 1 Gonoforceps very slender (Fig. 742 in Olmi 1984.....3. *koebelei* Perkins
— Gonoforceps not slender, very broad and wrapping the volsellae (Fig. 50 G)
.....2. *nelsoni* Perkins
The males of the other three Australian species are unknown.

***Neodryinus koebelei* PERKINS 1905**

Olmi (1982) designated the lectotype F and 4 paralectotypes (2 FF, 2 MM) of *Neodryinus koebelei* Perkins: they are kept in B. Recently I have seen in CB two other specimens (1 F, 1 M) belonging to the typical series. The female specimen is labelled as follows: «Sandhills, bred, Bundaberg, Q., Austr., 1904, 24.XI.04, Paratype, *Neodryinus koebelei* F Perkins». The male specimen is labelled as follows: «Mulgrave, bred, Bundaberg, Q., Austr., 1904, 7.X.04, Paratype, *Neodryinus koebelei* M Perkins».

The labels of both specimens are in Perkins' handwriting. These two specimens are here designated as paralectotypes.

GENUS *ADRYINUS*: NEOTROPIC REGION

***Adryinus delvarei* n. sp.**

Female: fully winged; length 3,25 mm; testaceous, with petiole and abdomen black and with antennal segments 6-9 darkened; antennae distally thickened, with rhinaria on segments 6-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 11:5:20:10:9:6:5:4,5:4:7,5; head flat, dull, fully granulated; frontal line absent; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; POL = 2; OL = 2,5; OOL = 9; posterior ocelli touching the occipital carina; temples distinct; pronotum shiny, crossed by a strong transversal impression, weakly granulated; notaulices invisible (or little visible); scutellum shiny, rugose; metanotum short, smooth; propodeum dull, reticulate rugose; dorsal surface reticulate rugose, but with parallel longitudinal keels; fore wing with two dark transversal bands; distal part of radial vein curved and longer than proximal part (19:6,5); fore tarsal segments in following proportions: 17:2,5:6,5:8,5:17; enlarged claw (Fig. 51 A) with a subapical tooth and a row of 5 bristles; segment 5 of front tarsus (Fig. 51 A) with two rows of 10+7 lamellae; apex with a group of at least 13 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Le Precheur (Martinique)

Typical material: holotype F! in P

Distribution: only known from the typical locality.

Notes: the species is named in honor of G. Delvare of Montpellier (C.I.R.A.D.); the holotype was collected on March 10, 1987 by J. Etienne.

Adryinus delvarei n. sp. is the first known Neotropical *Adryinus*.

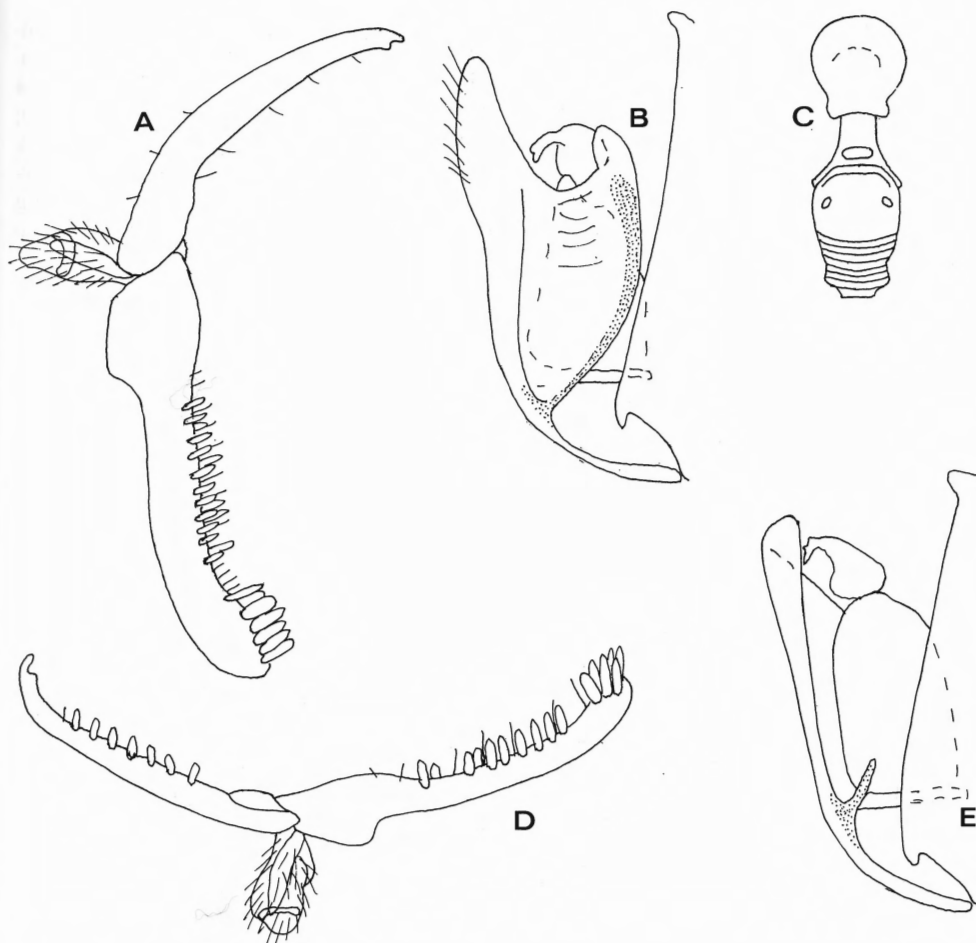


Fig. 51 - Chela of *Adryinus delvarei* n. sp. (holotype) (A) and *Pseudogonatopus azorensis* n. sp. (paratype from Sao Caetano - Santa Margarita) (D); male genitalia of *Acrodontochelys vitiensis* (Perkins) from Brunette Downs (B) and *Pseudogonatopus azorensis* n. sp. (holotype) (E); pronotum and metathorax + propodeum of female of *Pseudogonatopus azorensis* n. sp. (paratype from Santo Amaro) (in dorsal view) (C).

GENUS *ACRODONTOCHELYS*: AUSTRALIAN REGION

Acrodontochelys vitiensis (PERKINS 1906)

Acrodontochelys vitiensis (Perkins) was known only on the basis of female specimens. In the last years a series of male and female specimens from Northern Territory (Australia) was examined. The following description of the male can be proposed:

Male: fully winged; length 2,5 mm; head brown-black, with clypeus and mandibles testaceous; antennae brown; thorax and propodeum brown-black; abdomen brown; legs brown, with tarsi light; antennae not distally thickened; antennal segments in following proportions: 3,5:3:7:7:7,5:7:6,5:7:6:9; antennal segment 3 less

than four times as long as broad (7:2); head shiny, granulated; frontal line complete; occipital carina absent; POL = 7; OL = 3; OOL = 2; temples distinct; scutum shiny, weakly granulated; notaulices incomplete, reaching approximately 0,4 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum shiny, smooth, without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (13:8); dorsal process of gonoforceps slender and with apex broadened, at least as long as volsella (Fig. 51 B); maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Acrodontochelys vitiensis (Perkins) is now known from the following localities: FIJI ISLANDS: Suva (Viti Levu), B! BM! Greenwood (Lautoka), BM! Pembutu, B! TONGA ISLANDS: Nukualofa (Tongatapu), B! OL! Neiafu (Vavau), B! MARIANA ISLANDS: Umatac (Guam), B! Piti (Guam, on sedges), B! Asukonno (Saipan), B! AUSTRALIA: 10 Km N Brunette Downs (Northern Territory), CB! Balfour Ra. (via Benarkin, SE Queensland), OL! Yarraman (SE Queensland), UQ! Forest Station (Bulburin State Forest, via Many Peaks, Queensland), UQ! Brisbane (Queensland), UQ!

GENUS *PSEUDOGONATOPUS*: PALAEARCTIC REGION

Pseudogonatopus azorensis n. sp.

Female: apterous; length 2,12-2,68 mm; head testaceous, with vertex darkened; antennae black, with segments 1-2 testaceous and segment 10 whitish; thorax and propodeum testaceous; occasionally thorax and propodeum darkened; abdomen brown; legs testaceous, occasionally darkened; antennae distally thickened; antennal segments in following proportions: 7:4:6:4:4:4:4:4:6; head excavated, shiny, smooth, without sculpture; frontal line complete; occipital carina absent; POL = 1; OL = 1,5; OOL = 6; temples distinct; pronotum shiny, crossed by a strong transversal furrow, without sculpture; scutum shiny, smooth, sculptured by a few irregular keels; scutellum inclined, smooth, shiny, without sculpture; metanotum hollow behind the scutellum, transversely striate; meso-metapleural suture distinct and complete; metanotum with sides protruding (Fig. 51 C); protrusions pointed; metathorax + propodeum shiny, without sculpture, except for transversal striae on the posterior surface; mesopleura smooth, not transversely striate; metapleura in part transversely striate; fore tarsal segments in following proportions: 9:2:3:8,5:13; enlarged claw (Fig. 51 D) with a subapical tooth and a row of 7 lamellae; segment 5 of front tarsus (Fig. 51 D) with two rows of 11-16 lamellae; apex with a group of approximately 8-11 lamellae; maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 1,50-1,67 mm; head almost fully testaceous, only with vertex brown-black; antennae brown or brown-testaceous; thorax and propodeum black; abdomen black; legs testaceous; antennae not distally thickened; antennal segments in following proportions: 4:4:5:4,5:4,5:5:4:4:6; antennal segment 3 less than three and a half times as long as broad (5:2); head dull, granulated and rugose; frontal line absent; occipital carina absent; face with a median longitudinal furrow in front of the anterior ocellus; this furrow is fully smooth, without sculpture; POL = 4,5; OL = 2; OOL = 4; temples distinct, but short; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli (1,5:2); scutellum

and metanotum shiny, smooth, without sculpture; propodeum shiny, not reticulate rugose, with dorsal surface smooth; dorsal surface with a median longitudinal furrow; posterior surface smooth, without sculpture, except for a few irregular keels visible between dorsal and posterior surface; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (10:6); dorsal process of gonoforceps very short and reduced (Fig. 51 E); maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Locus typicus: Sao Caetano - Santa Margarita road (Pico I., Azores Islands)

Typical material: holotype M! and 7 paratypes (3 MM, 4 FF)! in OL

Distribution: AZORES ISLANDS: Sao Caetano - Santa Margarita road (Pico I.), OL! Santo Amaro (Pico I.), OL! MOROCCO: Sidi Benziane (Oued Massa mouth, nr. Massa, 70 Km S Agadir), OL!

Notes: the typical series from Sao Caetano - Santa Margarita (holotype and 3 paratypes (2 MM, 1 F)) was reared from parasitized specimens of *Toya tuberosa* Distant (*Delphacidae*) collected by M. Olmi on June 26, 1989; the only paratype (F) from Santo Amaro was reared from a parasitized specimen of *Toya propinqua* (Fieber) collected by M. Olmi on June 23, 1989; the paratypes from Sidi Benziane (1 F, 1 M) were reared from parasitized *Delphacidae* collected by M. Olmi on April 20, 1990.

The female specimens of *Pseudogonatopus azorensis* n. sp. are not distinguishable from the female specimens of *Pseudogonatopus dromedarius* (A. Costa); the male specimens, on the contrary, are very different. The frons is fully black in the males of *Ps. dromedarius*; it shows testaceous spots in the males of *Ps. azorensis*. The dorsal process of the gonoforceps is short and reduced in the males of *Ps. azorensis* (Fig. 51 E); it's long and slender in the males of *Ps. dromedarius* (Fig. 52 A); The vertex of the head shows, in the males of *Ps. dromedarius*, between eyes and ocelli, a shiny, oval area, anteriorly surrounded by a strong and prominent carina (Fig. 52 B); this smooth area is visible also in the males of *Ps. azorensis*, but it's not surrounded by a strong and prominent carina (Fig. 52 C).

***Pseudogonatopus rosellae* CURRADO and OLMI 1974**

Pseudogonatopus rosellae Currado and Olmi was described only on the basis of female specimens. Recently I reared in the typical locality a small series of male specimens. The following description of the male can be proposed:

Male: fully winged; length 2,12-2,68 mm; black; mandibles partly testaceous; fore legs with articulations between femora and tibiae testaceous; antennae not distally thickened; antennal segments in following proportions: 5:4:9:7:7:6,5:7:6:8; antennal segment 3 more than four times as long as broad (9:2); head dull, granulated; frontal line absent; occipital carina absent; POL = 7; OL = 3; OOL = 3; vertex without a keel between posterior ocelli and eyes; temples distinct; scutum dull, granulated; notaulices complete, posteriorly joint or separated; if they are separated, the minimum distance between the notaulices is shorter than the breadth of the ocelli (1:2); scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; dorsal process of gonoforceps with proximal region wide and with apex broad and rounded (Fig. 52 D); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

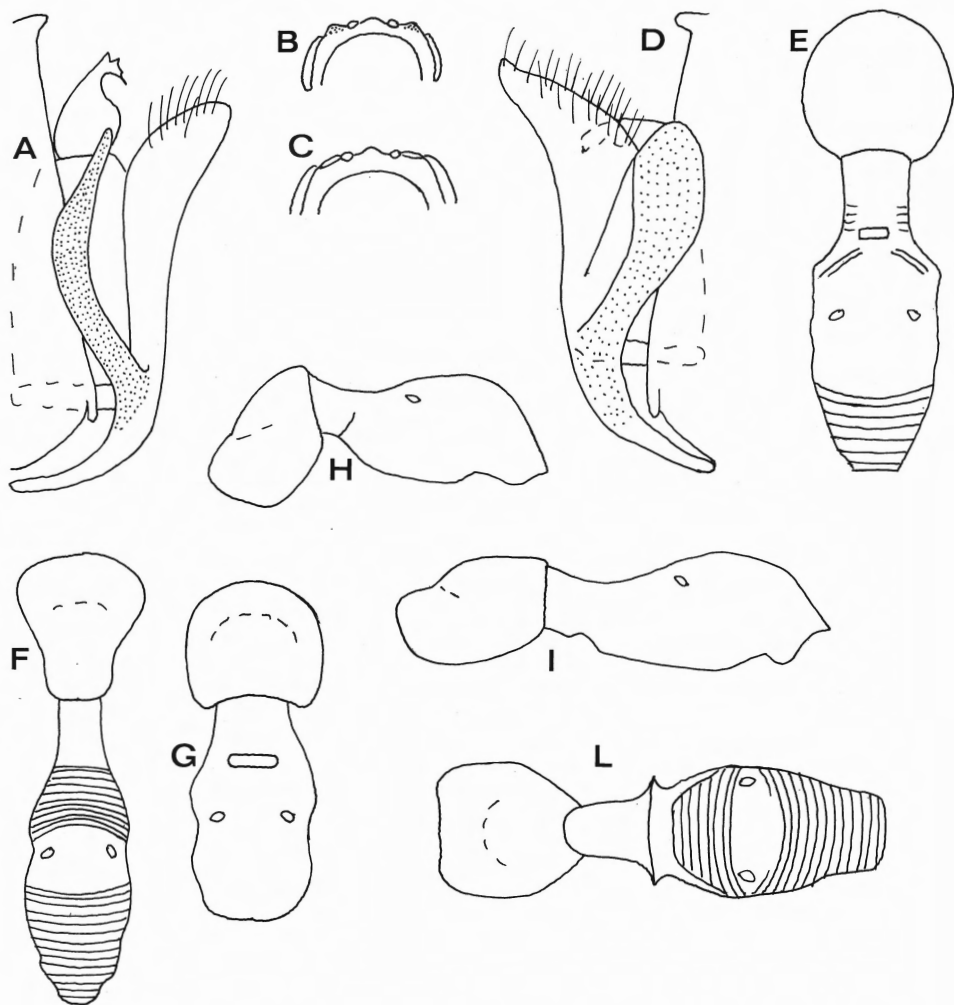


Fig. 52 - Male genitalia of *Pseudogonatopus dromedarius* (A. Costa) from Marina di Velca (A) and *rosellae* Currado & Olmi from Pian dell'Alpe (D); vertex of head (seen from occiput) of male of *Pseudogonatopus dromedarius* (A. Costa) from Marina di Velca (B) and *Pseudogonatopus azorensis* n. sp. (holotype) (C); pronotum and metathorax + propodeum (in dorsal view) of female of *Pseudogonatopus nepalensis* Olmi (paratype from Mangsingma Forest) (E), *fulgori* (Nakagawa) from Kami-gun (F), *rosellae* Currado & Olmi from Pian dell'Alpe (G), *pecki* n. sp. (holotype) (L); pronotum and metathorax + propodeum (in lateral view) of female of *Pseudogonatopus rosellae* Currado & Olmi from Pian dell'Alpe (H) and *flavifemur* Esaki & Hashimoto from Nangoku (I).

***Pseudogonatopus camelinus* (KIEFFER 1904)**

= *Pseudogonatopus ortholabis* (Kieffer in Kieffer et Marshall 1906: 506); n. syn.

Pseudogonatopus camelinus (Kieffer) and *ortholabis* (Kieffer) were considered distinct species mainly for the different colour of metathorax + propodeum (black in *ortholabis*, reddish or brown-reddish in *camelinus*) (Olmi 1986, p. 81).

Only the male of *Ps. ortholabis* was known (Olm 1987a).

Recently I reared at Marina di Velca (Viterbo, Italy) from *Toya propinqua* (Fieber) (*Delphacidae*) a series of male and female specimens of *Pseudogonatopus*. The female specimens showed in part the typical colour of *camelinus*, in part the typical colour of *ortholabis*. Other female specimens showed intermediate colours between the two species. The male specimens were all alike. Their genitalia were like the genitalia of *Ps. ortholabis* drawn previously (Olm 1987a, fig. 69).

The study of the population of Marina di Velca so demonstrated that *Pseudogonatopus camelinus* and *ortholabis* are synonyms.

Pseudogonatopus camelinus (Kieffer) is now known from the following localities: FRANCE: Grabels (Hérault), TS! Ucciani (Corse), BU! SPAIN: La Platja d'Aro (Costa Brava, Catalunya), TS! Gibraltar, WA! Almunecar (Granada), OT! OL! ITALY: Codiponte (m 300, Casola, Massa), OL! Giglio I. (Grosseto), GE! OL! Bolsena (Viterbo), OL! Capodimonte (Viterbo), OL! Viterbo, OL! Acqua Rossa (Viterbo), OL! Marina di Velca (Viterbo), OL! Mt. Circeo (Latina), P! Scicli (Ragusa), PL! GREECE: Iraklion (Crete I.), ZM! TURKEY: Cayagzi (between Alaçam and Gerze, Road N. 010), OL! Antalya, OL! CANARY ISLANDS: S. Cruz de La Palma (La Palma), HE! OL! AZORES ISLANDS: Agua d'Alto (2,5 Km from Vila Franca do Campo, Sao Miguel I.), OL! MOROCCO: Tarhazoute (20 Km N. Agadir), TS! EGYPT: Fayum, WA!

***Pseudogonatopus dromedarius* (A. COSTA 1882)**

- = *Pseudogonatopus albosignatus* (Kieffer 1904): 358; n. syn.
- = *Pseudogonatopus augustae* Currado and Olmi 1984: 221; n. syn.
- = *Pseudogonatopus ligusticus* Currado and Olmi 1974: 220; n. syn.
- = *Pseudogonatopus priesneri* Olmi 1984: 1216; n. syn.

The differences among *Pseudogonatopus dromedarius* (A. Costa), *albosignatus* (Kieffer), *augustae* Currado and Olmi, *ligusticus* Currado and Olmi and *priesneri* Olmi were based mainly on the colour of the body and the antennae (see key in Olmi 1986, pp. 80-81).

In the last years I reared numerous material from different localities. The study of this material, composed of female and male specimens, persuaded me about the synonymy of these five species. Whereas the male specimens are always alike (their genitalia are drawn in Olmi 1987a, fig. 70), the colour of the female specimens can be very different. It can vary from fully yellow-testaceous with petiole black (*dromedarius*), to almost fully brown (*priesneri*), to almost fully black (*augustae*), with intermediate specimens differently coloured (partly brown or black and partly yellow or testaceous or reddish, as in *albosignatus* and *ligusticus*). The colour of the antennae of the females can vary from fully yellow-testaceous to almost fully black or brown, with or without segment 10 whitish. The head of the females can show a vertex fully smooth and without sculpture, or a vertex rugose and dull. In the females the disc of metathorax + propodeum can show or not a track of a median furrow. The pronotum of the females can be smooth and without sculpture, or dull and granulated.

The synonymy of the above species is so here established.

Pseudogonatopus dromedarius (A. Costa) is now known from the following localities: HUNGARY: Krskunhalas (Bogarzo), BU! Tompa, BU! Vacz, BU! BO! FRANCE: St. Gely-du-Fesc (Hérault), P! Grabels (Hérault), TS! Le Crotoy (Rue, Artois), BT! SPAIN: La Platja de Aro (Costa Brava, Catalunya), TS! OL! Palamos

(Barcelona), SZ! Almunecar (Granada), OT! Torrevieja (Alicante), BM! OL! Lepe (Andalusia), OL! ITALY: S. Benedetto Belbo (Cuneo), OL! Gallareto (Asti), OL! Portacomaro (Asti), EN! Casale Roletto (Mongrando, Vercelli), OL! PL! SZ! Lido di Venezia (Venezia), P! San Lorenzo di Casanova (Genova), GE! Altare (Savona), PL! Punta Ala (Gosseto), OL! Giglio I. (Gosseto), GE! Marina di Velca (Viterbo), OL! Alghero (Sassari), EN! GREECE: Mt. Holomondas (Chalkidiki), OL! TURKEY: Antalya, OL! ISRAEL: Rehovot, GV! CANARY ISLANDS: Taodio (Tenerife I.), MD! ALGERIA: Bouzaréa Forest (Alger), P! EGYPT: Fayed, WA! OL! Meadi, WA! OL!

Pseudogonatopus distinctus (KIEFFER 1906)

= *Pseudogonatopus septemdentatus* (J. Sahlberg 1910): 11; n. syn.

Pseudogonatopus distinctus (Kieffer) and *septemdentatus* (J. Sahlberg) were distinct in the past mainly for the different colour of the scutum of the females (black or brown in *distinctus*, fully or partly yellow or reddish in *septemdentatus*) (Olmi 1986, p. 81).

Really however the colour of the scutum was variable from fully black or brown to partly black and yellow, to fully yellow or reddish. The doubt on the validity of *Ps. septemdentatus* was concrete.

Only the male of *Ps. distinctus* was known.

In the last years I examined a lot of material of *Ps. distinctus* and *septemdentatus* from different localities, but mainly from Northern Europe, where these species seem widely spread. Whereas the female specimens showed always the above differences of colour, the male specimens were always the alike and they showed always the same genitalia. The genitalia were always like those of *Ps. distinctus* (see fig. 818 in Olmi 1984).

I think that the two species are synonyms. The study of the two types, kept in BU (*Ps. distinctus*) and in HE (*Ps. septemdentatus*), seems to confirm this synonymy.

Pseudogonatopus distinctus (Kieffer) is now known from numerous localities of the following countries: MONGOLIA, U.S.S.R., FINLAND, SWEDEN, ROMANIA, GERMANY, DENMARK, HOLLAND, BELGIUM, SWITZERLAND, FRANCE, ENGLAND, SPAIN. It was listed by mistake of Italy (Peccia) (Olmi 1984): this record however is pertinent to *Pseudogonatopus rosellae* Currado and Olmi.

After the description of the above new species and after the above proposals of new synonymies, a new key to the Palaearctic *Pseudogonatopus* can be proposed:

FEMALES

- 1 Metanotum longer than scutellum.....2
- Metanotum as long as or shorter than scutellum.....7
- 2 Metanotum with sides very prominent (Fig. 52 E).....8. *nepalensis* Olmi
- Metanotum with sides rounded, less prominent (Figs 52 F, 52 G).....3
- 3 Metanotum flat, very long, more than twice as long as scutellum.....4
- Metanotum flat or inclined, shorter, at most twice as long as scutellum.5
- 4 Anterior surface of metathorax + propodeum very inclined (Fig. 802 B in Olmi 1984).....1. *fulgori* (Nakagawa)
- Anterior surface of metathorax + propodeum less inclined (Fig. 802 A in Olmi 1984).....5. *focarilei* Olmi

- 5 Anterior surface of metathorax + propodeum and disc shiny, fully or almost fully without sculpture.....2. *camelinus* (Kieffer)
- Anterior surface metathorax + propodeum and disc dull, fully or almost fully granulated or strongly sculptured by transversal striae.....6
- 6 Pronotum with transversal furrow deeper (Fig. 52 H); ocellar triangle equilateral or with POL longer than OL.....3. *rosellae* Currado and Olmi
- Pronotum with transversal furrow less deep (Fig. 52 I); ocellar triangle with POL shorter than OL.....4. *flavifemur* Esaki and Hashimoto
- 7 Metanotum with sides rounded (Fig. 820 A in Olmi 1984); species larger.....7. *distinctus* (Kieffer)
- Metanotum with sides prominent and often pointed (Fig. 820 B in Olmi 1984, Fig. 51 C); species smaller.....6. *dromedarius* (A. Costa)
-9. *azorensis* n. sp.

MALES

- 1 Antennal segment 3 less than three and a half times as long as broad....2
- Antennal segment 3 four or more than four times as long as broad.....3
- 2 Dorsal process of gonoforceps long and slender (Fig. 70 in Olmi 1987a); region of the head between eyes and posterior ocelli with a shiny, oval area anteriorly surrounded by a strong and prominent carina (Fig. 52 B); face black...
.....6. *dromedarius* (A. Costa)
- Dorsal process of gonoforceps short and reduced (Fig. 51 E); region of the head between eyes and posterior ocelli with a shiny, oval area anteriorly not surrounded by a strong and prominent carina (Fig. 52 C); face almost fully testaceous.....9. *azorensis* n. sp.
- 3 Dorsal process of gonoforceps very short and pointed (Fig. 808 in Olmi 1984); region of the head between eyes and posterior ocelli without a strong and prominent carina.....4. *flavifemur* Esaki and Hashimoto
- Dorsal process of gonoforceps very long (Figs 804, 818 in Olmi 1984; Fig. 69 in Olmi 1987a; Fig. 52 D).....4
- 4 Dorsal process of gonoforceps with inner side serrate (Fig. 818 in Olmi 1984)
.....7. *distinctus* (Kieffer)
- Dorsal process of gonoforceps with inner side not serrate (Fig. 804 in Olmi 1984; Fig. 69 in Olmi 1987a; Fig. 52 D).....5
- 5 Head with OOL approximately as long as breadth of the ocelli.....
.....1. *fulgori* Nakagawa
- Head with OOL much longer than the breadth of the ocelli.....6
- 6 Notaulices complete, posteriorly joint.....3. *rosellae* Currado and Olmi
- Notaulices complete, posteriorly separated.....7
- 7 Dorsal process of gonoforceps with apex narrow and pointed (Fig. 69 in Olmi 1987a).....2. *camelinus* (Kieffer)
- Dorsal process of gonoforceps with apex broad and rounded (Fig. 52 D)...
.....3. *rosellae* Currado and Olmi

GENUS *PSEUDOGONATOPUS*: NEOTROPIC REGION

***Pseudogonatopus pecki* n. sp.**

Female: apterous; length 3,12-4,18 mm; testaceous, with petiole black (Ecuador specimens) or brown, with anterior surface on the head, scutum and posterior surface of the propodeum testaceous (Costa Rica specimens); antennae brown, with segments 1-2 testaceous; occasionally antennae brown, with segments 6-8 or 6-7 whitish; antennae distally thickened; antennal segments in following proportions: 11:5,5:22:14:10:8:7:6:5:9; head excavated, smooth, shiny, without sculpture; frontal line complete; occipital carina incomplete, only shortly visible on the sides of the posterior ocelli; POL = 0,5; OL = 1,5; OOL = 8; pronotum crossed by a strong transversal furrow, shiny, smooth, without sculpture; scutum with two lateral pointed apophyses (Fig. 52 L); metanotum transversely striate, not hollow behind the scutellum; meso-metapleural suture usually with proximal part distinct and with distal part obsolete; rarely the suture is fully distinct or fully obsolete; metathorax + propodeum shiny, with anterior surface without sculpture and with posterior surface and pleura transversely striate; fore tarsal segments in following proportions: 15:3:6:18:29; enlarged claw (Fig. 53 A) with a subapical tooth and a row of 5-7 lamellae; segment 5 of front tarsus (Fig. 53 A) with two rows of approximately 11-19 lamellae; apex with a group of approximately 19 lamellae; maxillary palps with 3-4 segment; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 1,87-2,87 mm; head almost fully testaceous, with vertex darkened; antennae brown, with segments 1-2 testaceous; thorax brown; propodeum black; abdomen brown; legs testaceous, occasionally darkened; antennae not distally thickened; antennal segments in following proportions: 5:6:10:9,5:8:8:7:7,5:10; antennal segment 3 more than three times as long as broad (10:2); head hairy, shiny, smooth, without sculpture; frontal line absent; occipital carina absent; POL = 4; OL = 1; OOL = 3; temples distinct; scutum dull, alutaceous, hairy; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli (1:3); scutellum shiny, finely punctate, without sculpture among the punctures, hairy; metanotum hairless, shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; radial cell open; radial vein regularly curved; genitalia in fig. 53 B; maxillary palps with 3-4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Locus typicus: Tinalandia (16 Km SE Santo Domingo de los Colorados, m 500, Pichincha Prov., Ecuador)

Typical material: holotype F! and 4 paratypes (2 FF, 2 MM)! in AL; 1 paratype F! in SO; 2 paratypes (1 F, 1 M)! in GC; 8 paratypes (2 FF, 6 MM)! in OL.

Distribution: ECUADOR: Tinalandia (m 500, 16 Km SE Santo Domingo de los Colorados, Pichincha Prov.), AL! OL! Santiago de los Tayos (nr. Morona), SO! COSTA RICA: 9,5 Km E tunel, Braulio Carrillo National Park (m 1000, San José Prov.), OL! GC!

Notes: the species is named in honor of one of the collectors of the typical series from Tinalandia, Stewart B. Peck; the typical material from Tinalandia was collected by S. and J. Peck in June-August, 1985; the paratype from Santiago de los Tayos was collected by Tjitte de Vries on August 3, 1987; the paratypes from

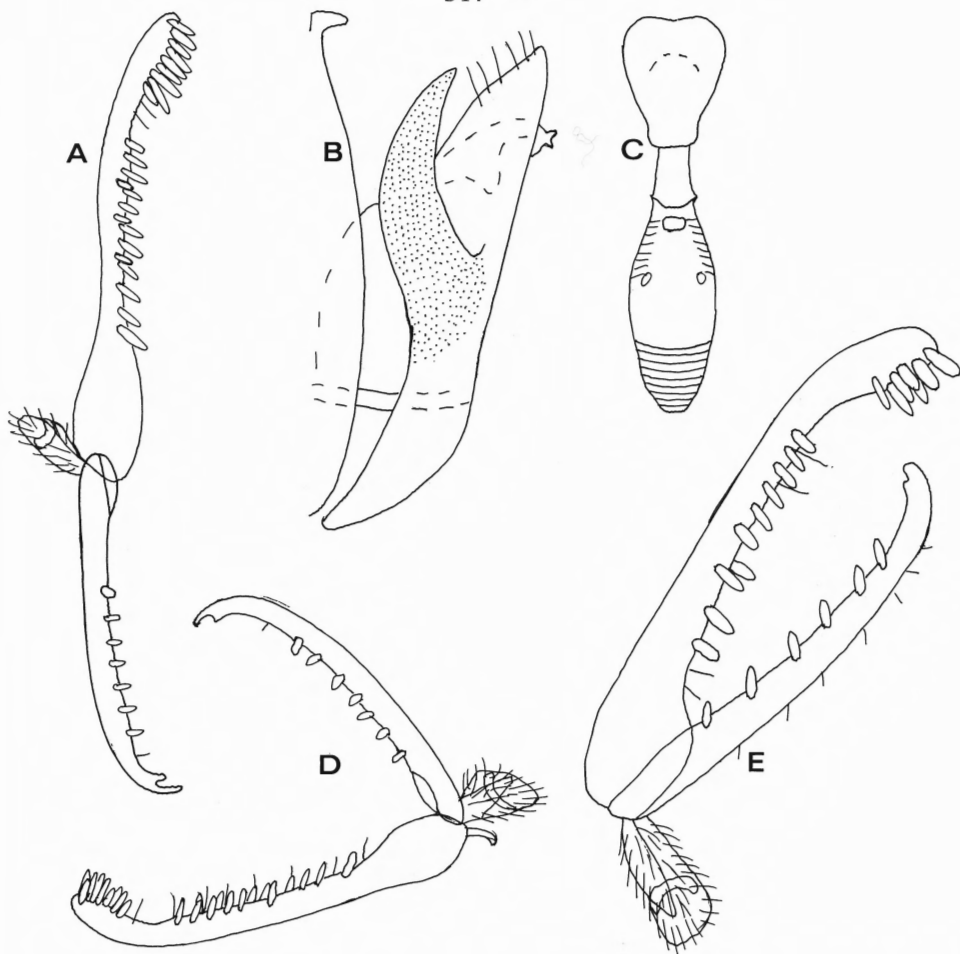


Fig. 53 - Chela of *Pseudogonatopus pecki* n. sp. (holotype) (A), *drifti* n. sp. (holotype) (D), *chilensis* n. sp. (holotype) (E); male genitalia of *Pseudogonatopus pecki* n. sp. (paratype from Tinalandia) (B); pronotum and metathorax + propodeum of female of *Pseudogonatopus drifti* n. sp. (holotype) (in dorsal view) (C).

Costa Rica were collected by a malaise trap by Paul Hanson in July-September, 1989.

***Pseudogonatopus drifti* n. sp.**

Female: apterous; length 3,43-4,00 mm; testaceous, with petiole black; antennae distally thickened; antennal segments in following proportions: 8:4,5:13:7:5:5,5:5,5:6:5:9; head excavated, shiny, smooth, without sculpture; frontal line complete; occipital carina absent; POL = 1; OL = 1,5; OOL = 7,5; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture, hairy; scutum and scutellum shiny, smooth, without sculpture; scutum with two lateral pointed apophyses (Fig. 53 C); meso-metapleural suture obsolete; metanotum in-

clined, not hollow behind the scutellum, shiny, smooth, without sculpture; metathorax + propodeum shiny, smooth, without sculpture, except for pleura and posterior surface of propodeum strongly transversely striate; fore tarsal segments in following proportions: 12:3:5:16:25; enlarged claw (Fig. 53 D) with a subapical tooth and a row of 5-7 lamellae; segment 5 of front tarsus (Fig. 53 D) with two rows of 14-17 lamellae; apex with a group of approximately 13 lamellae; maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Pocroc (Suriname)

Typical material: holotype F! in SO; 4 paratypes FF! in OL; 1 paratype F! in GC.

Distribution: SURINAME Pocroc, SO! PERU: Toronto y Canyon (base of Machu Picchu, m. 200-220), OL! COSTA RICA: 10°56'N 85°28'W (Estacion Mengo, m. 1100, SW Volcán Cacao, Guanacaste National Park, Guanacaste Prov.), OL! 11°00'N 85°26'W (Estacion Pitilla, m 700, 9 Km S Santa Cecilia, Guanacaste National Park, Guanacaste Prov.), OL! 10°09'N 83°55'W (16 Km W Guápiles, m 400, Limón Prov.), GC! 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.). OL!

Notes: the species is named in honor of the collector of the holotype, I. v. d. Drift; the holotype was collected in September, 1959; the paratype from Peru was collected by B. Malkin on June 8-24, 1964; the paratype from 16 Km W Guápiles was collected by Paul Hanson in March-May, 1990; the paratype from Estacion Pitilla was collected by Paul Hanson in May, 1989; the paratype from 10 Km W Piedras Blancas was collected by Paul Hanson in June-August, 1989; the paratype from Estacion Mengo was collected by Paul Hanson in 1988-89;

***Pseudogonatopus chilensis* n. sp.**

Female: apterous; length 3,31 mm; head testaceous; antennae testaceous, with segments 3-8 darkened; thorax and propodeum reddish-testaceous; petiole black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 10:7:15:10:7,5:7:6:6:9,5; head excavated, alutaceous; frontal line complete; occipital carina absent; POL = 2; OL = 1,5; OOL = 8; pronotum shiny, without sculpture, crossed by a weak transversal impression; scutum dull, weakly granulated, with two lateral pointed apophyses; meso-metapleural suture obsolete; metanotum not hollow behind the scutellum, strongly transversely striate; metathorax + propodeum without sculpture, shiny, except for numerous transversal striae on the pleura and on the posterior surface of the propodeum; fore tarsal segments in following proportions: 19:3:5:15:23; enlarged claw (Fig. 53 E) with a subapical tooth and a row of 6 lamellae; segment 5 of front tarsus (Fig. 53 E) with two rows of 3+8 lamellae; apex with a group of approximately 14 lamellae; maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Pemehue (Malleco Dept., Chile)

Typical material: holotype F! in CA

Distribution: only known from the typical locality.

Notes: the holotype was collected by L. and C.W. O'Brien on February 2, 1968.

After the descriptions of the above new species a new key to the Neotropical *Pseudogonatopus* can be proposed, as follows:

FEMALES

- 1 Meso-metapleural suture distinct and complete.....2
- Meso-metapleural suture fully obsolete or only with proximal part distinct
.....4
- 2 Scutum laterally with two strong pointed apophyses (Fig. 52 L).....3
-9. *pecki* n. sp.
- Scutum laterally without pointed apophyses.....3
- 3 Body more or less black or brown.....5. *morenoi* Olmi
- Body testaceous, with petiole black.....6. *invictus* Olmi
- 4 Scutum with two lateral pointed apophyses (Figs 52 L, 53 C).....5
- Scutum without lateral pointed apophyses.....7
- 5 Scutum with lateral pointed apophyses very strong and prominent (Fig. 52 L)
.....9. *pecki* n. sp.
- Scutum with lateral pointed apophyses smaller (Fig. 53 C).....6
- 6 Metanotum smooth, not transversely striate.....10. *drifti* n. sp.
- Metanotum strongly transversely striate.....11. *chilensis* n. sp.
- 7 At least metathorax + propodeum black (usually except for distal apex of
propodeum testaceous).....8
- Metathorax + propodeum fully testaceous or reddish-testaceous or partly
brown and partly reddish-testaceous.....9
- 8 Metanotum smooth, not transversely striate, with sides rounded; scutum yellow
.....3. *delphacidis* Olmi
- Metanotum strongly transversely striate, with sides protruding; protrusions
pointed; scutum black.....4. *muesebecki* Olmi
- 9 Metathorax + propodeum brown, with disc and anterior surface reddish-
testaceous.....8. *cobbeni* Olmi
- Metathorax + propodeum fully testaceous or reddish-testaceous.....10
- 10 Segment 4 of front tarsus longer than segment 1.....2. *flavus* Olmi
- Segment 4 of front tarsus shorter than segment 1.....11
- 11 Abdomen testaceous.....1. *variistriatus* Fenton
- Abdomen black.....7. *maidicolus* Olmi

MALES

- 1 Head fully black, except for mandibles testaceous; dorsal process of gonofor-
ceps slender (Fig. 1 G in Olmi 1978b); scutum smooth, shiny.....2. *flavus* Olmi
-2. *flavus* Olmi
- Head almost fully testaceous, only with vertex darkened; dorsal process of
gonoforceps broader (Fig. 53 B); scutum dull, alutaceous.....9. *pecki* n. sp.

GENUS *PSEUDOGONATOPUS*: AUSTRALIAN REGION

***Pseudogonatopus nigricans* (PERKINS 1905)**

Olmi (1982) designated the lectotype F and 2 paralectotypes FF of *Ps. nigricans* (Perkins): they are kept in B. Recently I have seen in CB another female specimen belonging to the typical series. This specimen is labelled as follows: «Sandhills, bred, X.04, Bundaberg, Q., Austr., 1904, Paratype, *Haplogonatopus nigricans* Perkins». The labels are in Perkins' handwriting. This specimen is here desig-

nated as paralectotype.

Pseudogonatopus dichromus PERKINS 1905

Olmi (1982) designated the lectotype F and 4 paralectotypes (3 FF, 1 M) of *Ps. dichromus* Perkins: they are kept in B. Afterwards the same Olmi (1984) designated other 5 paralectotypes (4 FF, 1 M) of the same species: they are kept in BM. Recently I have seen in CB two other female specimens belonging to the typical series. Both specimens are labelled as follows: «Bundaberg, bred, 26.X.04, Bundaberg, Q., Austr., 1904, Paratype, *Pseudogonatopus dichromus* Perkins». The labels are in Perkins' handwriting. The two specimens are here designated as paralectotypes.

GENUS *DONISTHORPINA*: PALAEARCTIC REGION

***Donisthorpina tussaci* n. sp.**

Female: apterous; length 3,62 mm; head black, with mandibles, clypeus and part of the genae testaceous; antennae black, with segments 1-2 testaceous; thorax, propodeum and abdomen black; legs black, with part of coxae, part of tibiae and part of tarsi testaceous; antennae distally thickened; antennal segments in following proportions: 8:6:9:5:4,5:5:5:5:7; head dull, excavated, granulated; frontal line complete; occipital carina absent; POL = 1; OL = 3; OOL = 8; temples distinct; pronotum crossed by a strong transversal furrow, shiny, without sculpture or weakly alutaceous; scutum dull, granulated, with a few longitudinal keels; scutellum dull, alutaceous, inclined; meso-metapleural suture distinct and complete; metanotum not hollow behind the scutellum, with sides protruding and rounded; metathorax + propodeum dull, alutaceous, with posterior surface transversely striate; fore tarsal segments in following proportions: 13:2,5:4:11:18; enlarged claw (Fig. 54 A) with a subapical tooth and a row of 5 lamellae; segment 5 of front tarsus (Fig. 54 A) with two rows of 3 (proximal) + 22 lamellae; apex with a group of approximately 8 lamellae; maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Grabels (Hérault, France)

Typical material: holotype F! in P

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Hubert Tussac de Cahors; the holotype was collected on April 7, 1989.

After the description of the above new species, the following key to the Palaearctic *Donisthorpina* can be proposed:

FEMALES

- 1 Meso-metapleural suture obsolete.....1. *pallida* (Ceballos)
- Meso-metapleura suture distinct and complete.....2. *tussaci* n. sp.

Only the male of *D. pallida* is known.

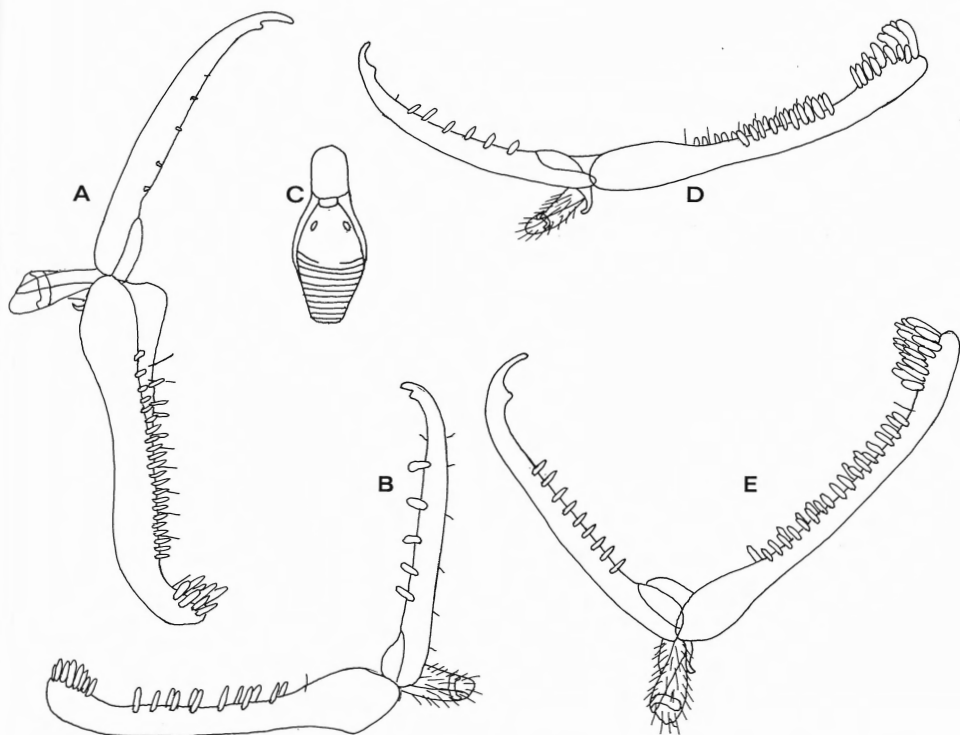


Fig. 54 - Chela of *Donisthorpina tussaci* n. sp. (holotype) (A) and *malkini* n. sp. (holotype) (B); scutum and metathorax + propodeum of female of *Apterodryinus punensis* n. sp. (holotype) (in dorsal view) (C); chela of *Apterodryinus punensis* n. sp. (holotype) (D) and *brasiliensis* n. sp. (holotype) (E).

GENUS *DONISTHORPINA*: NEOTROPIC REGION

***Donisthorpina malkini* n. sp.**

Female: apterous; length 3,44 mm; head brown-reddish, with a black band on the vertex; antennal segments 1-2 testaceous (other segments missing in the only known specimen); thorax and propodeum brown-reddish; petiole black; abdomen brown-reddish; legs brown-reddish, with tarsi and trochanters testaceous; antennal segments 1-2 in following proportions: 7:5; head excavated, shiny, alutaceous; frontal line complete; occipital carina absent; POL = 1; OL = 1; OOL = 8; pronotum shiny, without sculpture, crossed by a strong transversal impression; scutum shiny, smooth, alutaceous; metanotum inclined, not hollow behind the scutellum, not transversely striate, with lateral rounded protrusions; meso-metapleural suture obsolete; metathorax + propodeum shiny, smooth, alutaceous, with posterior surface transversely striate; pleura not transversely striate; fore tarsal segments in following proportions: 15:2:3,5:12:17; enlarged claw (Fig. 54 B) with a subapical tooth and a row of 5 lamellae; segment 5 of front tarsus (Fig. 54 B) with two rows of 11 lamellae; apex with a group of approximately 10 lamellae;

maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.
Male: unknown

Locus typicus: Machu Picchu (m 2600-2800, on ruins, Peru)

Typical material: holotype F! in SO

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, B. Malkin; the holotype was collected on July 1-2, 1964.

After the description of the above new species, the following key to the Neotropical *Donisthorpina* can be proposed:

FEMALES

- 1 Meso-metapleural suture distinct and complete.....1. *neotropica* Olmi
— Meso-metapleural suture obsolete.....2. *malkini* n. sp.

The males of the Neotropical *Donisthorpina* are unknown.

GENUS *APTERODRYINUS*: NEOTROPIC REGION

Apterodryinus punensis n. sp.

Female: apterous; length 2,62 mm; head brown, with anterior part of frons and clypeus reddish; mandibles testaceous, with teeth brown; antennae brown, with segments 1-2 and 9-10 testaceous; pronotum brown, with sides and posterior surface of disc reddish; scutum yellow, with anterior margin black; metathorax + propodeum black; abdomen black; legs brown, with tarsi, clubs of femora and partly tibiae testaceous; antennae distally thickened; antennal segments in following proportions: 9:5:15:7:6,5:5:5:5:5:7; head excavated, dull, fully granulated; frontal line complete; occipital carina absent; POL = 1,5; OL = 1,5; OOL = 7; temples visible; pronotum crossed by a strong transversal impression, granulated; scutum without lateral pointed apophyses; scutellum inclined; metanotum flat, short, hollow behind the scutellum, with sides rounded, not protruding (Fig. 54 C); meso-metapleural suture distinct and complete; metathorax + propodeum shiny, without sculpture, except for transversal striate on posterior surface and on pleura; anterior surface smooth, shiny, without sculpture, very inclined; fore tarsal segments in following proportions: 12:3:5:15,5:24; enlarged claw (Fig. 54 D) with a subapical tooth and a row of 6 lamellae; segment 5 of front tarsus (Fig. 54 D) with two rows of 22 lamellae; apex with a group of approximately 15 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Puná Island (Guayas, Ecuador)

Typical material: holotype F! in OL

Distribution: only known from the typical locality.

Notes: the holotype was collected by M. Huybensz on March 22, 1988.

Apterodryinus brasiliensis n. sp.

Female: apterous; length 4 mm; head black, with mandibles, clypeus and anterior region of the frons testaceous; antennae testaceous; thorax and propodeum black,

with a few reddish nuances on pronotum and propectus; abdomen brown; legs testaceous, with coxae, clubs of femora and fore tibiae partly brown; antennae distally thickened; antennal segments in following proportions: 10:5:27:20:16:12:9:8:7:9; head dull, excavated, granulated; frontal line complete; occipital carina incomplete, only visible behind the posterior ocelli; POL = 1,5; OL = 3; OOL = 9,5; pronotum dull, crossed by a strong transversal impression, granulated; scutum dull, granulated, without lateral pointed apophyses; scutellum dull, granulated, inclined; meso-metapleural suture distinct and complete; metanotum dull, granulated, hollow behind the scutellum; metathorax + propodeum dull, fully granulated; posterior surface of propodeum and pleura not transversely striate; mesopleura and metapleura in different planes, because the meso-metapleural suture is very broad and step-shaped; fore tarsal segments in following proportions: 17:3:6:20:31; enlarged claw (Fig. 54 E) with a subapical tooth and a row of 9 lamellae; segment 5 of front tarsus (Fig. 54 E) with two rows of approximately 34 lamellae; apex with a group of at least 25 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Fazenda Floresta (Três Lagoas, Mato Grosso, Brazil)

Typical material: holotype F! in SO

Distribution: only known from the typical locality.

Notes: the holotype was collected by an expedition of the Department of Zoology, University of Sao Paulo, on September 13-20, 1964.

After the descriptions of the above new species, the following new key to the Neotropic *Apterodyinus* can be proposed:

FEMALES

- 1 Meso-metapleural suture obsolete.....2
- Meso-metapleural suture distinct and complete or incomplete.....4
- 2 Posterior surface of propodeum transversely striate only near apex.....9. *haitianus* Olmi
- Posterior surface of propodeum fully transversely striate.....3
- 3 Anterior surface of metathorax + propodeum granulated..1. *citrinus* Olmi
- Anterior surface of metathorax + propodeum without sculpture.....6. *longicornis* (Kieffer)
- 4 Anterior surface of metathorax + propodeum fully granulated or granulated and finely transversely striate.....5
- Anterior surface of metathorax + propodeum fully or almost fully without sculpture.....9
- 5 Anterior surface of metathorax + propodeum fully granulated; scutum laterally without pointed apophyses.....6
- Anterior surface of metathorax + propodeum granulated and sculptured by fine transversal striae; scutum laterally with two pointed apophyses.....8
- 6 Metanotum hollow behind the scutellum.....11. *brasiliensis* n. sp.
- Metanotum not hollow behind the scutellum.....7
- 7 Head and prothorax almost fully black.....2. *arnaudi* Olmi
- Head and prothorax fully or almost fully reddish-testaceous.....8. *rabidanus* Olmi
- 8 Body mostly black.....5. *tijucanus* (Arlé)
- Body ferruginous, with petiole black.....3. *testaceus* (Cameron)

- 9 Scutum laterally with two pointed apophyses.....10
— Scutum laterally without pointed apophyses.....11
10 At least the anterior half of the anterior surface of metathorax + propodeum sculptured by numerous fine transversal striae; metathorax + propodeum reddish-testaceous.....3. *testaceus* (Cameron)
— Anterior surface of metathorax + propodeum fully without sculpture, not transversely striate; metathorax + propodeum black.....7. *bellottii* Olmi
11 Metanotum with sides protruding; protrusions pointed; body mostly testaceous-reddish.....4. *menkei* Olmi
— Metanotum with sides rounded, not protruding (Fig. 54 C); body mostly black10. *punensis* n. sp.

GENUS *APTERODRYINUS*: AUSTRALIAN REGION

Apterodryinus doddi n. sp.

Female: apterous; length 5,31 mm; head, prothorax and scutum reddish-testaceous; antennae testaceous, with segments 4-7 darkened; scutellum and metathorax + propodeum black; abdomen black; fore legs testaceous, with coxae and trochanters partly darkened; mid and hind legs brown, with part of tibiae and tarsi testaceous; antennae distally thickened; antennal segments in following proportions: 10:8:35:23:18:15:10:9:8:11; head excavated, shiny, weakly granulated; frontal line complete; occipital carina incomplete, only visible on the sides of the posterior ocelli; POL = 3; OL = 2; OOL = 13; pronotum crossed by a strong transversal impression, without sculpture, shiny; scutum shiny, sculptured by longitudinal keels, with two lateral pointed apophyses (Fig. 55 A); scutellum shiny, smooth, without sculpture; metanotum hollow behind the scutellum, transversely striate; meso-metapleural suture distinct and complete; anterior surface of metathorax + propodeum dull, irregularly rugose; posterior surface strongly transversely striate; pleura transversely striate; fore tarsal segments in following proportions: 23:4:8:28:43; enlarged claw (Fig. 55 D) with a subapical tooth and a row of 14 lamellae; segment 5 of front tarsus (Fig. 55 D) with two rows of 23 lamellae; apex with a group of approximately 16 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Westwood (Queensland, Australia)

Typical material: holotype F! in CB

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, A.P. Dodd; the holotype was collected in February, 1928.

Apterodryinus weiri n. sp.

Female: apterous; length 3,56 mm; head brown, with mandibles, clypeus and anterior region of the frons testaceous; antennae brown, with segments 1-2 and 9-10 testaceous; thorax and propodeum brown, with scutum testaceous; abdomen brown; fore legs brown, with chelae testaceous and with trochanters and part of coxae whitish; mid and hind legs with tarsi and part of tibiae testaceous, with part of coxae, trochanters and part of clubs of femora whitish; antennae distally

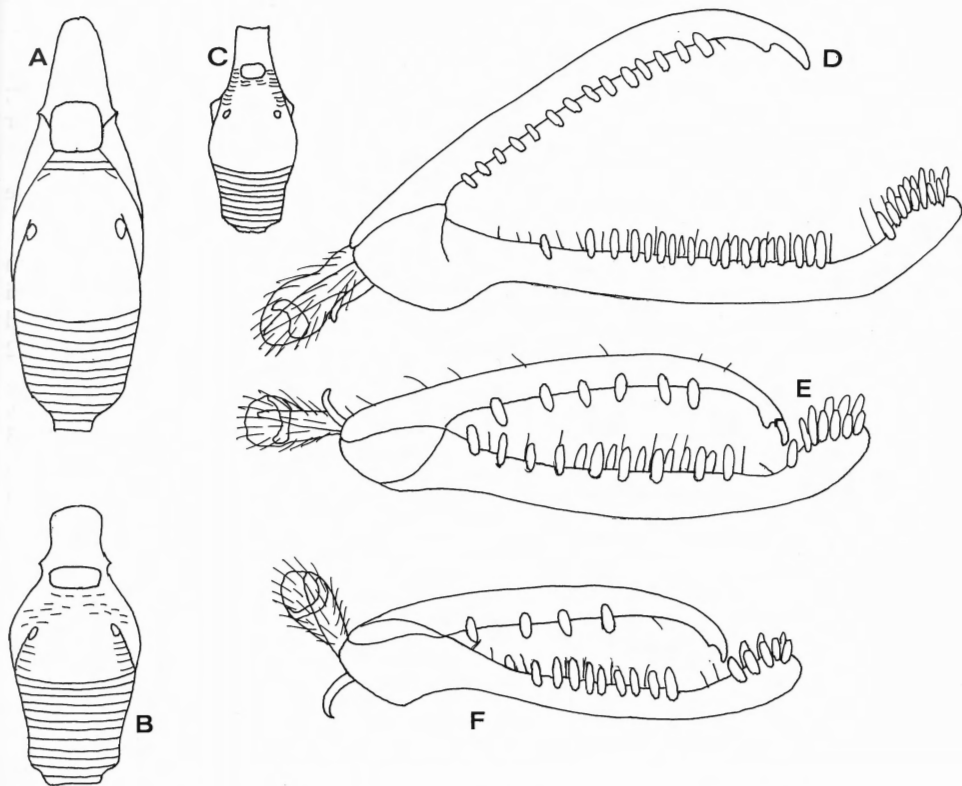


Fig. 55 - Scutum and metathorax + propodeum (in dorsal view) of female of *Apterodryinus doddi* n. sp. (holotype) (A), *notogeicus* Olmi (paratype from Perth) (B), *weiri* n. sp. (holotype) (C); chela of *Apterodryinus doddi* n. sp. (holotype) (D), *Apterodryinus weiri* n. sp. (holotype) (E), *Dicondylus costaricanus* n. sp. (holotype) (F).

and part of clubs of femora whitish; antennae distally thickened; antennal segments in following proportions: 8:6,5:15:8:7:5:5:5:5:8; head excavated, shiny, smooth, without sculpture; frontal line complete; occipital carina absent; POL = 1,5; OL = 1,5; OOL = 8; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum dull, sculptured by longitudinal keels, without lateral pointed apophyses (Fig. 55 C); metanotum hollow behind the scutellum, without sculpture, smooth, shiny, with sides protruding (Fig. 55 C); protrusions pointed; meso-metapleural suture distinct and complete; metathorax + propodeum with anterior surface shiny, smooth, without sculpture; posterior surface strongly transversely striate; mesopleura and metapleura almost fully smooth, without sculpture, partly transversely striate; fore tarsal segments in following proportions: 13:3:5:15:24; enlarges claw (Fig. 55 E) with a subapical tooth and a row of 6 lamellae; segment 5 of front tarsus (Fig. 55 E) with two rows of 17 lamellae; apex with a group of approximately 16 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 15°47'S 145°17'E (Moses Ck., 4 Km N by E of Mt. Finnigan, Queensland, Australia)

Typical material: holotype F! in CB

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, T. Weir; the holotype was collected by Berlesate in sieved rain forest litter on October 14-16, 1980.

After the description of the above new species, the following new key to the Australian *Apterodryinus* can be proposed:

- 1 Meso-metapleural suture obsolete; metanotum not hollow behind the scutellum2. *insularis* Olmi
- Meso-metapleural suture very strong and distinct; metanotum hollow behind the scutellum.....2
- 2 Metanotum with sides protruding; protrusions pointed (Fig. 55 C).....4. *weiri* n. sp.
- Metanotum with sides rounded (Figs 55 A, 55 B).....3
- 3 Thorax and propodeum fully reddish-testaceous; segment 1 of front tarsus as long as or longer than segment 4.....1. *notogeicus* Olmi
- Prothorax and scutum reddish-testaceous; scutellum and metathorax + propodeum black; segment 1 of front tarsus shorter than segment 4.....3. *doddi* n. sp.

GENUS *DICONDYLUS*: NEOTROPIC REGION

Dicondylus costaricanus n. sp.

Female: apterous; length 2,87-3,37 mm; body brown, with reddish nuances; mandibles, clypeus and anterior surface of frons testaceous; antennae testaceous; legs testaceous, with clubs of femora and mid and hind coxae darkened; occasionally thorax and propodeum black; occasionally head brown-testaceous; antennae distally thickened; antennal segments in following proportions: 8:5:12:8:6,5:6:5,5:6:6:10; head shiny, excavated, smooth, without sculpture; frontal line complete; occipital carina absent; POL = 1; OL = 1,5; OOL = 8; pronotum not crossed by a transversal furrow, smooth, shiny, without sculpture; scutum slightly granulated, with two lateral pointed apophyses; scutellum shiny, smooth, without sculpture; metanotum shiny, smooth, without sculpture, inclined, not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for numerous transversal striae on posterior surface, on metapleura and on anterior third of the mesopleura; anterior surface of metathorax + propodeum without sculpture; fore tarsal segments in following proportions: 14:3:4:13,5:21; enlarged claw (Fig. 55 F) with a subapical tooth and a row of 4 lamellae; segment 5 of front tarsus (Fig. 55 F) with two rows of 8:2 lamellae; apex with a group of approximately 11-13 lamellae; maxillary palps with 2-3 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 2,56 mm; head black, with mandibles testaceous; antennae testaceous; thorax and propodeum black; abdomen brown; legs yellow; antennae not distally thickened, very slender, with segment 3 more than three times as long as broad (11:1,5); head shiny, hairy, alutaceous; frontal line absent;

occipital carina absent, temples prominent; POL = 6; OL = 2,5; OOL = 2,5; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices slightly shorter than the breadth of the ocelli (2:2,5); scutellum shiny, smooth, finely punctate, without sculpture among the punctures, slightly granulated near scutum; metanotum shiny, smooth, without sculpture; propodeum shiny, with posterior surface strongly rugose; dorsal surface almost smooth, weakly sculptured by irregular striae, with a median longitudinal furrow; fore wing hyaline, without dark transversal bands; radial cell open; radial vein regularly curved with distal part longer than the proximal part (19:13); dorsal process of gonoforceps long and slender (Fig. 56 A); maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

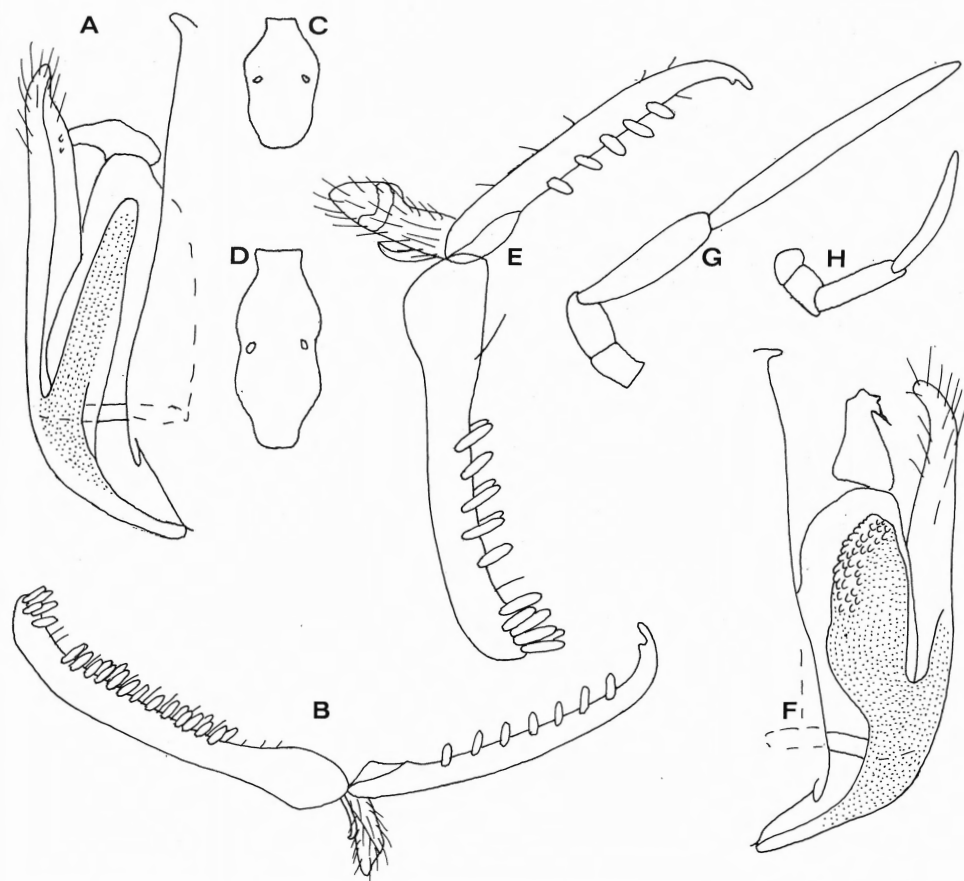


Fig. 56 - Male genitalia of *Dicondylus costaricanus* n. sp. (paratype from Cerro de la Muerte) (A) and *rufus* (Fouts) from Ootua (F); chela of *Dicondylus tahitianus* n. sp. (holotype) (B) and *levis* n. sp. (paratype) (E); scutum and metathorax + propodeum (in dorsal view) of female of *Dicondylus levis* n. sp. (paratype) (C) and *alpinus* (Gourlay) from Wattle Bay (D); maxillary palp of male of *Dicondylus rufus* (Fouts) from Ootua (G) and *perkinsi* (Ashmead) from M. Tantalus (H).

Locus typicus: 09°38'N 83°48'W (Cerro de la Muerte, m. 2800, 20 Km S Empalme, San José Prov., Costa Rica)

Typical material: holotype F! and 4 paratypes (3 FF, 1 M)! in OL; 1 paratype F! in GC.

Distribution: only known from the typical locality.

Notes: the typical series was collected by a malaise trap by Paul Hanson in May-June, 1989 (holotype) and in July-August, 1989 (paratypes).

After the description of the above new species, the following new key to the Neotropical *Dicondylus* can be proposed:

- 1 Scutum with two lateral pointed apophyses; anterior surface of metathorax + propodeum smooth, shiny, without sculpture.....2. *costaricanus* n. sp.
- Scutum without lateral pointed apophyses; anterior surface of metathorax + propodeum dull, strongly transversely striate.....1. *nigrithorax* (Ogloblin)

GENUS *DICONDYLUS*: AUSTRALIAN REGION

Dicondylus tahitianus n. sp.

Female: apterous; length 3,75 mm; head brown, with mandibles, clypeus and anterior region of frons testaceous; antennae testaceous; thorax and propodeum black, with margins of pronotum brown; abdomen black; legs yellow, with hind coxae partly black; antennae distally thickened; antennal segments in following proportions: 9:6:17:8:7:7:7:6:9; head excavated, shiny, without sculpture, except for ocellar triangle and temples granulated; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the ocellar triangle; POL = 1; OL = 2; OOL = 8; pronotum weakly crossed by a transversal impression, shiny, without sculpture; scutum dull, sculptured by longitudinal keels; scutellum shiny, smooth; metathorax + propodeum dull, shiny, smooth; metathorax + propodeum dull, with metanotum reticulate rugose and not hollow behind the scutellum; meso-metapleural suture obsolete; mesopleura reticulate rugose; metapleura transversely striate; anterior and posterior surface of propodeum transversely striate; fore tarsal segments in following proportions: 18:3:5:18:26; enlarged claw (Fig. 56 B) with a subapical tooth and a row of 7 lamellae; segment 5 of front tarsus (Fig. 56 B) with two rows of approximately 18 lamellae; apex with a group of approximately 5 lamellae; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Aorai (m 2000, Tahiti I., Society Islands)

Typical material: holotype F! in B

Distribution: only known from the typical locality.

Notes: the holotype was collected by S.L. Montgomery on September 10-12, 1977.

Dicondylus levis n. sp.

Female: apterous; length 2,37-2,87 mm; testaceous, with petiole black and antennal segments 3-9 brown; occasionally body more or less darkened; antennae distally thickened; antennal segments in following proportions: 7:4:6:4:3:3:3:3,5:7; head excavated, shiny, smooth, without sculpture; occipital carina absent; frontal line complete; POL = 1; OL = 2; OOL = 6; temples distinct; pronotum not crossed by a transversal furrow, shiny, smooth, without sculpture; metanotum transversely

striate, with sides protruding; protrusions rounded (Fig. 56 C); metanotum not hollow behind the scutellum; metathorax + propodeum shiny, without sculpture, except for pleura and posterior surface transversely striate; meso-metapleural suture obsolete; metanotum much broader than propodeum (Fig. 56 C); fore tarsal segments in following proportions: 10:2:3:7:11; enlarged claw (Fig. 56 E) with a subapical tooth and a row of 5 lamellae; segment 5 of front tarsus (Fig. 56 E) with two rows of 3 + 5 lamellae; apex with a group of 7 lamellae; maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 35°22'S 148°50'E (m 850, Blundells Ck., 3 Km E of Piccadilly Circus, A.C.T., Australia)

Typical material: holotype F! and 3 paratypes FF! in CB; 1 paratype F! in OL

Distribution: only known from the typical locality.

Notes: the typical series was collected by a flight intercept/window trough trap by Lawrence, Weir and Johnson in February, 1985 (holotype), February, 1984, February, 1985, April, 1985, January, 1985 (paratypes). This species is very near *D. alpinus* (Gourlay), but smaller and with shape of metathorax + propodeum different.

***Dicondylus rufus* (FOUTS 1935)**

Dicondylus rufus (Fouts) was known only on the basis of female specimens. Recently I examined a series of female specimens and one male from the Marquesas Islands. The following description of the male can be proposed:

Male: fully winged; length 2,18 mm; black; antennae, mandibles and legs brown; antennae not distally thickened with segment 3 four times as long as broad (8:2); antennal segments in following proportions: 4,5:4:8:8:9:8:7:7 (last two segments missing in the only known specimen); head swollen, shiny, without sculpture, except for the frontal region in front of the anterior ocellus, which is granulated; frontal line absent; occipital carina incomplete, only visible behind the posterior ocelli; POL = 5; OL = 2; OOL = 3; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli (1,5:2,5); scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without longitudinal or transversal keels, with a median furrow on the dorsal surface; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (23:8); radial cell closed; dorsal process of gonoforceps shorter than gonoforceps, with apical region showing numerous papillae (Fig. 56 F); maxillary palps with 4 segments; segment 4 approximately twice as long as segment 3 (Fig. 56 G); labial palps with 2 segments; tibial spurs 1, 1, 2.

***Dicondylus dubius* OLM 1984 or *Dicondylus kiefferi* (PERKINS 1906)**

Dicondylus dubius Olmi and *Dicondylus kiefferi* (Perkins) were known only on the basis of female specimens. Recently I examined a male specimen from the Fiji Islands (Vanua Levu I.). It's impossible to know what species it is belonging, if to *dubius* or *kiefferi*. The following description of this male can be proposed: *Male*: fully winged; length 2,93 mm; black; mandibles testaceous; antennae brown, with segments 1-2 testaceous; abdomen brown; legs yellow; antennae not distally thickened, with segment 3 four times as long as broad (12:3); antennal segments

in following proportions: 6:5:12:11:10:10:9:9:8:10; head dull, granulated and punctate; frontal line absent; occipital carina incomplete, only visible behind the ocelli; temples distinct; POL = 7; OL = 2; OOL = 3,5; scutum dull, granulated; notaulices complete, posteriorly joint; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum dull, reticulate rugose without transversal or longitudinal keels, with dorsal surface sculptured by areolae smaller than the areolae of the posterior surface; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (25:12); dorsal process of gonoforceps approximately as long as gonoforceps, slender, with apex pointed (Fig. 57 A); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

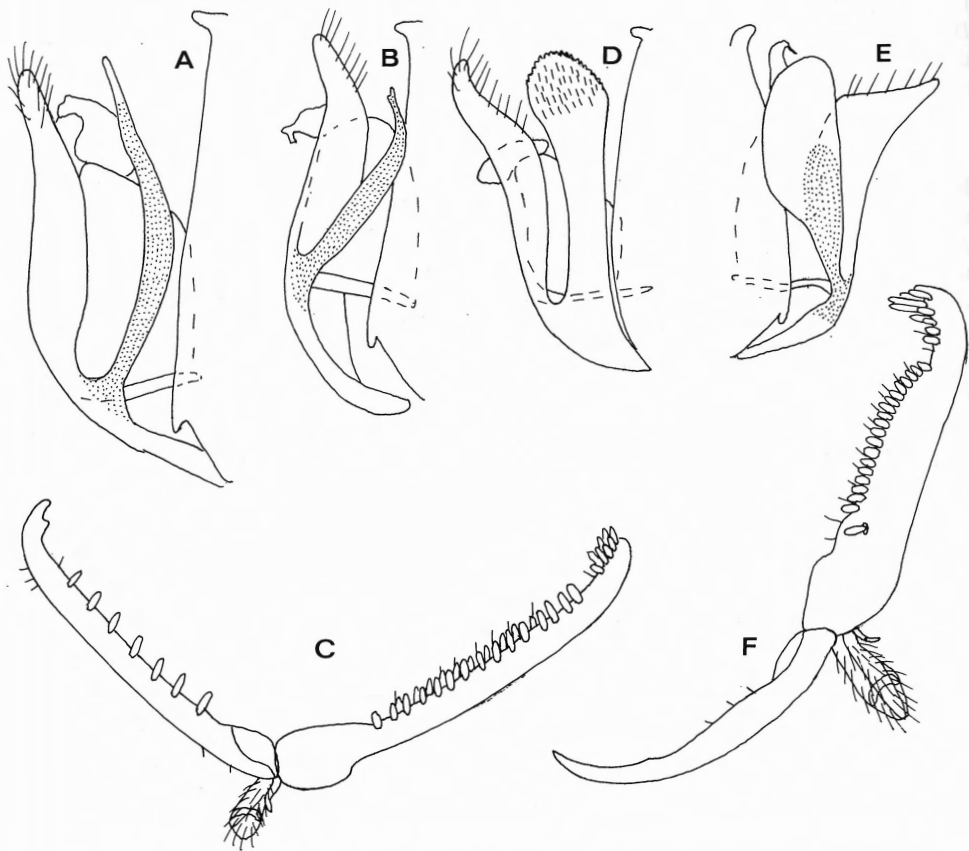


Fig. 57 - Male genitalia of *Dicondylus dubius* Olmi or *kiefferi* (Perkins) from Vanua Levu I. (A), *Dicondylus primitivus* Olmi from Vaemali (B), *Plectrogonatopoides fijianus* n. sp. (paratype from Nadarivatu) (D), *Tetrodontocheles ochreus* Olmi from Djarengol (E); chela of *Plectrogonatopoides fijianus* n. sp. (holotype) (C) and *Tetrodontocheles zolnerowichi* n. sp. (holotype) (F).

Dicondylus primitivus OLM I 1984

Dicondylus primitivus Olmi was known only on the basis of female specimens. Recently I examined a series of female and male specimens of the New Hebrides. The following description of the male can be proposed:

Male: fully winged; length 2,75 mm; head testaceous, with ocellar region brown; antennae brown; thorax and propodeum black or brown; abdomen brown-testaceous; legs yellow; antennae not distally thickened, with segment 3 approximately four times as long as broad (12:3); antennal segments in following proportions: 6:6:12:10:9:9:8,5:8,5:8:11; head dull, granulated; frontal line absent; occipital carina absent; POL = 7; OL = 2; OOL = 1; temples absent; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli (1,8:5); scutellum shiny, punctate, without sculpture among the punctures; metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without transversal or longitudinal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein shorter than proximal part (7:9); radial cell open; dorsal process of gonoforceps long and slender, with apex pointed (Fig. 57 B); maxillary palps with 4 segments, with segment 4 slightly longer than segment 3 (4:3,5); labial palps with 2 segments; tibial spurs 1, 1, 2.

Dicondylus indianus OLM I 1984

Dicondylus indianus Olmi was known only of the Oriental region (INDIA, PHILIPPINES, TAIWAN). Recently I examined a series from AUSTRALIA: Ayr (Queensland), OF! OL!

After the description of the above new species a new key to the Australian *Dicondylus* can be proposed, as follows:

FEMALES

- 1 Metanotum with sides rounded (Fig. 958 A in Olmi 1984).....2
- Metanotum with sides protruding; protrusions rounded or pointed (Figs 961 C, 964 A, 967 A in Olmi 1984).....4
- 2 Thorax and propodeum fully black.....8. *indianus* Olmi
- Thorax and propodeum yellow or reddish-testaceous or brown or partly black; never fully black.....3
- 3 Segment 1 of front tarsus shorter than segment 4 (Fig. 958 D in Olmi 1984).....1. *perkinsi* (Ashmead)
- Segment 1 of front tarsus longer than segment 4.....2. *rufus* (Fouts)
- 4 Pronotum dull, sculptured by irregular and longitudinal keels.....3. *dubius* Olmi
- Pronotum shiny, smooth, without sculpture.....5
- 5 Metanotum with lateral protrusions rounded (Fig. 967 A in Olmi 1984)....6
- Metanotum with lateral protrusions pointed (Fig. 964 A in Olmi 1984)....9
- 6 Metathorax + propodeum shiny, with anterior surface without sculpture; pleura and posterior surface fully or partly transversely striate.....7
- Metathorax + propodeum dull, fully sculptured by strong transversal keels or partly reticulate rugose.....8
- 7 Metanotum much broader than propodeum (Fig. 56 C).....10. *levis* n. sp.

- Metanotum approximately as broad as propodeum (Fig. 56 D).....7. *alpinus* (Gourlay)
- 8 Meso-metapleural suture distinct and complete.....6. *oceanicus* Olmi
- Meso-metapleural suture obsolete.....9. *tahitianus* n. sp.
- 9 Thorax and propodeum reddish-testaceous.....4. *kiefferi* (Perkins)
- Thorax and propodeum black.....5. *primitivus* Olmi

MALES

- 1 Notaulices complete and joint.....2
- Notaulices complete and separated.....4
- 2 Dorsal process of gonoforceps reduced to an inner expansion of the gonoforceps (Fig. 954 in Olmi 1984).....8. *indianus* Olmi
- Dorsal process of gonoforceps well developed (Fig. 969 in Olmi 1984; Fig. 57 A).....3
- 3 Dorsal process of gonoforceps long, large and with apex serrate (Fig. 969 in Olmi 1984).....7. *alpinus* (Gourlay)
- Dorsal process of gonoforceps long, slender and with apex pointed (Fig. 57 A).....3. *dubius* Olmi or 4. *kiefferi* (Perkins)
- 4 Dorsal process of gonoforceps slightly shorter than the gonoforceps (Fig. 57 B).....5. *primitivus* Olmi
- Dorsal process of gonoforceps much shorter than the gonoforceps (Fig. 960 in Olmi 1984; Fig. 56 F).....5
- 5 Segment 4 of maxillary palps approximately twice as long as segment 3 (Fig. 56 G); dorsal process of gonoforceps larger and with papillae on the apical region (Fig. 56 F).....2. *rufus* (Fouts)
- Segment 4 of maxillary palps less than twice as long as segment 3 (Fig. 56 H); dorsal process of gonoforceps smaller and without papillae (Fig. 960 in Olmi 1984).....1. *perkinsi* (Ashmead)

GENUS *PLECTROGONATOPOIDES*: AUSTRALIAN REGION

***Plectrogonatopoides fijianus* n. sp.**

Female: apterous; length 3,25 mm; head black, with mandibles, clypeus and anterior region of frons, more along the orbits, yellow; antennae testaceous; thorax and propodeum reddish; abdomen black; legs testaceous, with extremities of mid and hind femora and tibiae darkened; antennae distally thickened; antennal segments in following proportions: 8:6:20:9:9:7:5:5:5:8; head excavated, dull, granulated; frontal line complete; occipital carina incomplete, only visible behind the ocelli; POL = 1; OL = 2; OOL = 7; pronotum shiny, smooth, without sculpture, crossed by a very weak transversal impression; scutum sculptured by longitudinal striae, with two lateral pointed apophyses; scutellum dull, rugose, very inclined; metathorax + propodeum dull, with sides rounded, strongly reticulate rugose and transversely striate; mesopleura and metapleura transversely striate and reticulate rugose; meso-metapleural suture distinct and complete; fore tarsal segments in following proportions: 15:2,5:6:19:27; enlarged claw (Fig. 57 C) with a subapical tooth and a row of 7 lamellae; segment 5 of front tarsus (Fig. 57 C) with two rows of approximately 25 lamellae; apex with a group of approximately 9 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 2,18-2,81 mm; black; mandibles and clypeus testaceous; antennae brown, with segments 1-2 yellow; abdomen brown; legs yellow; antennae not distally thickened, with segment 3 four times as long as broad (9,5:2,3); antennal segments in following proportions: 5:5:9,5:8:8:7,5:7,5:7,5:7:9,5; head dull, granulated; frontal line absent; occipital carina incomplete, only visible behind the ocelli; POL = 6; OL = 2; OOL = 2,5; temples distinct; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices as long as the breadth of the ocelli (2:2); scutellum shiny, smooth, partly punctate, without sculpture among the punctures; metanotum shiny, smooth, without sculpture; propodeum dull, reticulate rugose, without longitudinal or transversal keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (18:11); dorsal process of gonoforceps approximately as long as gonoforceps, with distal region rounded and with serrate margin (Fig. 57 D); maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 1, 2.

Locus typicus: Lami (Viti Levu I., Fiji Islands)

Typical material: holotype F! and 3 paratypes MM! in B; 4 paratypes MM! in OL.

Distribution: FIJI ISLANDS: Lami (Viti Levu I.), B! OL! Nadarivatu (Viti Levu I.), OL! Trans-insular road (500-550 m, above summit, Viti Levu I.), OL! B!

Notes: the holotype was collected by N.L.H. Krauss in March, 1978.

Plectrogonatopoides fijianus n. sp. is the only known species of *Plectrogonatopoides* known from the Australian region.

GENUS *TETRODONTOCHELYS*: ETHIOPIAN REGION

Tetrodontochelys ochreus OLMI 1984

Tetrodontochelys ochreus Olmi was known only on the basis of female specimens. Recently a series of female and male specimens from Djarengol (Maroua, Cameroon) was examined. The following description of the male can be proposed:

Male: fully winged; length 1,12-1,56 mm; black; mandibles testaceous; antennae brown; legs brown, with tarsi, fore tibiae and articulations testaceous; antennae not distally thickened, with segment 3 less than four times as long as broad (3,5:1,7); antennal segments in following proportions: 2:3:3,5:3,5:3:3:3:3:4,5; head dull, granulated; frontal line absent; occipital carina absent; POL = 4; OL = 2; OOL = 3; vertex of the head with a shiny, ovoidal and without sculpture area between the eyes and the posterior ocelli; this area is surrounded anteriorly by a strong prominent process; scutum, scutellum and metanotum dull, granulated; notaulices incomplete, reaching approximately 0,3 length of scutum; propodeum shiny, not reticulate rugose, with numerous irregular striae; the surface among the striae is unsculptured; fore wing hyaline, without dark transversal bands; dorsal process of gonoforceps long and with apical region broadened (Fig. 57 E); maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

T. ochreus Olmi is now known from the following localities: NAMIBIA: Okahandja, BM! CAMEROONS: Djarengol (Maroua), CR!

GENUS *TETRODONTOCHELYS*: NEOTROPIC REGION

Tetrodontochelys zolnerowichi n. sp.

Female: apterous; length 2,81 mm; testaceous, with petiole black; antennae distal-

ly thickened; antennal segments in following proportions: 7:4,5:9:5:4,5:4,5:4:4:3,5:6; head excavated, shiny, weakly granulated; frontal line complete; occipital carina absent; POL = 2; OL = 1; OOL = 6; temples distinct; pronotum crossed by a very weak transversal impression, shiny, weakly granulated; scutum dull, granulated, without lateral pointed apophyses; metanotum shiny, without sculpture, inclined; meso-metapleural suture obsolete; metathorax + propodeum shiny, very weakly granulated, with numerous transversal striae on pleura and posterior surface; fore tarsal segments in following proportions: 11:2:3:10:16; enlarged claw (Fig. 57 F) without a subapical tooth, with a small tooth at the end of a longitudinal furrow and with a row of 2 peg-like hairs and 1 bristle; segment 5 of front tarsus (Fig. 57 F) with two rows of 1 (proximal) + 19 lamellae; apex with a group of approximately 12 lamellae; maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 1,62 mm; head black, with mandibles testaceous; antennae brown; thorax and propodeum black; abdomen brown; legs brown, with articulations and tarsi testaceous; antennae not distally thickened, with segment 3 twice as long as broad (4:2); antennal segments in following proportions: 3:3:4:3,5:4:3,5:3,5:3,5:3,5:5; head dull, granulated; frontal line absent; occipital carina absent; POL = 5; OL = 2; OOL = 2; temples distinct; vertex with a shiny ovoidal area between the eyes and the posterior ocelli; scutum granulated, dull; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum shiny, almost fully smooth, irregularly striate; fore wing hyaline, without dark transversal bands; radial vein regularly curved; genitalia in fig. 58 A; maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Locus typicus: 1,1 mi. W El Tule (5400', Oaxaca, Mexico)

Typical material: holotype F! in TE; 1 paratype M! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of one of the collectors of the typical series, Mr. Zolnerowich; the typical series was collected by Woolley and Zolnerowich on July 17, 1987.

After the description of the above new species, the following new key to the Neotropic *Tetrodontochelys* can be proposed:

FEMALES

- 1 Posterior surface of metathorax + propodeum not transversely striate.....2. *neotropicus* Olmi
- Posterior surface of metathorax + propodeum fully transversely striate..2
- 2 Thorax and propodeum black.....1. *caraibicus* Olmi
- Thorax and propodeum testaceous.....3. *zolnerowichi* n. sp.

Only the male of *T. zolnerowichi* n. sp. is known.

GENUS *TETRODONTOCHELYS*: AUSTRALIAN REGION

***Tetrodontochelys anomalus* (PERKINS 1912)**

Tetrodontochelys anomalus (Perkins) was known only on the basis of female

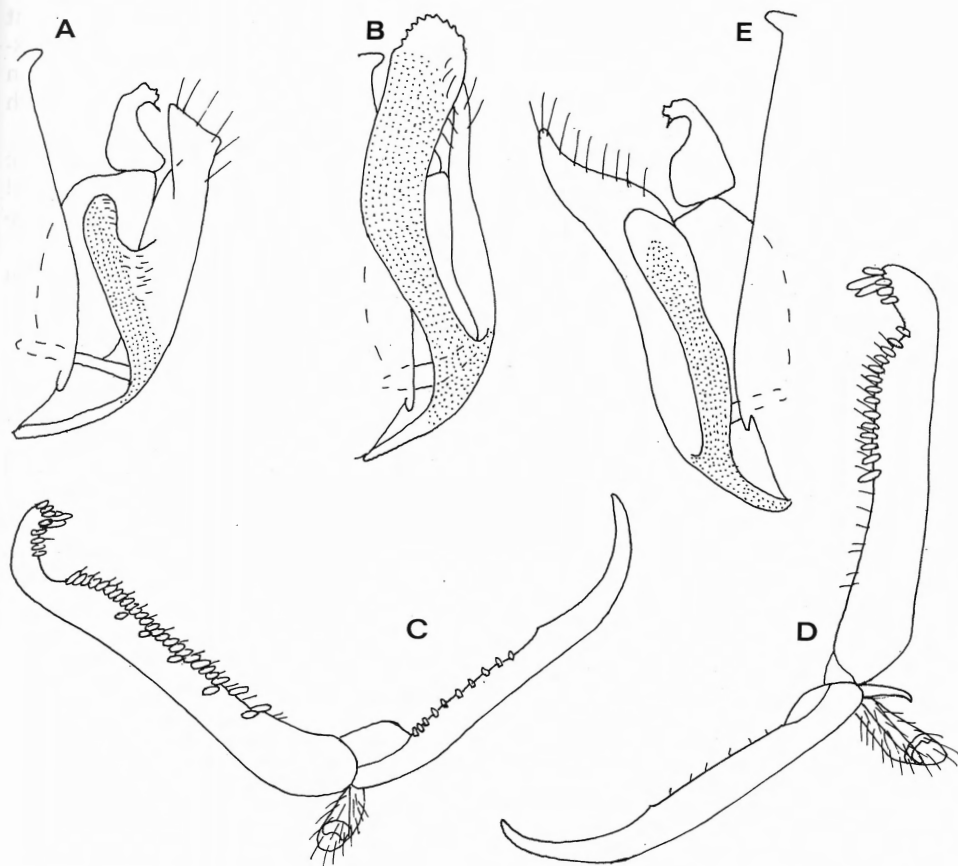


Fig. 58 - Male genitalia of *Tetrodontocheilus zolnerowichi* n. sp. (paratype) (A), *Tetrodontocheilus anomalus* (Perkins) from Cooktown (B) and *Gonatopus lycius* n. sp. from Torre Civetta (E); chela of *Trichogonatopus goiasensis* n. sp. (holotype) (C) and *Gonatopus lycius* n. sp. (holotype) (D).

specimens. Recently a series of female and male specimens from 1 Km W Cooktown (Queensland, Australia) was examined. The following description of the male can be proposed:

Male: fully winged; length 1,31-1,87 mm; head brown or black, with frons, clypeus and mandibles testaceous or whitish; antennae brown-testaceous; ventral side of the head whitish; thorax, propodeum and abdomen brown or black; legs brown-testaceous, with hind coxae and hind clubs of femora darkened; antennae not distally thickened, with segment 3 approximately three times as long as broad (6:2); antennal segments in following proportions: 4:4:6:5:5:5:5:5:6,5; head shiny, granulated; frontal line absent; occipital carina absent; POL = 5; OL = 2; OOL = 2,5; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, finely punctate, without sculpture among the punctures; propodeum shiny, smooth, without sculp-

ture, except for the sides very weakly faintly rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein approximately as long as proximal part (9:9); dorsal process of gonoforceps broadened and with papillae on the distal apex (Fig. 58 B); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Tetrodontochelys anomalus (Perkins) is now known of the following localities: FIJI ISLANDS, B! HAWAIIAN ISLANDS: Oahu, WA! B! OL! Palolo (Oahu), WA! Hopaunau (Hawaii), B! AUSTRALIA: 15°28'S 145°15'E (1 Km W Cooktown, Queensland), CB! Mossman (N Queensland), CB!

The male of *T. anomalus* (Perkins) is the only known male of the Australian *Tetrodontochelys*.

GENUS *TRICHOGONATOPUS*: NEOTROPIC REGION

Trichogonatopus goiasensis n. sp.

Female: apterous; length 5,00-7,18 mm; head black, with mandibles, clypeus and a narrow region of frons near clypeus testaceous; antennae brown, with segments 7-10 and ventral side of segments 1-2 testaceous; thorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments in following proportions: 10:9:34:21:15:12:11:10:9:11; head dull, excavated, granulated; frontal line complete; occipital carina absent; temples distinct; POL = 2,5; OL = 2,5; OOL = 13; pronotum dull, granulated, crossed by a very weak transversal impression; scutum dull, granulated, with two lateral pointed apophyses; scutellum dull, granulated, only partly visible; metathorax + propodeum dull, granulated, with a narrow longitudinal unsculptured smooth stripe on anterior surface; metanotum inclined, not hollow behind the scutellum; pleura not transversely striate; posterior surface of propodeum only with a few transversal striae near apex; stalk between pronotum and metathorax + propodeum very long and slender, composed of scutum, scutellum and metanotum, approximately as long as metathorax + propodeum; fore tarsal segments in following proportions: 30:3:8:34:46; enlarged claw (Fig. 58 C) without subapical tooth, with a small tooth at the end of a longitudinal furrow and with a row of 10 peg-like hairs; segment 5 of front tarsus (Fig. 58 C) with two rows of 5 + 20 lamellae; apex with a group of approximately 16 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Fazenda Aceiro (Jatai, Goiás, Brazil)

Typical material: holotype F! and 1 paratype F! in SO; 1 paratype F! in OL.

Distribution: BRAZIL: Fazenda Aceiro (Jatai, Goiás), SO! Barra do Tapirapé (Mato Grosso), SO! OL!

Notes: the holotype was collected by an expedition of the Department of Zoology, University of Sao Paulo, on October 29, 1962; the paratypes (from Barra do Tapirapé) were collected by B. Malkin on January 1-13, 1963 and on January 25-27, 1964.

After the description of the above new species, the following new key to the females of the Neotropic *Trichogonatopus* can be proposed:

- 1 Meso-metapleural suture distinct.....1. *richardsi* Olmi
- Meso-metapleural suture obsolete.....2
- 2 Enlarged claw with a row of teeth in the proximal region of the inner side

- (Fig. 1022 in Olmi 1984; Fig. 23 in Olmi 1986).....3
 — Enlarged claw without rows of teeth in the proximal region of the inner side (Figs 1024, 1025 in Olmi 1984; Fig. 58 C).....4
 3 Enlarged claw without lamellae (Fig. 1022 in Olmi 1984)..2. *hispidus* Olmi
 — Enlarged claw with a row of lamellae (Fig. 23 in Olmi 1986).....
8. *fiorii* Olmi
 4 Stalk between pronotum and metathorax + propodeum very long, slender, composed of scutum, scutellum and metanotum, as long as metathorax + propodeum (Fig. 1023 A in Olmi 1984).....5
 — Stalk between pronotum and metathorax + propodeum very short and broad (Fig. 1027 in Olmi 1984); metathorax + propodeum approximately two-three times as long as stalk (Fig. 1027 in Olmi 1984).....6
 5 Metathorax + propodeum shiny, smooth, except for strong striae on pleura and posterior surface of propodeum.....3. *palliditarsis* (Cameron)
 — Metathorax + propodeum dull, almost fully granulated; pleura without striae; posterior surface of propodeum only with a few transversal striae near apex..... 9. *goiasensis* n. sp.
 6 Enlarged claw with a small tooth near apex or without tooth (Fig. 1025 in Olmi 1984).....4. *raptor* (Fenton)
 — Enlarged claw with a small tooth far from the apex (Figs 1026, 1028, 1029 in Olmi 1984).....7
 7 Head black, at most with part of clypeus and mandibles reddish-testaceous5. *albomarginatus* (Cameron)
 — Head fully or mostly reddish or reddish-testaceous.....8
 8 Abdomen shiny, without sculpture; body slender (Fig. 1027 in Olmi 1984)6. *neotropicus* Olmi
 — Abdomen dull, granulated; body less slender.....7. *rubriceps* Kieffer

GENUS *GONATOPUS*: PALAEARCTIC REGION

Gonatopus lycius n. sp.

Female: apterous; length 2,31-2,75 mm; head fully testaceous or with a brown ocellar spot; prothorax and scutum fully testaceous, or with brown spots on propectus and dorsal side of pronotum; scutellum, mesopleura, metathorax and propodeum black; petiole black; abdomen testaceous, with brown spots; antennae black, with segments 1, 2 and part of 3 testaceous, segment 10 and part of 9 whitish; legs fully testaceous, or with clubs of fore femora brown; antennae distally thickened; antennal segments in following proportions: 8:5:13:8:7:6:5,5:5:5:8; head excavated, shiny; frontal line complete; occipital carina absent; POL = 1,5; OL = 2; OOL = 7 temples distinct, but short, less than 0,5 times as long as eyes; pronotum shiny, crossed by a strong transversal furrow, smooth, without sculpture; metanotum inclined, not hollow behind the scutellum, with sides rounded; metathorax + propodeum shiny, without sculpture; posterior surface of metathorax + propodeum, mesopleura and metapleura transversely striate; anterior surface of metathorax + propodeum smooth, without sculpture; fore tarsal segments in following proportions: 11:2:3,5:13:18; enlarged claw (Fig. 58 D) without subapical tooth, with a small tooth at the end of a longitudinal furrow and with 7 peg-like hairs; segment 5 of front tarsus (Fig. 58 D) with a row of 15 lamellae located

in the distal half of the segment, without proximal serrate inner region; apex with a group of at least 7 lamellae; maxillary palps with 4-5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 2 mm; black; mandibles testaceous; legs black, with articulations, fore tibiae and tarsi testaceous; antennae not distally thickened, with segment 3 less than three and a half times as long as broad (9:2,7); antennal segments in following proportions: 5:4,5:9:9:8:8:8:7:7:9; head dull, granulated and rugose; frontal line absent; occipital carina absent; POL = 7; OL = 3; OOL = 4; temples distinct; vertex with two shiny, ovoidal areas between the eyes and the posterior ocelli; these areas are not surrounded by carinas; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than antennal segment 2 (2,5:4,5) and shorter than the breadth of the ocelli (2,5:3); scutellum dull, granulated; metanotum shiny, without sculpture; propodeum dull, granulated and rugose, without keels; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (14:9); dorsal process of gonoforceps short and slender (Fig. 58 E); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Locus typicus: Antalya (Turkey)

Typical material: holotype F! and 8 paratypes (7 FF, 1 M)! in OL.

Hosts: in Turkey *Exitianus capicola* (Stål) (J. Dlabola det.) and *Recilia schmidtgeni* (Wagner) (J. Dlabola det.) (*Cicadellidae*); in Italy not identified *Cicadellidae*.

Distribution: ITALY: Torre Civetta (Punta Ala, Grosseto), OL! TURKEY: Antalya, OL! Aksakal (Balikesir Distr.), OL!

Notes: the holotype was reared by M. Olmi from an adult of *Recilia schmidtgeni* (Stål) collected on July 9, 1987; 4 female paratypes from Antalya were reared by M. Olmi from nymphs of *Exitianus capicola* (Wagner) collected on July 9, 1987; a female paratype from Antalya was reared by M. Olmi from a nymph of *Exitianus capicola* (Wagner) collected on July 30, 1988; a female paratype from Aksakal was reared by M. Olmi from an adult of *Recilia schmidtgeni* (Stål) collected on August 2, 1987; a female paratype from Torre Civetta was reared by M. Olmi from a not identified Cicadellid collected on July 22, 1989; a male paratype from Torre Civetta was reared by M. Olmi from a not identified Cicadellid collected on July 15, 1987.

Gonatopus visticus OLMI 1984

Gonatopus visticus Olmi was known only on the basis of female specimens. Recently a series of female and male specimens was reared by me in the Canary Islands (Caleta de Interian, Garachico, Tenerife I.) from *Balclutha pellucens* Horvát (W. della Giustina and R. Remane det.: many thanks to them for the identification). The following description of the male can be proposed:

Male: fully winged; length 2,5 mm; black, with articulations and tarsi of the legs testaceous; antennae not distally thickened, with segment 3 approximately six times as long as broad (9:1,5); antennal segments in following proportions: 5:5:9:9:8:8:7:7:6,5:9; head shiny, granulated, except for a small without sculpture area in front of the anterior ocellus; frontal line absent; occipital carina absent; POL = 6,5; OL = 2; OOL = 2; breadth of the ocelli: 4; scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum shiny, almost fully without sculpture, except for a small granulated area in the dorsal surface near

longitudinal furrow; fore wing hyaline, without dark transversal bands; radial cell open; radial vein regularly curved; dorsal process of gonoforceps long and slender (Fig. 59 A); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

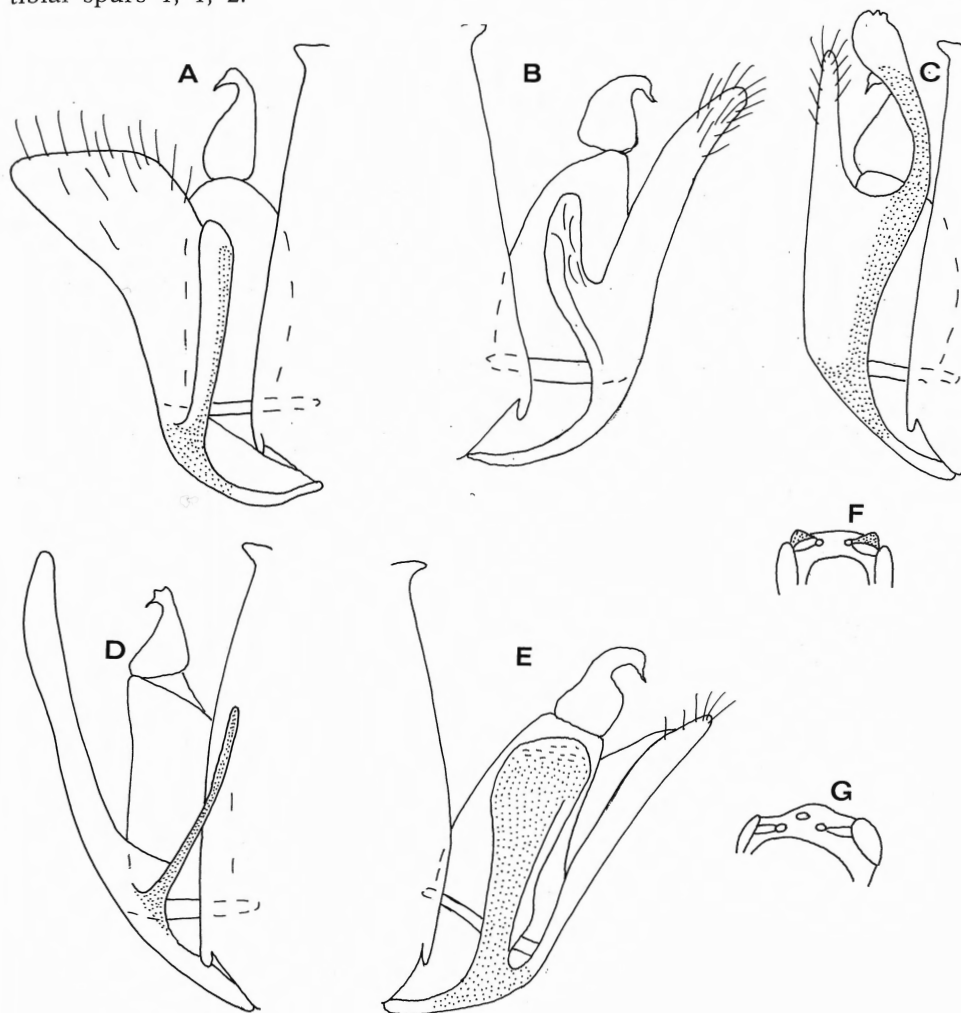


Fig. 59 - Male genitalia of *Gonatopus vistosus* Olmi from Caleta de Interian (A), *horvathi* Kieffer from Cavaniés (B), *albolineatus* Kieffer from Torre Civetta (C) *formicarius* Ljungh from Kullaberg (D), *brunneicollis* (Richards) from Sidi Benziane (E); vertex of head (seen from occiput) of male of *Gonatopus lunatus* Klug from Platja d'Aro (F) and *sepsoides* Westwood from Montech (G).

***Gonatopus horvathi* KIEFFER 1906**

Gonatopus horvathi Kieffer was known only on the basis of female specimens. Recently a series of female and male specimens from Cavaniés (Cahors, Lot, France) was examined. This material was reared by Mr. Hubert Tussac; Many

thanks to Mr. Hubert Tussac for the loan of these specimens. The following description of the male can be proposed:

Male: fully winged; length 2,62-3,12 mm; black; mandibles testaceous; antennae brown; legs brown, with trochanters, articulations, stalks of femora, tibiae and tarsi testaceous; antennae not distally thickened, with segment 3 at least four and a half times as long as broad (from 4,5 to 5 times); antennal segments in following proportions: 5:4:10:10:9:9:8:7:7:10; head dull, granulated; frontal line complete; occipital carina absent; POL = 6; OL = 3; OOL = 2; breadth of the ocelli approximately twice as long as OOL (4:2); scutum dull, granulated; notaulices incomplete, reaching approximately 0,5 length of scutum; scutellum and metanotum shiny, smooth, without sculpture; propodeum shiny, smooth, without sculpture; fore wing hyaline, without dark transversal bands; radial vein curved; distal part of radial vein longer than proximal part (23:10); genitalia in fig. 59 B; maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Gonatopus albolineatus KIEFFER 1905

= *Gonatopus bernardi* (Picard 1932): 29; n. syn.

Recently I reared from *Opsius lethierryi* Wagner at Torre Civetta (Punta Ala, Grosseto, Italy) a series of female and male specimens of *Gonatopus albolineatus* Kieffer and *bernardi* (Picard). The only difference between the two species is the colour: the body is almost fully black in *bernardi*; it's variable from fully whitish to reddish-testaceous in *albolineatus*. The male specimens of the Torre Civetta population were all alike, with the same genitalia. I think so that the two species are synonyms.

Previously the male of *Gonatopus albolineatus* Kieffer was not known; I can propose the following description:

Male: fully winged; length 2 mm; black; mandibles, clypeus, fore legs, articulations of mid and hind legs (except for last segments) testaceous; antennae brown; antennae not distally thickened, with segment 3 less than four times as long as broad (5:2); antennal segments in following proportions: 5:4,5:5:5:5:5:5:4:6; head dull, granulated; frontal line absent; occipital carina absent; POL = 6; OL = 3; OOL = 2; temples distinct; scutum dull, granulated; notaulices incomplete, reaching approximately 0,6 length of scutum; scutellum and metanotum shiny, without sculpture; propodeum shiny, with dorsal surface sculptured by longitudinal keels; dorsal surface with a median longitudinal furrow; posterior surface smooth, without sculpture; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (12:6); dorsal process of gonoforceps approximately as long as penis (Fig. 59 C); maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 1, 2.

Gonatopus lunatus KLUG 1810

= *Gonatopus vollenhoveni* (Olmi and Currado 1974): 207; n. syn.

Gonatopus lunatus Klug and *vollenhoveni* (Olmi and Currado) are very near species. The only difference is the presence of a deep median longitudinal furrow in the disc of metathorax + propodeum in *vollenhoveni*; this furrow is absent in *lunatus*, where only a track of furrow is visible.

I examined again the holotype of *G. vollenhoveni* in GE and I came to the conclusion that the two species are synonyms. Probably *G. vollenhoveni* is only

a variety of *G. lunatus*, without systematic value. One only specimen of *G. vollenhoveni* is known: the holotype.

***Gonatopus formicarius* LJUNGH 1810**

Gonatopus formicarius Ljungh was known only on the basis of female specimens. Recently a series of female and male specimens from Sweden was examined. The following description of the male can be proposed:

Male: fully winged; length 1,56-1,87 mm; black; mandibles testaceous; antennae brown; legs brown, with fore tibiae and fore tarsi yellow; antennae not distally thickened, with segment 3 less than three and a half times as long as broad (6:2); antennal segments in following proportions: 5:4:6:6:6:6:5:5:6:5,5:8; head shiny, granulated; frontal line absent; occipital carina absent; POL = 5; OL = 2,5; OOL = 4; region of vertex between eyes and posterior ocelli without carinas; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices often approximately as long as the breadth of the ocelli; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum dull, reticulate rugose; dorsal region of propodeum with a median longitudinal furrow; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (12:7); dorsal process of gonoforceps shorter than gonoforceps, slender and pointed, with a membranous band at the distal apex (Fig. 59 D); maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

***Gonatopus brunneicollis* (RICHARDS 1972)**

Gonatopus brunneicollis (Richards) was known only on the basis of female specimens. Recently I reared in Morocco (Sidi Benziane, 70 Km S Agadir) from not identified Cicadellids a series of female and male specimens. The following description of the male can be proposed:

Male: fully winged; length 1,81 mm; head black, with mandibles testaceous; thorax, propodeum and abdomen black; legs brown, with tarsi, articulations and fore tibiae testaceous; antennae not distally thickened, with segment 3 less than three and a half times as long as broad (5:2); antennal segments in following proportions: 4:4:5:5:5:5:5:5:4:6,5; head dull, granulated; occipital carina absent; frontal line incomplete, only visible in the anterior half of the frons; POL = 5; OL = 2,5; OOL = 3; vertex of the head with a shiny, ovoidal area between eyes and posterior ocelli; temples distinct; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than antennal segment 2 (5:2); scutellum shiny, weakly granulated; metanotum smooth, shiny, without sculpture; propodeum shiny, smooth, without sculpture or with very weak irregular striae; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (12:5); radial cell open; dorsal process of gonoforceps long and with apex broadened (Fig. 59 E); maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

***Gonatopus sepsoides* WESTWOOD 1833**

- = *Gonatopus barbatellus* Richards 1939: 213; n. syn.
- = *Gonatopus campestris* Ponomarenko 1965: 628; n. syn.
- = *Gonatopus rhaensis* Ponomarenko 1970: 431; n. syn.

The above synonymies are proposed for the following motivations:

1) *Gonatopus barbatellus* Richards.

The only differences between *Gonatopus sepsoides* Westwood and *barbatellus* Richards were the colour of the scutum (black in *sepsoides*, fully or partly yellow in *barbatellus*) and the sculpture of the anterior surface of metathorax + propodeum (granulated in *barbatellus*, without sculpture in *sepsoides*).

Recently I reared in Turkey (nr. Gömbe, Antalya Distr.) from *Psammotettix striatus* (L.) a mixed population of *Gonatopus sepsoides* and *barbatellus*. Whereas the female specimens showed the characteristic differences between the two species, the male specimens were all alike, with the same genitalia.

I think so that the two species are synonyms.

2) *Gonatopus campestris* Ponomarenko.

The only difference between *Gonatopus campestris* Ponomarenko and *sepsoides* Westwood was the presence (in *G. campestris*) of a median longitudinal furrow in the disc of metathorax + propodeum. This furrow was absent in *G. sepsoides*.

Recently I reared in Viterbo (Italy) from *Psammotettix striatus* (L.) a population of *Gonatopus sepsoides*, where some specimens had the above median longitudinal furrow and some specimens had not this furrow. The male specimens were all alike, with the same genitalia.

The presence or absence of the median longitudinal furrow is so only a case of variability, without systematic value. I think so that the two species are synonyms.

3) *Gonatopus rhaensis* Ponomarenko.

The only differences between *Gonatopus sepsoides* Westwood and *rhaensis* Ponomarenko were the presence (in *rhaensis*) of the following characters: track of median longitudinal furrow in the disc of metathorax + propodeum; presence of a proximal serrate region in the inner margin of front tarsus 5; segment 1 of front tarsus slightly shorter than segment 4; segment 5 of front tarsus with 2 rows of lamellae extending beyond 0,5 length of the segment.

In the last years I examined numerous material of *Gonatopus sepsoides* from different localities and more recently a mixed population from Ganges (Hérault, France). The study of this material showed that in the populations of *G. sepsoides* there is a great variability. Some specimens can have the characters of *G. rhaensis*.

I think so that the two species are synonyms.

After the description of *Gonatopus lycius* n. sp., the key to the females of the Palaearctic *Gonatopus* must be modified. The new species is near *Gonatopus mongolicus* Ponomarenko. In the key proposed by Olmi (1984) *G. lycius* must be inserted at the number 39, near *G. mongolicus*, as follows:

- 39 Anterior surface of metathorax + propodeum shiny, smooth, without sculpture 39'
- Anterior surface of metathorax + propodeum dull, granulated..... 40
- 39' Metanotum hollow behind the scutellum..... 27. *mongolicus* Ponomarenko
- Metanotum not hollow behind the scutellum..... 38. *lycius* n. sp.

After the above description of males of European *Gonatopus*, the following new key to the males of the Palaearctic *Gonatopus* can be proposed:

- 1 Antennal segment 3 four or more than four times as long as broad..... 2
- Antennal segment 3 less than three and a half times as long as broad... 3
- 2 Propodeum almost fully without sculpture, only granulated in the dorsal sur

- face near the longitudinal furrow; dorsal process of gonoforceps straight (Fig. 59 A).....1. *vistosus* Olmi
- Propodeum fully without sculpture; dorsal process of gonoforceps curved (Fig. 59 B).....2. *horvathi* Kieffer
- 3 Notaulices incomplete.....10. *albolineatus* Kieffer
- Notaulices complete.....4
- 4 Propodeum fully smooth and without sculpture.....30. *brunneicollis* (Richards)
- Propodeum fully reticulate rugose, dull.....5
- 5 Minimum distance between the notaulices as long as the length of the antennal segment 2.....5. *distinguendus* Kieffer
- Minimum distance between the notaulices much shorter than length of antennal segment 2.....6
- 6 Head with a very prominent apophysis on the sides of the posterior ocelli (Fig. 59 F); maxillary palps with 4 segments.....18. *lunatus* Klug
- Head without a very prominent apophysis on the sides of the posterior ocelli (Fig. 59 G); maxillary palps with 4-5 segments.....7
- 7 Dorsal process of gonoforceps transverse and with a membranous band visible in the proximal and distal region (Fig. 1095 in Olmi 1984).....32. *sepsoides* Westwood
- Dorsal process of gonoforceps not transverse and with a membranous band located in the distal apex (Fig. 1049 in Olmi 1984; Figs 58 E, 59 D).....8
- 8 Dorsal process of gonoforceps broader, less slender (Fig. 58 E).....38. *lycius* n. sp.
- Dorsal process of gonoforceps very slender (Fig. 1049 in Olmi 1984; Fig. 59 D).....9
- 9 Dorsal process of gonoforceps short (Fig. 59 D); propodeum with areolae smaller.....26. *formicarius* Ljungh
- Dorsal process of gonoforceps long (Fig. 1049 in Olmi 1984); propodeum with areolae wider.....6. *striatus* Kieffer

GENUS *GONATOPUS*: ETHIOPIAN REGION

Gonatopus paulyi n. sp.

Female: apterous; length 4 mm; head black, with clypeus and mandibles testaceous; antennae black, with segments 1-2 testaceous; thorax, propodeum and abdomen black; legs black, with tarsi, part of fore coxae, part of fore trochanters and fore articulations testaceous; antennae distally thickened; antennal segments in following proportions: 10:7:24:17:13:10:9,5:9:8:11; head excavated, shiny, strongly sculptured by numerous longitudinal keels on frons, vertex and part of the occiput; frontal line complete; occipital carina absent; POL = 2; OL = 2; OOL = 9; pronotum crossed by a strong transversal impression, shiny, partly granulated and partly without sculpture, with some transversal keels on the sides; scutum dull, fully reticulate rugose, with two lateral pointed apophyses; scutellum short, inclined, rugose; metanotum inclined, reticulate rugose; metathorax + propodeum dull, fully reticulate rugose; posterior surface of propodeum reticulate rugose, with a few transversal striae near posterior apex; pleura reticulate rugose, not transversely striate; meso-metapleural suture obsolete; fore tarsal segments in following proportions: 16:3:6:25:37; enlarged claw (Fig. 60 A) without

a subapical tooth, with a row of 9 lamellae + 1 hair; segment 5 of front tarsus (Fig. 60 A) with proximal region of inner side serrate, with two rows of 2 (proximal) + 20 lamellae; apex with a group of approximately 20 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

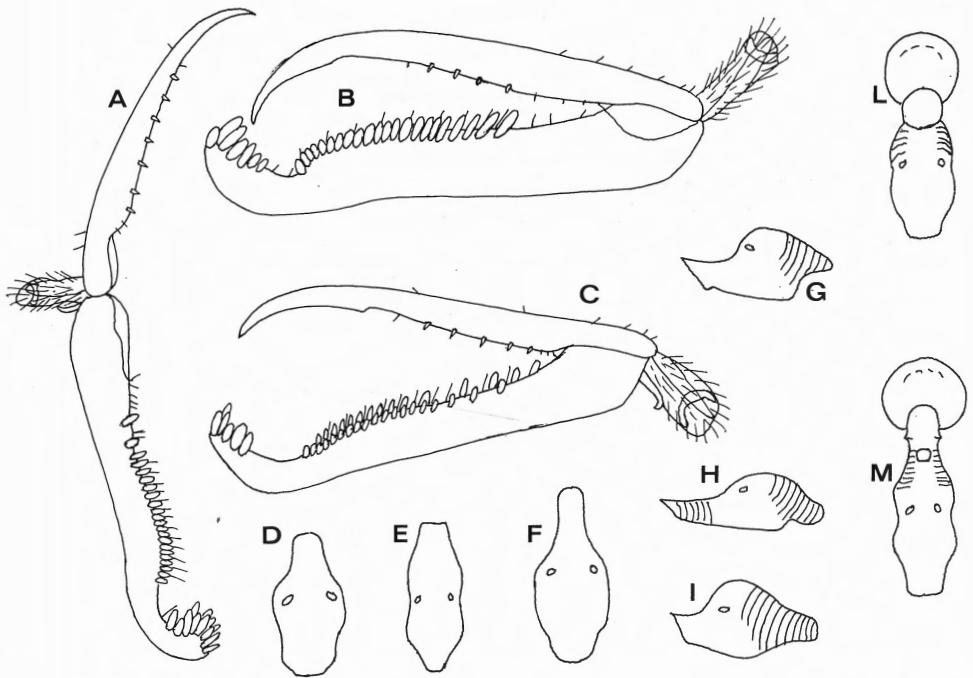


Fig. 60 - Chela of *Gonatopus paulyi* n. sp. (holotype) (A), *besucheti* n. sp. (holotype) (B), *achterbergi* n. sp. (holotype) (C); scutum and metathorax + propodeum (in dorsal view) of female of *Gonatopus acer* n. sp. (holotype) (D), *onorei* Olmi (holotype) (E), *guayasensis* n. sp. (holotype) (F); scutum and metathorax + propodeum (in lateral view) of female of *Gonatopus acer* n. sp. (holotype) (G), *onorei* Olmi (holotype) (H), *guayasensis* n. sp. (holotype) (I); pronotum and metathorax + propodeum (in dorsal view) of female of *Gonatopus cavazzutii* Olmi (paratype) (L) and *flavipes* Olmi (holotype) (M).

Male: unknown

Locus typicus: Donguila (Gabon)

Typical material: holotype F! in GX

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Alain Pauly; the holotype was collected on *Borreria verticillata* on January 5, 1985.

Gonatopus paulyi n. sp. must be inserted in the key to the females of the Ethiopian *Gonatopus* (Olm 1984: p. 1588) at the number 8, near *G. pilosipes* Brues, *guigliae* (Benoit) and *seyrigi* (Ceballos), as follows:

8 Scutum and metathorax + propodeum fully reticulate rugose.....

-35. *paulyi* n. sp.
— Scutum and metathorax + propodeum differently sculptured (granulated or without sculpture or with longitudinal keels or punctate).....8'
8' Head less excavated (Fig. 1102 A in Olmi 1984).....4. *pilosipes* Brues
— Head more excavated (Fig. 1102 B in Olmi 1984).....9

GENUS *GONATOPUS*: ORIENTAL REGION

Gonatopus besucheti n. sp.

Female: apterous; length 3,5 mm; head black, with mandibles, clypeus and front part of vertex testaceous; antennae black, with segments 1-2 testaceous; thorax and propodeum black, with scutum yellow, apex of propodeum reddish and light nuances on metanotum; abdomen black; legs brown, with tarsi testaceous; antennae distally thickened; antennal segments in following proportions: 8:6:11:7:6:5:5:4,5:6; head shiny, excavated, without sculpture; frontal line complete; occipital carina incomplete, only visible behind the ocelli; POL = 1; OL = 2; OOL = 8; pronotum crossed by a strong transversal furrow, shiny, without sculpture; scutum and metanotum laterally without pointed apophyses; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for posterior surface transversely striate; metanotum inclined, not hollow behind the scutellum; mesopleura and metapleura without sculpture, not transversely striate; fore tarsal segments in following proportions: 14:3:5:17:24; enlarged claw (Fig. 60 B) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 7 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 60 B) with a row of 20 lamellae; apex with a group of approximately 10 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Lawarai Pass (m. 3000, Dir, Pakistan)

Typical material: holotype F! in GV

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Claude Besuchet; the holotype was collected on May 21, 1983.

Gonatopus achterbergi n. sp.

Female: apterous; length 5,31 mm; head brown, with clypeus, mandibles and genae testaceous; antennae brown, with segments 6-8 and ventral side of segments 1-2 testaceous; thorax and propodeum reddish-testaceous, with dorsal regions of pronotum and propodeum black; scutellum black; anterior region of scutum darkened; abdomen brown; legs testaceous, with part of coxae, part of clubs of femora, extremities of mid and hind tibiae, extremities of mid and hind stalks of femora, external side of fore tibiae brown; antennae distally thickened; antennal segments in following proportions: 9:6:20:12:10:9:7:7:5,5:8; head excavated, shiny, without sculpture, except for numerous longitudinal striae on the frons; frontal line complete; occipital carina absent; POL = 1,5; OL = 2; OOL = 9; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum shiny, smooth, without sculpture, with two lateral pointed apophyses; scutellum inclined, shiny, smooth, without sculpture; metanotum shiny, smooth, without sculp-

ture, hollow behind the scutellum; meso-metapleural suture thin, distinct and complete; metathorax + propodeum shiny, smooth, without sculpture, except for numerous transversal striae on posterior half of posterior surface; metapleura smooth, not transversely striate; mesopleura almost fully smooth and without sculpture, only with a medial region transversely striate; disc of metathorax + propodeum with a deep median furrow; anterior surface of metathorax + propodeum very inclined; fore tarsal segments in following proportions: 17:3:6:22:31; enlarged claw (Fig. 60 C) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 8 peg-like hairs + 1 hair; segment 5 of front tarsus (Fig. 60 C) with two rows of 36 lamellae; apex with a group of approximately 10 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Kinabalu Park H. Q. (m 1700, N Sabah, Malaysia)

Typical material: holotype F! in LE

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, C. van Achterberg; the holotype was collected by a malaise trap on March 8-11, 1987.

Gonatopus achterbergi n. sp. must be inserted in the key to the females of the Oriental *Gonatopus* (Olm 1987c, pp. 67-69) at the number 5, near *G. philippinus* Olmi and *G. daunus* Olmi, as follows:

- 5 Anterior surface of metathorax + propodeum less inclined (Fig. 1152 A in Olmi 1984); metathorax + propodeum with median furrow less deep.....11. *philippinus* Olmi
- Anterior surface of metathorax + propodeum more inclined (Fig. 1150 A in Olmi 1984); metathorax + propodeum with median furrow deeper.....5'
- 5' Labial palpi with 2 segments.....10. *daunus* Olmi
- Labial palpi with 3 segments.....27. *achterbergi* n. sp.

Gonatopus besucheti n. sp. must be inserted in the key to the females of the Oriental *Gonatopus* (Olm 1987c, pp. 67-69) at the number 24, near *G. plebeius* (Perkins) and *G. perpolitus* (Perkins), as follows:

- 24 Maxillary palps with 6 segments; species larger.....26. *besucheti* n. sp.
- Maxillary palps composed of less than 6 segments; species smaller.....25
- 25 Head more excavated (Fig. 1144 A in Olmi 1984); scutum and metathorax + propodeum testaceous-reddish.....5. *plebeius* (Perkins)
- Head less excavated (Fig. 1144 B in Olmi 1984); scutum and metathorax + propodeum black or brown-black.....6. *perpolitus* (Perkins)

GENUS *GONATOPUS*: NEOTROPIC REGION

Gonatopus acer n. sp.

Female: apterous; length 2,31-2,50 mm; head black, with anterior region of frons, clypeus and mandibles testaceous; antennae testaceous, with segments 7-10 brown; thorax and propodeum black, with metanotum and posterior apex of propodeum testaceous; in the paratype from Mexico head, thorax and propodeum are brown; abdomen brown; legs brown, with tarsi, clubs of femora, hind tibiae and part

of trochanters testaceous; antennae distally thickened; antennal segments in following proportions: 9:5:9:5:4:4:3,5:4:3,5:5; head shiny, excavated, without sculpture, except for occiput granulated; frontal line complete; occipital carina absent; POL = 2; OL = 1,5; OOL = 6; pronotum shiny, crossed by a strong transversal impression, without sculpture; scutum without lateral pointed apophyses; metanotum flat, shiny, smooth, without sculpture, with sides protruding; protrusions pointed (Fig. 60 D); metathorax + propodeum shiny, smooth, without sculpture, except for transversal striae on posterior surface and partly on metapleura; mesopleura without sculpture; meso-metapleural suture obsolete; fore tarsal segments in following proportions: 11:2,5:5:12:19; enlarged claw (Fig. 61 A) without a subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 7 peg-like hairs; segment 5 of front tarsus (Fig. 61 A) with two rows of 3 (proximal) + 18 lamellae; apex with a group of approximately 10 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

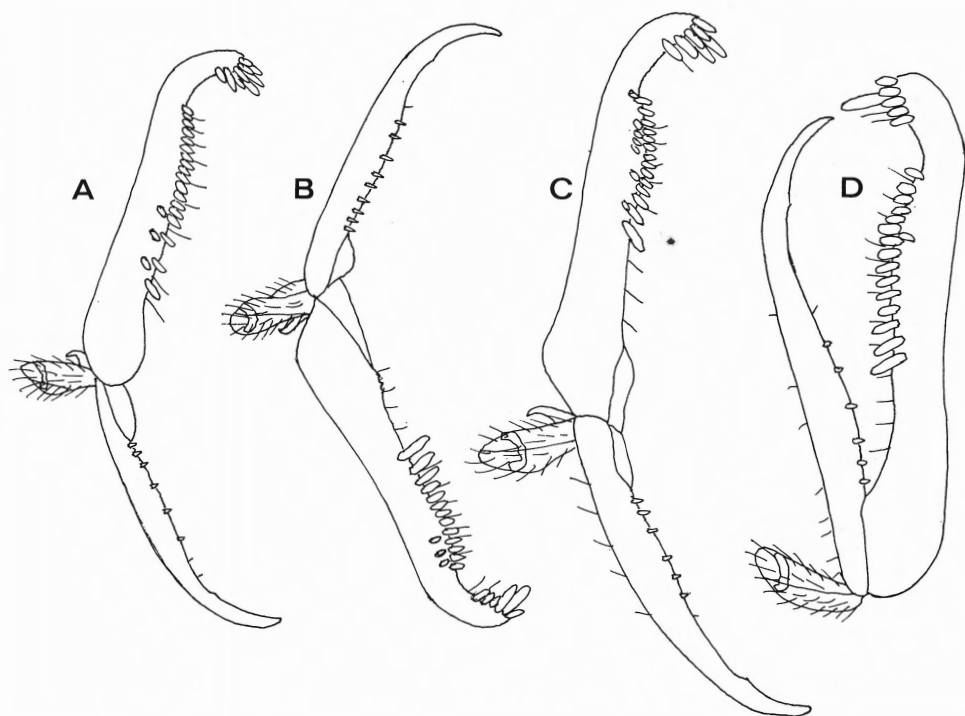


Fig. 61 - Chela of *Gonatopus acer* n. sp. (holotype) (A), *guayasensis* n. sp. (holotype) (B), *moyaraygozai* n. sp. (holotype) (C), *flavoniger* n. sp. (holotype) (D).

Male: unknown

Locus typicus: Puná Island (Guayas, Ecuador)

Typical material: holotype F! in OL; 1 paratype F! in HS.

Distribution: ECUADOR: Puná Island (Guayas), OL! MEXICO: Cozumel S. Miguel (Quintana Roo), HS!

Notes: the holotype was collected by M. Huybensz on March 22, 1988; the para-

type from Mexico was collected by G.E. Bohart on January 29, 1981.

Gonatopus guayasensis n. sp.

Female: apterous; length 2,62 mm; head brown, with anterior surface of frons, clypeus and mandibles testaceous; antennae brown, with segments 1-3 testaceous; thorax and propodeum brown-light, with scutum yellow; abdomen black; legs brown, with tarsi, clubs of femora and part of hind tibiae testaceous; antennae distally thickened; antennal segments in following proportions: 8:4:12:6:5:5:4:4:5; head excavated, dull, granulated; frontal line complete; occipital carina absent; POL = 1,5; OL = 1,5; OOL = 6; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum without lateral pointed apophyses; metanotum flat, without sculpture, with sides protruding (Fig. 60 F); protrusions pointed; metathorax + propodeum shiny, without sculpture, except for strong transversal striae on posterior surface and a few longitudinal striae on anterior surface; disc of metathorax + propodeum with a track of median furrow; meso-metapleura suture obsolete; mesopleura without sculpture; metapleura transversely striate; fore tarsal segments in following proportions: 11:2,5:4:14:20; enlarged claw (Fig. 61 B) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 9 peg-like hairs; segment 5 of front tarsus (Fig. 61 B) with two rows of 3 (distal) + 13 lamellae; apex with a group of approximately 9 lamellae; maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Puná Island (Guayas, Ecuador)

Typical material: holotype F! in OL

Distribution: only known from the typical locality.

Notes: the holotype was collected by M. Huybensz on March 22, 1988.

Gonatopus moyaraygozai n. sp.

Female: apterous; length 2 mm; head brown, with clypeus and mandibles testaceous; antennae brown, with segments 1-3 testaceous; thorax and propodeum brown, with apex of propodeum testaceous; abdomen black; legs testaceous, with articulations, clubs of femora and fore tibiae brown; antennae distally thickened; antennal segments in following proportions: 8:4:7:5:4:4:3,5:3,5:3,5:5; head excavated, shiny, without sculpture, with occiput granulated; frontal line complete; occipital carina absent; POL = 1; OL = 1; OOL = 6; temples distinct; pronotum crossed by a strong transversal impression, without sculpture; scutum laterally without pointed apophyses; metanotum inclined, not hollow behind the scutellum, transversely striate; meso-metapleural suture obsolete, only weakly visible near metanotum; metathorax + propodeum shiny, without sculpture, except for transversal striae on posterior surface; pleura dull, granulated and transversely striate; fore tarsal segments in following proportions: 8:2:4:10:17; enlarged claw (Fig. 61 C) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 7 peg-like hairs; segment 5 of front tarsus (Fig. 61 C) with two rows of approximately 17 lamellae; apex with a group of approximately 7 lamellae; maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: El Colli (m 1620, Guadalajara, Jalisco, Mexico)

Typical material: holotype F! in OL

Hosts: *Dalbulus quinquenotatus* DeLong & Nault (*Cicadellidae Deltocephalinae Macrostelini*) (see also Moya Raygoza 1990).

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Gustavo Moya Raygoza; the holotype was reared from a parasitized specimen of *Dalbulus quinquenotatus* DeLong & Nault collected on August 24, 1989.

Gonatopus flavoniger n. sp.

Female: apterous; length 3,12 mm; head brown, with occiput light and mandibles, clypeus and anterior region of frons testaceous; antennae fully testaceous; prothorax reddish-testaceous, with some brown spots; scutum yellow; scutellum and metathorax + propodeum black; abdomen brown; legs testaceous, with mid and hind coxae and hind clubs of femora darkened; antennae distally thickened; antennal segments in following proportions: 6:5:14:8:6:5:4:4:3,5:6; head excavated, shiny, granulated, except for lateral regions of frons without sculpture; frontal line complete; occipital carina absent; POL = 1,5; OL = 2; OOL = 7; pronotum shiny, crossed by a strong transversal impression, weakly granulated; scutum with two lateral pointed apophyses; metanotum granulated and sculptured by transversal striae, not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum with pleura and posterior surface granulated and transversely striate; anterior surface of metathorax + propodeum smooth, without sculpture; fore tarsal segments in following proportions: 13:2:4:15:21; enlarged claw (Fig. 61 D) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 6 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 61 D) with two rows of 1 (medial) + 15 lamellae; apex with a group of approximately 9 lamellae; maxillary palps broken in the only known specimen, only composed of the two first segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: S. Bocaina (Sao Paulo, Brazil)

Typical material: holotype F! in AL

Distribution: only known from the typical locality.

Notes: the holotype was collected in March, 1973.

Gonatopus matoensis n. sp.

Female: apterous; length 5 mm; head black, with mandibles, clypeus and anterior region of frons testaceous; antennae with segments 1-2 and 5-6 testaceous, 3-4 brown (other segments missing in the only known specimen); thorax, propodeum and abdomen black; legs brown, with tarsi, coxae, trochanters and articulations partly testaceous; antennal segments 1-6 in following proportions: 11:7:27:20:14:11 (other segments missing in the only known specimen); head excavated, dull, granulated; frontal line complete; occipital carina absent; POL = 2; OL = 4; OOL = 10; pronotum shiny, crossed by a strong transversal impression, almost fully granulated; scutum dull, granulated, with two lateral pointed apophyses; stalk between pronotum and metathorax + propodeum approximately twice as long as broad; metanotum not hollow behind the scutellum; metathorax + propodeum dull, granulated, with posterior surface transversely striate; pleura granulated and irregularly transversely striate; meso-metapleural suture distinct and complete; the mesopleura and metapleura are on different planes, because the meso-metapleural

suture is very broad and step-shaped; fore tarsal segments in following proportions: 21:4:6:29:39; enlarged claw (Fig. 62 A) without a subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 13 peg-like hairs; segment 5 of front tarsus (Fig. 62 A) with two rows of approximately 38 lamellae; apex with a group of approximately 18 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

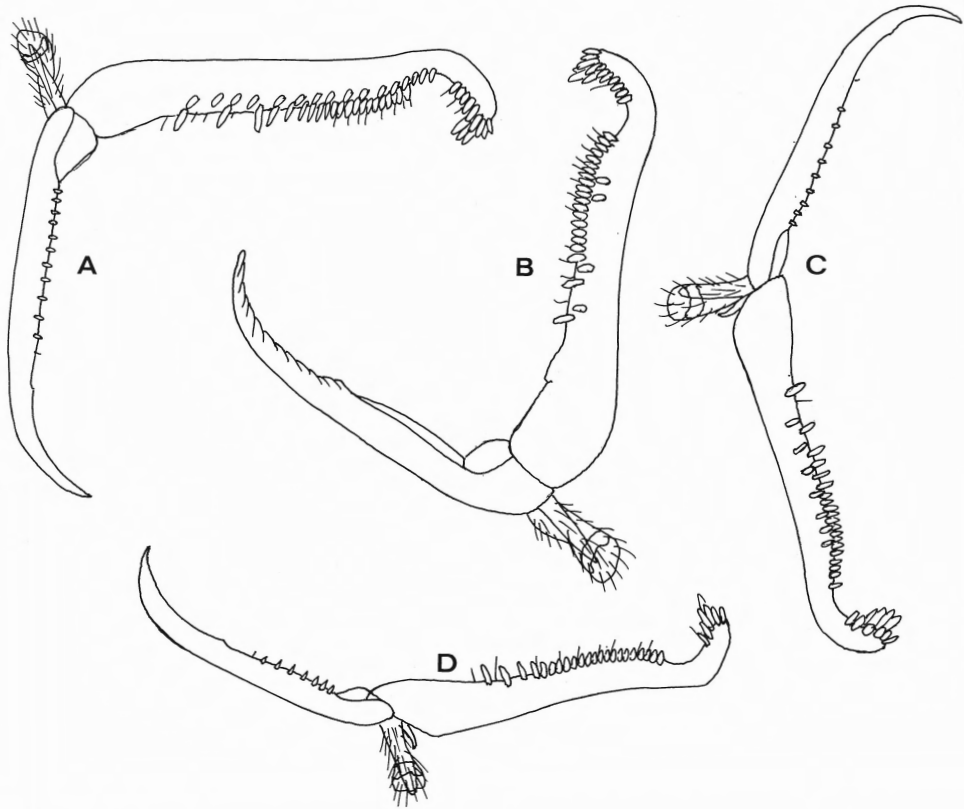


Fig. 62 - Chela of *Gonatopus matoensis* n. sp. (holotype) (A), *amapaensis* n. sp. (holotype) (B), *guerrerensis* n. sp. (holotype) (C), *providus* n. sp. (holotype) (D).

Male: unknown

Locus typicus: Barra do Tapirapés (Mato Grosso, Brazil)

Typical material: holotype F! in SO

Distribution: only known from the typical locality.

Notes: the holotype was collected by B. Malkin on January 25-27, 1964.

***Gonatopus amapaensis* n. sp.**

Female: apterous; length 4 mm; head testaceous, with ocellar triangle darkened; antennae testaceous, with segments 4-6 darkened; thorax and propodeum black; abdomen brown; legs testaceous; antennae distally thickened; antennal segments

in following proportions: 14:7:28:14:14:12:10:9:7:6; head excavated, dull, granulated; frontal line complete; occipital carina absent; POL = 3; OL = 4; OOL = 11; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum dull, granulated, with two small lateral pointed apophyses; scutellum shiny, smooth, without sculpture; metanotum shiny, smooth, without sculpture, not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for posterior surface transversely striate; metapleura transversely striate; mesopleura without sculpture, except for the distal third transversely striate; fore tarsal segments in following proportions: 21:3:6:25:36; enlarged claw (Fig. 62 B) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 7 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 62 B) with two rows of 5 + 20 lamellae; apex with a group of approximately 20 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Porto Platon (Amapá, Brazil)

Typical material: holotype F! in SO

Distribution: only known from the typical locality.

Notes: the holotype was collected by J. Lane in September, 1957.

Gonatopus guerrerensis n. sp.

Female: apterous; length 4,25 mm; head black, with mandibles, clypeus, a small frontal region near clypeus and two narrow frontal stripes near orbits testaceous; antennae testaceous, with segments 7-10 and most part of 3 brown; thorax, propodeum and abdomen black; fore legs testaceous, with part of coxae and clubs of femora black; external side of fore tibiae brown; mid and hind legs testaceous, with coxae and clubs of femora black; antennae distally thickened; antennal segments in following proportions: 11:6:20:13:9:8:7:6:6:8; head excavated, dull, granulated; frontal line complete; occipital carina absent; POL = 2; OL = 2,5; OOL = 8,5; pronotum crossed by a strong transversal impression, dull, granulated; scutum dull, granulated, with some irregular keels, without lateral pointed apophyses; metanotum dull, granulated, transversely striate, not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum dull, granulated, except for numerous transversal striae on posterior surface, metapleura and proximal half of mesopleura; fore tarsal segments in following proportions: 18:3:5:23:32; enlarged claw (Fig. 62 C) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 12 peg-like hairs; segment 5 of front tarsus (Fig. 62 C) with two rows of 10 + 18 lamellae; apex with a group of approximately 18 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 2 mi. N Cacahuamilpa (Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.B. Woolley on July 19, 1984.

Gonatopus providus n. sp.

Female: apterous; length 4,18 mm; testaceous, with petiole black; antennae distally thickened; antennal segments in following proportions: 9:6:19:11:8:7:6:6:5:7; head

excavated, shiny, weakly granulated; frontal line complete; occipital carina absent; POL = 2; OL = 2; OOL = 9; temples distinct; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum shiny, weakly granulated, with two lateral pointed apophyses; meso-metapleural suture almost fully obsolete, only visible near scutellum; metathorax + propodeum shiny, without sculpture, except for numerous transversal striae on pleura and on posterior surface; metanotum flat, without sculpture, shiny, not hollow behind the scutellum; fore tarsal segments in following proportions: 17:3:5:19:28; enlarged claw (Fig. 62 D) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 8 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 62 D) with a row of 22 lamellae; apex with a group of approximately 11 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.
Male: unknown

Locus typicus: 7 mi. W Chilapa (Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.B. Woolley on July 16, 1984.

Gonatopus oaxacanus n. sp.

Female: apterous; length 2,18-3,06 mm; testaceous, with petiole and abdomen black; antennae distally thickened; antennal segments in following proportions: 6:4,5:11:6:5:4,5:4:4:3,5:5; head excavated, shiny, with frons without sculpture and with vertex and occiput weakly granulated; frontal line complete; occipital carina absent; POL = 0,5; OL = 1; OOL = 6; pronotum crossed by a strong transversal impression, without sculpture or very weakly granulated; scutum with two lateral pointed apophyses; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for transversal striae on posterior surface and on pleura; metanotum flat, transversely striate, not hollow behind the scutellum; fore tarsal segments in following proportions: 11:2:3,5:13:19; enlarged claw (Fig. 63 A) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 8 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 63 A) with two rows of 13 + 4 lamellae; apex with a group of approximately 12 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 1,1 mi. W El Tule (5400', Oaxaca, Mexico)

Typical material: holotype F! in TE; 1 paratype F! in OL

Distribution: only known from the typical locality.

Notes: the typical series was collected by Woolley and Zolnerowich on July 17, 1987.

Gonatopus whartoni n. sp.

Female: apterous; length 4 mm; head black, with mandibles, clypeus and anterior region of frons testaceous; antennae brown, with ventral side of segments 1-2 testaceous; thorax, propodeum and abdomen black; fore legs black, with part of trochanters and tarsi testaceous; mid and hind legs black, with trochanters, stalks of femora, medial region of tibiae and tarsi whitish; antennae distally thickened; antennal segments in following proportions: 12:6:16:11:7:6:5:5:4:7; head excavated, dull, granulated; frontal line complete; occipital carina absent; POL = 2; OL =

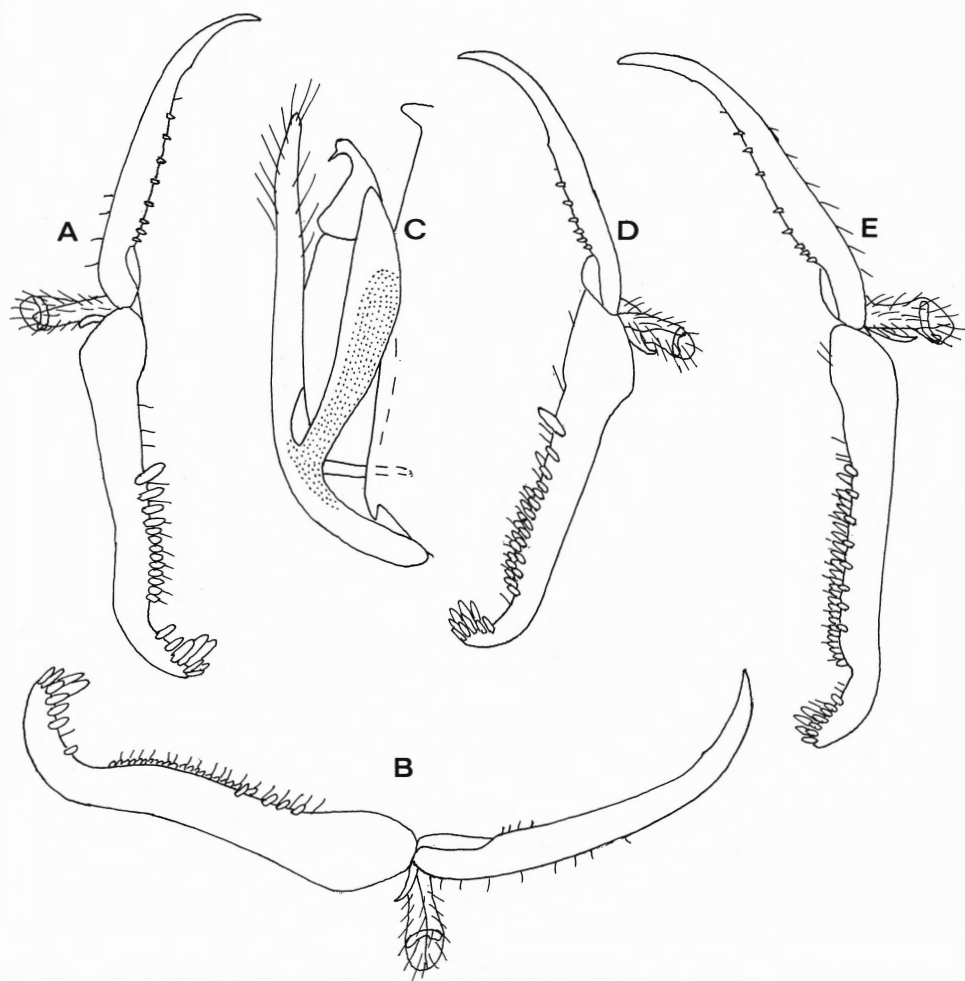


Fig. 63 - Chela of *Gonatopus oaxacanus* n. sp. (holotype) (A), *whartoni* n. sp. (holotype) (B), *virgatus* n. sp. (holotype) (D), *webbensis* n. sp. (holotype) (E); male genitalia of *Gonatopus flavipes* Olmi from Piedra ancha (C).

2; OOL = 7; pronotum crossed by a strong transversal impression, dull, granulated; scutum dull, granulated, without lateral pointed apophyses; scutellum inclined, shiny, weakly granulated; metanotum dull, granulated, transversely striate, hollow behind the scutellum; meso-metapleural suture distinct and complete; mesopleura and metapleura on different planes, because the keel along the meso-metapleural suture is broad and step-shaped; metathorax + propodeum dull, granulated, with numerous transversal striae on metapleura and on posterior surface; mesopleura not transversely striate; fore tarsal segments in following proportions: 15:3:5:17:26; enlarged claw (Fig. 63 B) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a proximal short row of 6 hairs; segment 5 of front tarsus (Fig. 63 B) with two rows of 4 (proximal) + 18 lamellae; apex with a group of approximately 13 lamellae; maxillary palps with 6 segments; labi-

al palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 18,2 mi. S Iguala (3000 ft., Guerrero, Mexico)

Typical material: holotype F! in TE

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Robert Whar-ton; the holotype was collected on July 5, 1987.

Gonatopus flavipes OLMI 1984

Gonatopus flavipes Olmi was known only on the basis of female specimens. Recently a series of female and male specimens from Piedra ancha (Guadalajara, Jalisco, Mexico) was examined. The following description of the male can be proposed:

Male: fully winged; length 2,31 mm; black; mandibles testaceous; antennae and legs brown; antennae not distally thickened, with segment 3 more than three times as long as broad (11:1,6); head shiny, weakly granulated; frontal line complete; occipital carina absent; POL = 6; OL = 2,5; OOL = 2; a shiny, ovoidal area is visible between the eyes and the posterior ocelli; scutum dull, granulated; notaulices complete, posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli (3:2); scutellum and metanotum shiny, smooth, without sculpture; propodeum dull, rugose; fore wing hyaline, without dark transversal bands; radial vein curved; distal part of radial vein longer than proximal part (18:8); genitalia in fig. 63 C; maxillary palps with 4 segments; labial palps with 2 segments; tibial spurs 1, 1, 2.

Gonatopus flavipes is now known from the following localities: MEXICO: Piedra ancha (m 2000, Guadalajara, Jalisco), GL! COSTA RICA: La Palma, OL! JAMAICA: Monymusk Estate, WA! ECUADOR: Banos, B! Tena (Napo Prov.), AL! BOLIVIA: Sacramento Camp (m 2100, Ingavi - Coroico Road, Yungas), SO! BRAZIL: Nova Teutonia (S.ta Catarina), HD! Barueri (Sao Paulo), SO!

After the descriptions of the above new species, the following new key to the Neotropic *Gonatopus* can be proposed:

FEMALES

- 1 Segment 1 of front tarsus approximately twice as long as segment 4.....2
- Segment 1 of front tarsus as long as, or shorter, or slightly longer than segment 4.....4
- 2 Head mostly black; thorax and propodeum black.....2. *breviforceps* Kieffer
- Head, thorax and propodeum ferruginous.....3
- 3 Head dull, fully granulated; posterior surface of propodeum not transversely striate.....34. *antilleanus* Olmi
- Head shiny, without sculpture; posterior surface of propodeum transversely striate.....1. *fernandinae* Olmi
- 4 Meso-metapleural suture distinct.....5
- Meso-metapleural suture obsolete.....17
- 5 Scutum with two lateral pointed apophyses (Fig. 1234 B in Olmi 1984)...6
- Scutum without lateral pointed apophyses (Fig. 1234 A in Olmi 1984)...13

- 6 Stalk between pronotum and metathorax + propodeum very slender, more than twice as long as broad (Fig. 1234 B in Olmi 1984); stalk and pronotum yellow.....3. *agilis* Olmi
- Stalk between pronotum and metathorax + propodeum less slender, at most twice as long as broad; stalk and pronotum mostly black.....7
- 7 Metanotum hollow behind the scutellum.....8
- Metanotum not hollow behind the scutellum.....9
- 8 Anterior surface of metathorax + propodeum with a track of median furrow and with numerous transversal keels.....5. *spinolai* Olmi
- Anterior surface of metathorax + propodeum without a track of median furrow and without keels, smooth.....32. *casalei* Olmi
- 9 Mesopleura and metapleura on different planes, because the keel along the meso-metapleural suture is very broad and step-shaped.....10
- Mesopleura and metapleura on the same plane.....12
- 10 Head shiny, without sculpture; metanotum and mesopleura smooth, without sculpture.....4. *peruvianus* Olmi
- Head dull, granulated; metanotum and mesopleura granulated or irregularly striate.....11
- 11 Scutum and anterior surface of metathorax + propodeum shiny, almost fully without sculpture.....29. *amazonicus* Olmi
- Scutum and anterior surface of metathorax + propodeum dull, granulated.....39. *matoensis* n. sp.
- 12 Scutum fully black; head with vertex dull, fully granulated.....21. *bolivianus* Olmi
- Scutum almost fully yellow; head with vertex shiny; ocellar triangle granulated; sides of the vertex smooth and without sculpture.....18. *arlei* Olmi
- 13 Metathorax + propodeum with a strong median furrow.....20. *contortus* Olmi
- Metathorax + propodeum without median furrow.....14
- 14 Thorax and propodeum reddish-testaceous.....6. *willinki* Olmi
- Thorax and propodeum fully or mostly black.....15
- 15 Mesopleura and metapleura on the same plane.....7. *pseudorbitalis* Olmi
- Mesopleura and metapleura on different planes, because the keel along the meso-metapleural suture is very broad and step-shaped.....16
- 16 Pronotum and metathorax + propodeum granulated (except for transversal striae on pleura and posterior surface of propodeum).44. *whartoni* n. sp.
- Pronotum and metathorax + propodeum without sculpture (except for transversal striae on pleura and posterior surface of propodeum).....8. *orbitalis* Cameron
- 17 Enlarged claw with apex rounded, not pointed, without small tooth (Fig. 1217 in Olmi 1984).....18
- Enlarged claw with apex pointed, with a small tooth (Fig. 1218 in Olmi 1984).....19
- 18 Posterior surface of metathorax + propodeum fully transversely striate; frons irregularly striate.....23. *zulianus* Olmi
- Posterior surface of metathorax + propodeum with anterior half smooth and with posterior half transversely striate; frons smooth, not striate.....9. *townesi* Olmi
- 19 Stalk between pronotum and metathorax + propodeum very long, longer than disc of pronotum (Fig. 1221 B in Olmi 1984).....10. *apicalis* Cameron

- Stalk between pronotum and metathorax + propodeum short, as long as, or shorter than disc of pronotum (Fig. 1221 A in Olmi 1984).....20
- 20 Thorax and propodeum mostly or almost fully yellow-testaceous or reddish 21
 - At least metathorax + propodeum fully or almost fully black or brown 32
- 21 Metathorax + propodeum with a median furrow.....19. *cilipes* Kieffer
 - Metathorax + propodeum without median furrow.....22
- 22 Head flat.....23
 - Head excavated.....24
- 23 Metanotum flat (Fig. 21 in Olmi 1987d); segment 5 of front tarsus with medial lamellae (Fig. 1219 in Olmi 1984).....11. *bartletti* Olmi
 - Metanotum inclined (Fig. 20 in Olmi 1987d); segment 5 of front tarsus with only medial bristles (Fig. 22 in Olmi 1987d).....33. *cobbeni* Olmi
- 24 Head, thorax and propodeum fully or almost fully smooth, without sculpture (except for striae on pleura and posterior surface of propodeum).....25
 - Head, thorax and propodeum dull, fully or almost fully granulated (except for striae on pleura and posterior surface of propodeum).....30
- 25 Sides of metanotum rounded (Fig. 1221 A in Olmi 1984).....26
 - Sides of metanotum protruding.....29
- 26 Enlarged claw with tooth farther from the distal apex (Fig. 62 D).....
 -42. *providus* n. sp.
 - Enlarged claw with tooth nearer the distal apex (Fig. 63 A).....27
- 27 Labial palps with 3 segments.....43. *oaxacanus* n. sp.
 - Labial palps with 2 segments..... 28
- 28 Body slender, with metanotum flat, with stalk between pronotum and metathorax + propodeum longer and narrow (Fig. 60 M).....12. *flavipes* Olmi
 - Body less slender, with metanotum less flat, with stalk between pronotum and metathorax + propodeum less long and less narrow (Fig. 60 L).....
 -31. *cavazzutii* Olmi
- 29 Mesopleura transversely striate.....13. *campbelli* Olmi
 - Mesopleura smooth, not striate.....26. *fiorii* Olmi
- 30 Posterior surface of metathorax + propodeum fully transversely striate14. *tristis* Olmi
 - Posterior surface of metathorax + propodeum only with posterior half or third transversely striate.....31
- 31 Head, thorax and propodeum dull, fully granulated.....25. *argentinus* Olmi
 - Frons of head, disc of pronotum and anterior surface of metathorax + propodeum shiny, without sculpture; other regions of head, thorax and propodeum granulated15. *doellojuradoi* (Ogloblin)
- 32 Posterior surface of metathorax + propodeum strongly transversely striate 33
 - Posterior surface of metathorax + propodeum without transversal striae, with only a few striae near the apex.....41
- 33 Mesopleura and metapleura dull, granulated, transversely striate and rugose 34
 - Mesopleura and metapleura smooth, without sculpture and with more or less numerous transversal striae.....37
- 34 Anterior surface of metathorax + propodeum dull, granulated.....
 -41. *guerrerensis* n. sp.

- Anterior surface of metathorax + propodeum shiny, without sculpture.....35
- 35 Scutum with two lateral pointed apophyses.....38. *flavoniger* n. sp.
- Scutum without lateral pointed apophyses.....36
- 36 Enlarged claw with tooth farther from the apex (Fig. 1228 in Olmi 1984).
.....17. *lacualis* Olmi
- Enlarged claw with tooth nearer the apex (Fig. 61 C).....
.....37. *moyaraygozai* n. sp.
- 37 Scutum with two lateral pointed apophyses.....38
- Scutum without lateral pointed apophyses.....39
- 38 Enlarged claw with tooth nearer the apex (Fig. 84 in Olmi 1987a).....
.....28. *regalis* Olmi
- Enlarged with tooth farther from the apex (Fig. 62 B).....
.....40. *amapaensis* n. sp.
- 39 Metanotum with sides rounded (Fig. 60 E); anterior surface of metathorax
+ propodeum less inclined (Fig. 60 H).....30. *onorei* Olmi
- Metanotum with sides protruding (Figs. 60 D, 60 F); protrusions pointed (Figs.
60 D, 60 F); anterior surface of metathorax + propodeum more inclined (Figs.
60 G, 60 I).....40
- 40 Head fully granulated, dull; anterior surface of metathorax + propodeum
with some longitudinal striae.....36. *guayasensis* n. sp.
- Head shiny, without sculpture, only with occiput granulated; anterior surface
of metathorax + propodeum smooth, without sculpture.....35. *acer* n. sp.
- 41 Prothorax and scutum fully reddish-testaceous.....24. *santiagan* Olmi
- Prothorax and scutum fully or almost fully black.....42
- 42 Metanotum inclined (Fig. 1226 B in Olmi 1984).....22. *autumnalis* Olmi
- Metanotum flat (Fig. 1226 A in Olmi 1984).....43
- 43 Species larger, with anterior surface of metathorax + propodeum more in-
clined (Fig. 83 in Olmi 1987a).....27. *tuxtlanus* Olmi
- Species smaller, slender, with anterior surface of metathorax + propodeum
less inclined (Fig. 1226 A in Olmi 1984).....16. *silvestrii* Kieffer

MALES

- 1 Notaulices complete.....2
- Notaulices incomplete.....3
- 2 Propodeum shiny, smooth, mostly without sculpture.....11. *bartletti* Olmi
- Propodeum dull, reticulate rugose.....12. *flavipes* Olmi
- 3 Dorsal process of gonoforceps much shorter than penis (Fig. 1206 in Olmi
1984).....1. *fernandinae* Olmi
- Dorsal process of gonoforceps slightly shorter than penis (Fig. 1208 in Olmi
1984).....2. *breviforceps* Kieffer

GENUS *GONATOPUS*: AUSTRALIAN REGION

***Gonatopus virgatus* n. sp.**

Female: apterous; length 4,68 mm; reddish-testaceous, with abdomen brown and with antennal segments 7-10 darkened; antennae distally thickened; antennal seg-

ments in following proportions: 9:7:24:17:13:10:8:7:6:10; head shiny, with frons and vertex sculptured by numerous longitudinal striae; frontal line incomplete, only shortly visible on the sides of the posterior ocelli; occipital carina complete; POL = 2; OL = 3; OOL = 11; pronotum shiny, crossed by a strong transversal impression; collar without sculpture; disc sculptured by numerous transversal striae; scutum shiny, with numerous longitudinal striae and with two lateral pointed apophyses; metanotum transversely striate, weakly hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum shiny, with anterior surface sculptured by numerous longitudinal striae; posterior surface and pleura transversely striate; fore tarsal segments in following proportions: 20:4:6:22:32; enlarged claw (Fig. 63 D) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 7 peg-like hairs; segment 5 of front tarsus (Fig. 63 D) with two rows of approximately 24 lamellae; apex with a group of approximately 16 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 23°46'S 133°04'E (Ellery Gorge, 85 Km W of Alice Springs, Northern Territory, Australia).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by I.D. Naumann on November 5, 1979.

Gonatopus webbensis n. sp.

Female: apterous; length 5 mm; head reddish-testaceous, with ocellar triangle darkened; antennae black, with segments 1-2 testaceous; thorax and propodeum reddish-testaceous, with posterior margin of pronotum, transversal impression of pronotum and disc of metathorax + propodeum darkened; antennae distally thickened; antennal segments in following proportions: 10:10:25:21:16:13:11:10:9:12; head very excavated, shiny, smooth, without sculpture; frontal line complete; occipital carina incomplete; only shortly visible on the sides of the posterior ocelli; POL = 2; OL = 2; OOL = 10; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture; scutum shiny, with two lateral pointed apophyses, with numerous longitudinal striae; meso-metapleural suture distinct and complete; metanotum weakly hollow behind the scutellum and transversely striate; anterior surface of metathorax + propodeum shiny, without sculpture; posterior surface strongly transversely striate; pleura transversely striate, except for a smooth central area on mesopleura; fore tarsal segments in following proportions: 20:4:6:27:37; enlarged claw (Fig. 63 E) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 8 peg-like hairs + 1 hair; segment 5 of front tarsus (Fig. 63 E) with two rows of 8 + 24 lamellae; apex with a group of approximately 20 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 15°04'S 145°07'E (Mt. Webb National Park, Queensland, Australia).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by I.D. Naumann on April 20-27, 1981. *G. webb-*

bensis n. sp. is very near *G. williamsi* Olmi: the only difference is the colour (mostly black in *williamsi*, reddish-testaceous in *webbensis*).

Gonatopus visendus n. sp.

Female: apterous; length 2,18-4,00 mm; head black, with mandibles and clypeus testaceous; antennae brown, with segments 1-2 testaceous; occasionally segment 10 whitish; thorax and propodeum black, except for posterior margin of pronotum with testaceous nuances; occasionally also sides of pronotum with testaceous nuances; abdomen brown; legs brown, with tarsi and trochanters testaceous; antennae distally thickened; antennal segments in following proportions: 6:4:9:6:5:5:4:4:4:6,5; head shiny, weakly granulated or without sculpture; frons with a track of frontal line; occipital carina incomplete, only shortly visible on the sides of the posterior ocelli; POL = 1; OL = 3; OOL = 7; temples distinct; pronotum crossed by a strong transversal impression, without sculpture or very weakly granulated; scutum without lateral pointed apophyses; metanotum hollow behind the scutellum, transversely striate; meso-metapleural suture distinct and complete; metathorax + propodeum with posterior surface transversely striate; anterior surface with numerous fine longitudinal and transversal striae; mesopleura with anterior half dull and granulated; posterior half shiny and without sculpture; metapleura transversely striate, except for a without sculpture region near the meso-metapleural suture; fore tarsal segments in following proportions: 11:2:3:10:15; enlarged claw (Fig. 64 A) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 2-3 bristles; segment 5 of front tarsus (Fig. 64 A) with a row of 16-19 lamellae; apex with a group of approximately 4-5 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: fully winged; length 2 mm; black; mandibles testaceous; abdomen and legs brown; antennae not distally thickened, with segment 3 less than four times as long as broad (7:2); antennal segments in following proportions: 4:4:7:7:6:6,5:6:6:5:8; head dull, granulated; frontal line absent; occipital carina absent; POL = 5; OL = 2,5; OOL = 4; temples distinct; scutum dull, granulated; notaulices incomplete, reaching approximately 0,3 length of scutum; scutellum dull, granulated; metanotum shiny, without sculpture; propodeum dull, reticulate rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (9:7); dorsal process of gonoforceps reduced to a membranous band located along the gonoforceps (Fig. 64 B); maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 1, 2.

Locus typicus: Kings Park (Perth, Western Australia).

Typical material: holotype F! and 3 paratypes (2 FF, 1 M!) in CB; 1 paratype F! in OL.

Distribution: AUSTRALIA: Kings Park (Perth, Western Australia), CB! OL! Fern-tree Gully (Victoria), CB! 35°22'S 148°50'E (Blundells Ck., 3 Km E of Piccadilly Circus, m 850, A.C.T.), CB!

Notes: the typical series from Kings Park was collected by G. Bornemissza in 1952; the paratype from Fern-tree Gully was collected by J. Clark on February 6, 1947; the paratype from A.C.T. was collected by a flight intercept window/trough trap by Weir, Lawrence and Johnson in February, 1984.

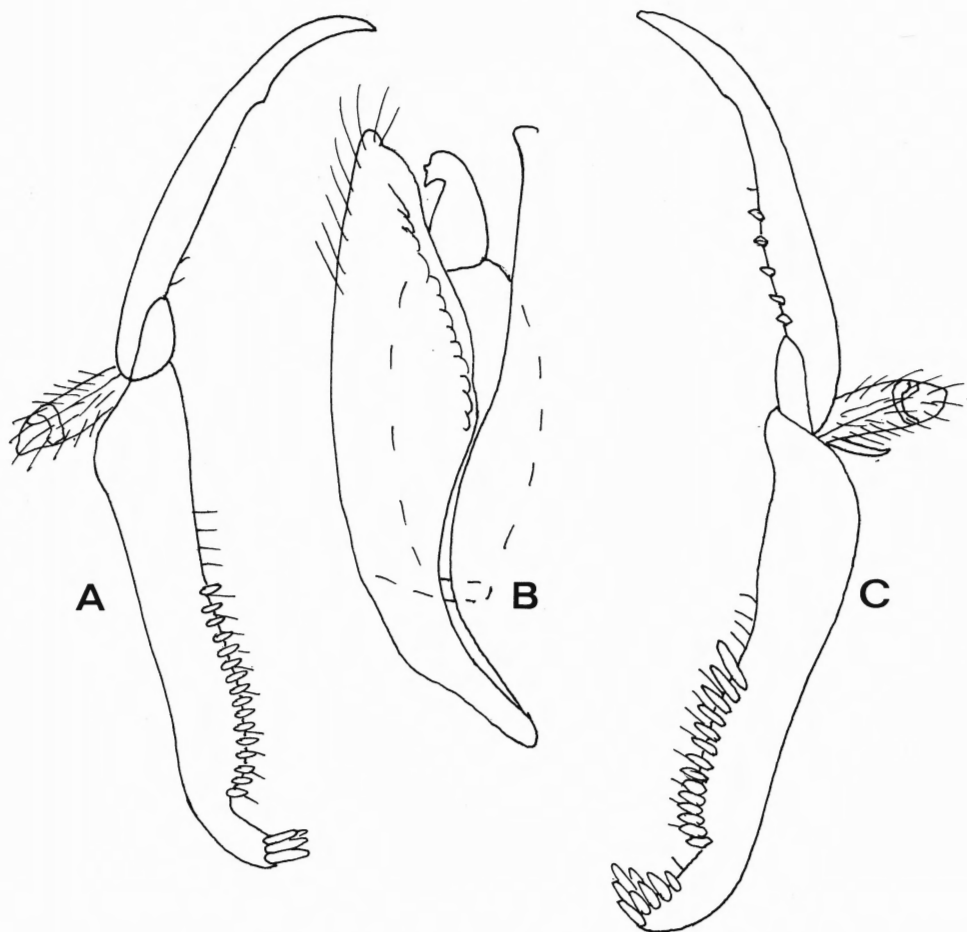


Fig. 64 - Chela of *Gonatopus visendus* n. sp. (holotype) (A) and *roomi* n. sp. (holotype) (C); male genitalia of *Gonatopus visendus* n. sp. (paratype from Kings Park) (B).

***Gonatopus roomi* n. sp.**

Female: apterous; length 3,31 mm; head brown, with anterior region of frons, clypeus and mandibles testaceous; antennae black with segments 1-2 testaceous, 3 brown; thorax, propodeum and abdomen black; legs brown, with tarsi and trochanters testaceous; antennae distally thickened; antennal segments in following proportions: 9:7:17:11:9:8:7:7:6:9; head excavated, shiny, with frons weakly granulated and with occiput strongly granulated; frontal line complete; occipital carina absent; POL = 1; OL = 1; OOL = 9; pronotum crossed by a strong transversal impression, granulated; scutum dull, sculptured by longitudinal keels, without lateral pointed apophyses; metanotum dull, transversely striate, not hollow behind the scutellum; meso-metapleural suture obsolete; anterior and posterior sur-

face of metathorax + propodeum transversely striate, dull; pleura transversely striate; fore tarsal segments in following proportions: 15:3:5:16:24; enlarged claw (Fig. 64 C) without subapical tooth, with a small tooth at the end of a longitudinal furrow and a row of 5 peg-like hairs + 1 bristle; segment 5 of front tarsus (Fig. 64 C) with a row of 15 lamellae; apex with a group of approximately 19 lamellae; maxillary palps with 5 segments; labial palps with 2 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Popondetta (N Distr., Papua, New Guinea).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, P.M. Room; the holotype was collected on December 19, 1972.

Gonatopus australiae PERKINS 1905

= *Neogonatopus dubiosus* Perkins 1905: 44; syn. proposed by Olmi 1984.

Olmi (1982) designated the lectotype F and 2 paralectotypes FF of *G. australiae* Perkins, the lectotype F and 2 paralectotypes FF of *N. dubiosus* Perkins: all this typical material is kept in B. Recently I have seen in CB another female specimen of *N. dubiosus* belonging to the typical series. This specimen is labelled as follows: «Bundaberg, 28.IX.04, slide L, Bundaberg, Q., Austr., 1904, Paratype, *Gonatopus dubiosus* Perkins». The labels are in Perkins' handwriting. This specimen is here designated as paralectotype.

Gonatopus webbensis n. sp. must be inserted in the key to the females of the Australian *Gonatopus* (Olmi 1987b, pp. 235-236) at the number 4, near *G. williamsi* Olmi and *G. zealandicus* Olmi, as follows:

- 4 Head with vertex almost flat; scutum without lateral pointed apophyses; posterior surface of metathorax + propodeum almost fully smooth, transversely striate only near the apex.....3. *zealandicus* Olmi
- Head with vertex very excavated; scutum with two lateral pointed apophyses; posterior surface of metathorax + propodeum fully transversely striate....
.....4'
- 4' Thorax and propodeum black, at most with reddish nuances.....
.....2. *williamsi* Olmi
- Thorax and propodeum reddish-testaceous, at most with some regions darkened.....15. *webbensis* n. sp.

Gonatopus virgatus n. sp. must be inserted in the same above key at the number 7, near *G. plicatus* Olmi and *G. rossi* Olmi, as follows:

- 7 Head with frons sculptured by numerous transversal folds.....
.....5. *plicatus* Olmi
- Head with frons sculptured by numerous longitudinal keels, without transversal folds.....7'
- 7' Thorax and propodeum black.....6. *rossi* Olmi
- Thorax and propodeum reddish-testaceous.....14. *virgatus* n. sp.

Gonatopus roomi n. sp. and the female of *Gonatopus visendus* n. sp. must be inserted in the same above key at the number 10, near *G. papuanus* Olmi and *G. optabilis* (Perkins), as follows:

- 10 Meso-metapleura suture obsolete.....10'
- Meso-metapleural suture distinct and complete.....10''
- 10' Anterior surface of metathorax + propodeum without sculpture, smooth.
.....8. *papuanus* Olmi
- Anterior surface of metathorax + propodeum sculptured by numerous transversal striae.....17. *roomi* n. sp.
- 10'' Segment 5 of front tarsus with lamellae located on a distinct prominence (Fig. 1245 in Olmi 1984); anterior surface of metathorax + propodeum without sculpture.....9. *optabilis* (Perkins)
- Segment 5 of front tarsus with lamellae located on a distinct prominence (Fig. 64 A); anterior surface of metathorax + propodeum sculptured by numerous fine longitudinal and transversal striae.....16. *visendus* n. sp.

After the above description of the male of *Gonatopus visendus* n. sp., the following new key to the males of the Australian *Gonatopus* can be proposed, as follows:

- 1 Propodeum smooth and shiny; proximal part of radial vein much shorter than distal part.....1. *melanias* (Perkins)
- Propodeum reticulate rugose, dull; distal part of radial vein approximately as long as proximal part.....2
- 2 Dorsal process of gonoforceps reduced to a membranous band located along the gonoforceps (Fig. 64 B).....16. *visendus* n. sp.
- Dorsal process of gonoforceps long and well separated from the gonoforceps (Figs. 1239, 1246 in Olmi 1984).....3
- 3 Dorsal process of gonoforceps approximately as long as gonoforceps (Fig. 1239 in Olmi 1984).....3. *zealandicus* Olmi
- Dorsal process of gonoforceps much shorter than the gonoforceps (Fig. 1246 in Olmi 1984).....9. *optabilis* (Perkins) or 10. *decoratus* (Perkins)

PARANEODRYINUS, NEW GENUS

Type species: Paraneodryinus malayanus n. sp.

Female (Figs. 65, 66): fully winged; maxillary palps with 6 segments; labial palps with 3 segments; notaulices visible; pronotum crossed by a strong transversal impression (Fig. 66); enlarged claw with subapical tooth and lamellae (Fig. 67); tibial spurs 1, 0, 2.

Male: unknown

Distribution: Oriental

Hosts: unknown

Species: 1

Paraneodryinus malayanus n. sp.

Female (Figs. 65, 66): fully winged; length 4,37-5,62 mm; head black, with mandibles testaceous; occasionally clypeus and genae testaceous; antennae brown, with

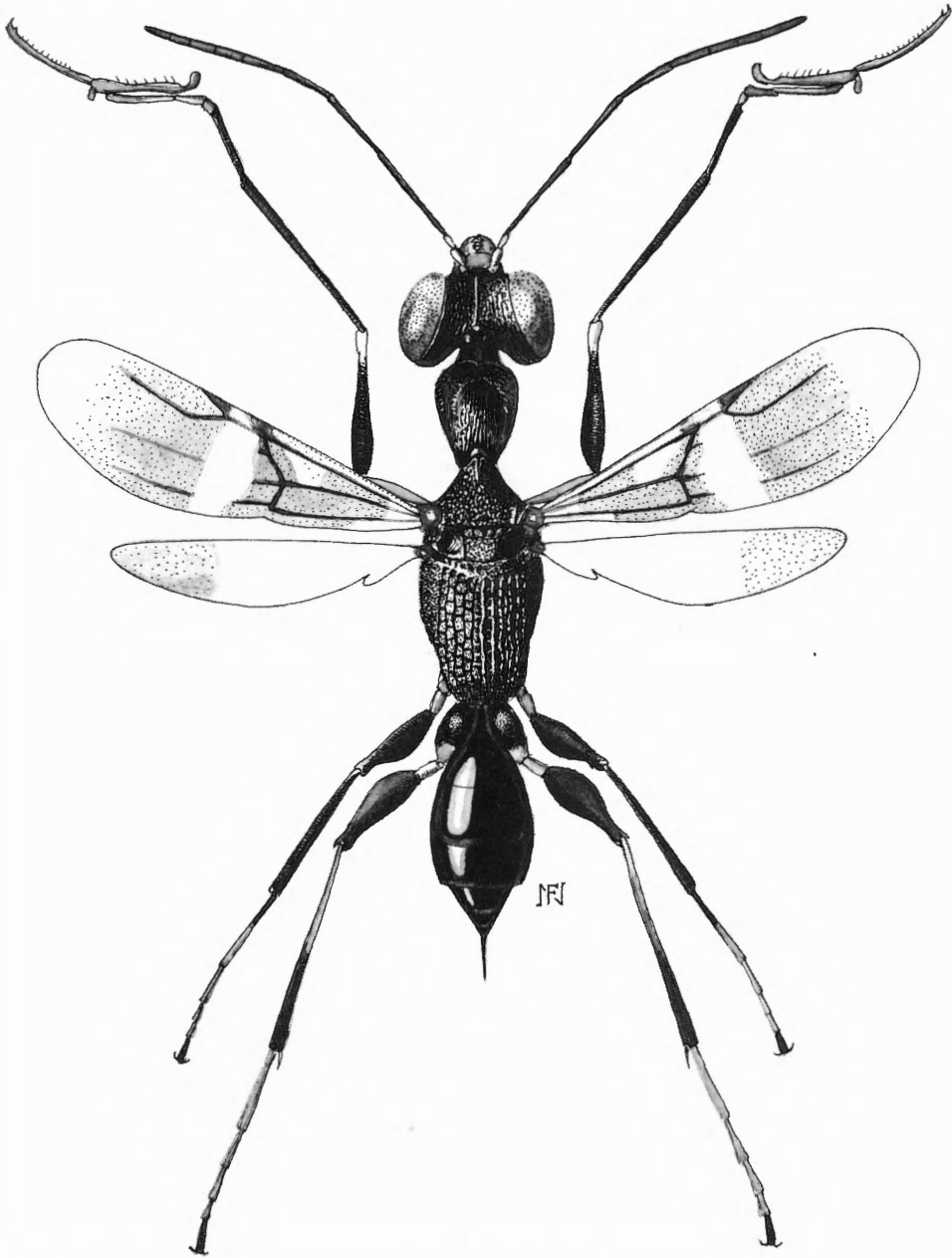


Fig. 65 - Female of *Paraneodryinus malayanus* n. sp. (holotype).

segments 1-2 whitish or testaceous; thorax and propodeum black; occasionally sides of pronotum with reddish nuances; abdomen brown or black; fore legs brown

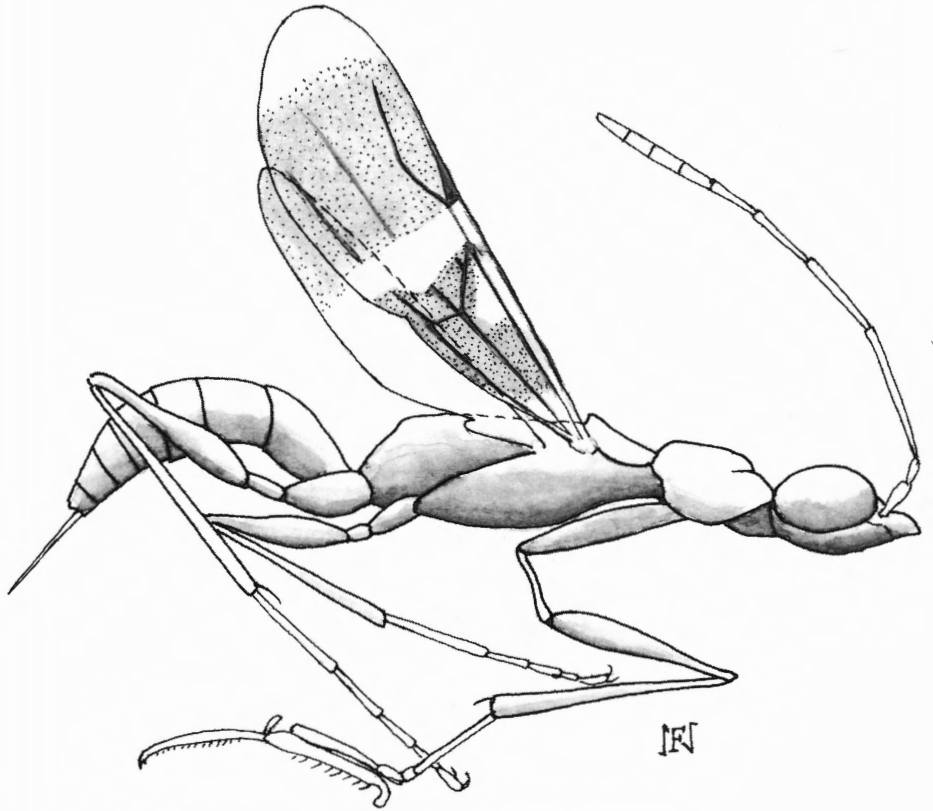


Fig. 66 - Female of *Paraneodryinus malayanus* n. sp. (holotype).

or black, with coxae and trochanters yellow or whitish; occasionally fore tarsi testaceous; mid legs brown or black, with coxae, trochanters and tarsi testaceous or whitish; hind legs brown or black, with trochanters and tarsi testaceous or whitish; antennae distally thickened, with rhinaria in the segments 6-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 9:6:37:25:17:13:11:9:7:13 (holotype); or 10:5:32:23:17:12:8:7:6,5:10 (paratype from The Gap); head dull, excavated, reticulate rugose; frontal line complete; occipital carina incomplete, only visible behind and on the sides of the posterior ocelli; POL = 1,5; OL = 2; OOL = 10; in a paratype from The Gap POL = OL; posterior ocelli touching the occipital carina; temples distinct; pronotum dull, with disc flat and with an anterior strong transversal impression; posterior collar not visible (it's only visible a track of a posterior transversal impression); anterior collar and sides of pronotum shiny, smooth, without sculpture or weakly granulated; disc rugose, with numerous irregular longitudinal keels; posterior edges of pronotum rounded, not produced into lobes directed towards the tegulae; scutum dull, reticulate rugose; notaulices incomplete, reaching approximately 0,6 length of scutum; in the holotype notaulices complete and posteriorly separated; minimum distance between the notaulices longer than the breadth of the ocelli

(5:3); scutellum and metanotum dull, fully reticulate rugose; propodeum dull, reticulate rugose, with dorsal surface much longer than posterior surface (34:20); posterior surface with two longitudinal keels; fore wing with two dark transversal bands; radial cell open; distal part of radial vein much longer than proximal part (32:11); hind wing with distal half darkened; fore tarsal segments in following proportions: 27:4:8:24:40; enlarged claw (Fig. 50 E, 67) with a subapical tooth and a row of 21-23 lamellae; segment 5 of front tarsus (Fig. 50 E, 67) with a row of 8—9 lamellae; apex with a group of approximately 9-18 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 2.

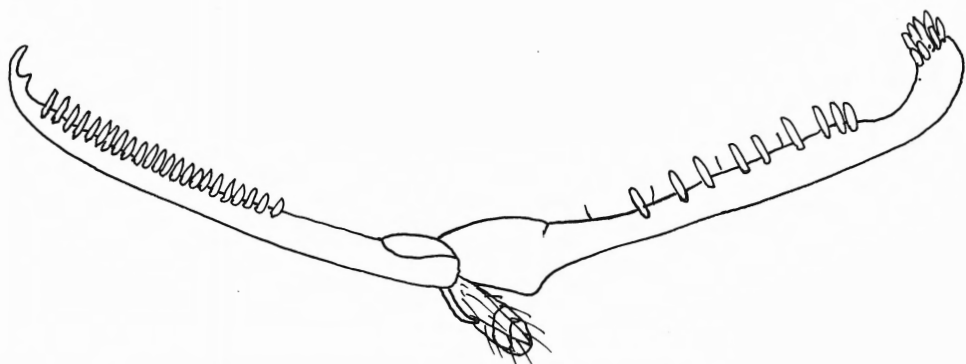


Fig. 67 - Chela of *Paraneodryinus malayanus* n. sp. (holotype).

Male: unknown

Locus typicus: Kampong Tekek to Kampong Juara (Tioman, Pulau, Pahang, Malaya, Malaysia).

Typical material: holotype F! in B; 1 paratype F! in TW; 1 paratype F! in CB.

Distribution: MALAYSIA: Kampong Tekek to Kampong Juara (Tioman, Pulau, Pahang, Malaya), B! The Gap (Fraser's Hill, Malaya), CB! Pasoh Forest Reserve (Negri S., Malaya), TW!

Notes: the holotype was collected on foliage by K.J. Kuncheria on March 27, 1962; the paratype from The Gap was collected by D.H. Colless on March 23, 1962; the paratype from Pasoh Forest Res. was collected by P. and M. Becker on August 25, 1979.

PSEUDODRYINUS, NEW GENUS

Type species: *Pseudodryinus townesi* (Olm 1984)

Female (Figs. 68, 69): fully winged; fore wing with costal, median and submedian cells clearly closed by pigmented veins (Fig. 68, 69); maxillary palps with 3-4 segments (Fig. 70 A); labial palps with 2 segments (Fig. 70 B); mandibles with 4 teeth progressing larger from anterior one to posterior (Fig. 70 C); occipital carina com-

plete or incomplete; fore trochanters more than twice as long as broad; front tarsi chelate; chela with rudimentary claw; segment 5 of front tarsus always with more than one preapical lamella; antennae without tufts of long hairs; pronotal tubercles present; metanotum well developed, not reduced; notaulices complete;

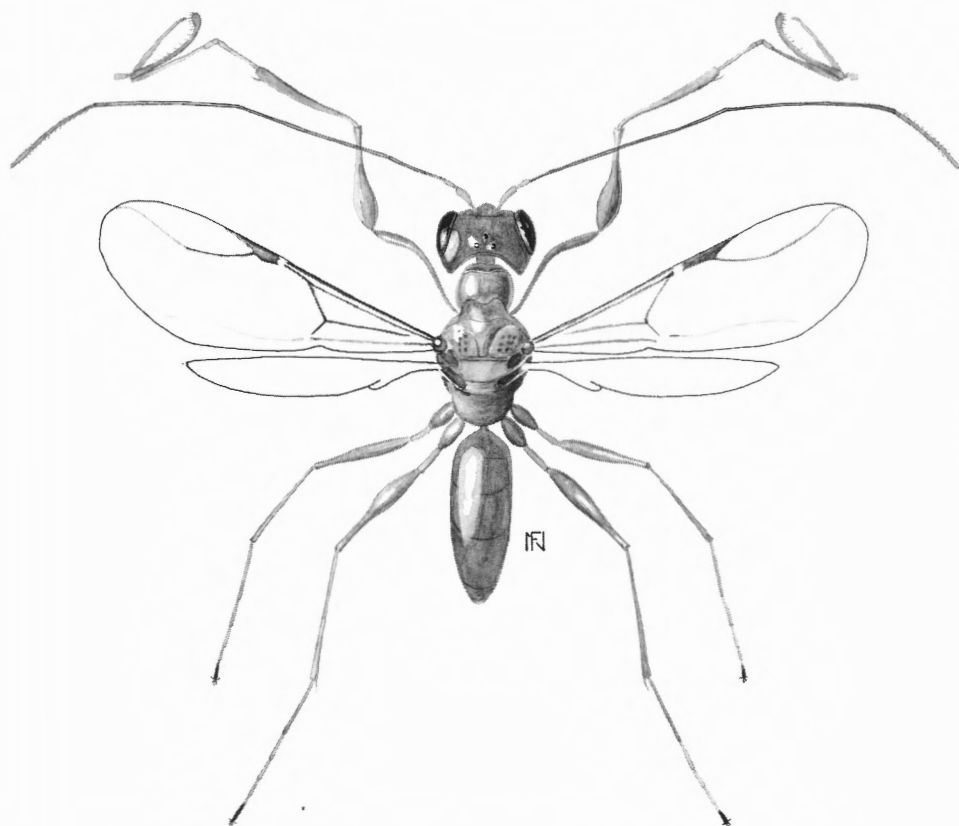


Fig. 68 - Female of *Pseudodryinus townesi* (Olm) (paratype from Kampala).

pronotum excavated, without a distinct disc and without a distinct anterior collar; enlarged claw with a subapical tooth and some lamellae; tibial spurs 1, 0, 2.

Male: unknown

Distribution: Ethiopian, Oriental

Hosts: unknown

Species: 3

Notes: *Pseudodryinus* is a genus of transition from *Dryininae* to *Gonatopodinae*. It's a *Dryinine* genus for the occipital carina complete or incomplete, the pronotal tubercles, the metanotum well developed. It's a *Gonatopodine* genus for the tibial spurs 1, 0, 2 and for the palpal formula (3-4/2).

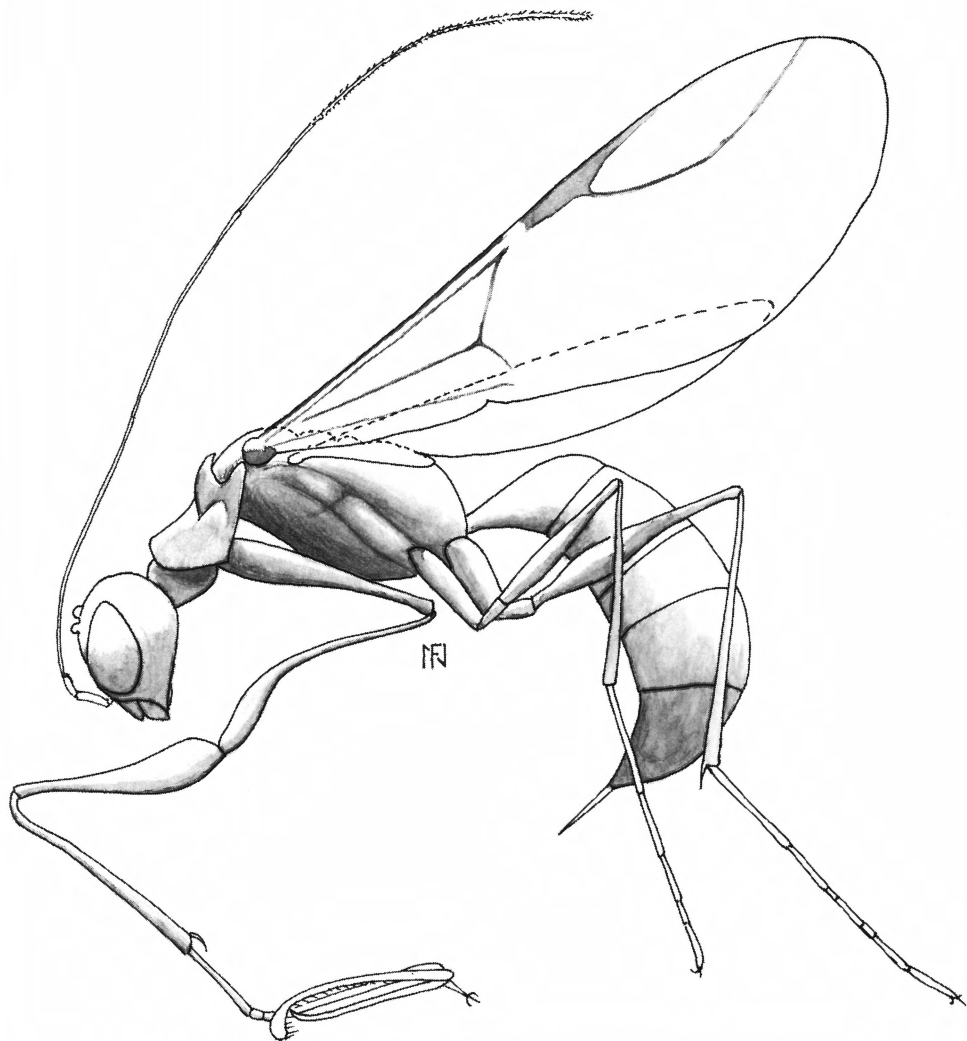


Fig. 69 - Female of *Pseudodryinus townesi* (Olm) (paratype from Kampala).

GENUS *PSEUDODRYINUS*: ETHIOPIAN REGION

Pseudodryinus paulyi n. sp.

Female: fully winged; length 5,56 mm; head testaceous, with a transverse black band on vertex; antennae brown, with segments 1-2 testaceous and with segments 7-10 light; thorax and propodeum black, except for prospectus partly testaceous and for sides of pronotum partly testaceous; abdomen brown; legs fully testaceous; antennae very slender, not distally thickened; antennal segments in following proportions: 11:6:70:59:32:15:11:9:7:13; head shiny, alutaceous; frons with a median longitudinal furrow; frontal line incomplete, only visible in front of the

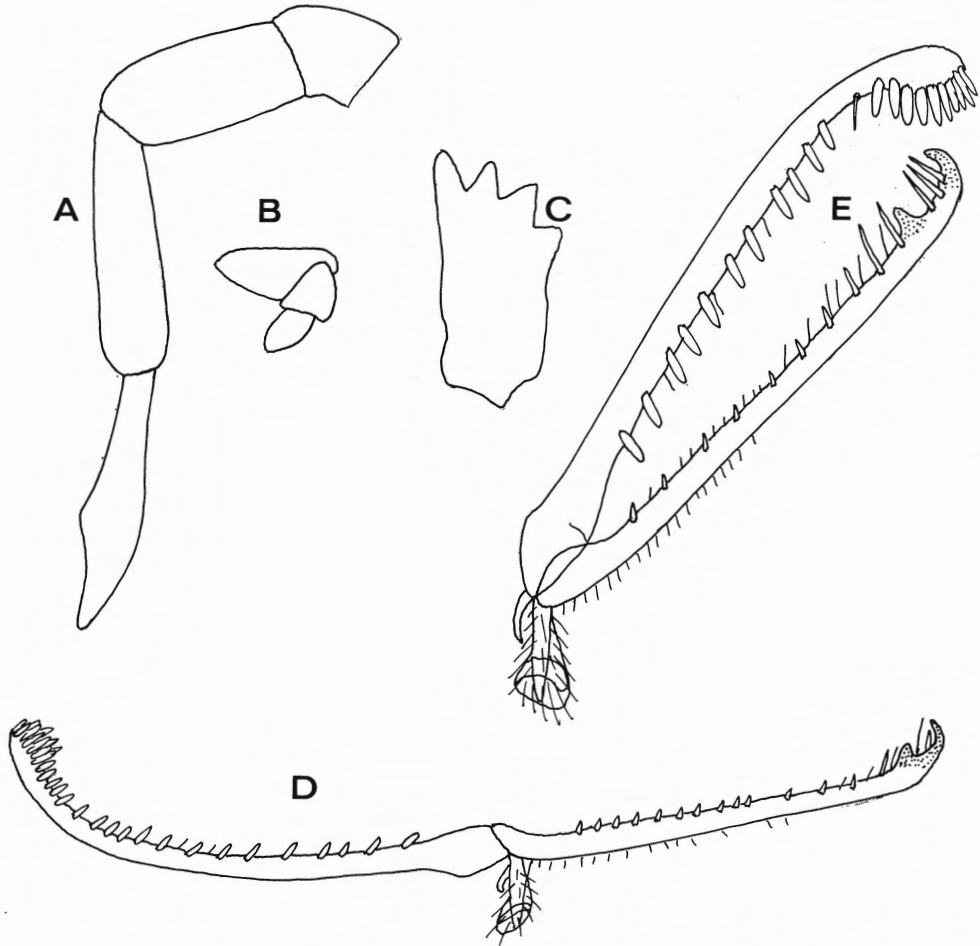


Fig. 70 - Maxillary palp (A), labial palp (B) and mandible (C) of female of *Pseudodryinus beckeri* n. sp. (holotype); chela of *Pseudodryinus paulyi* n. sp. (holotype) (D) and *beckeri* n. sp. (holotype) (E).

anterior ocellus; occipital carina apparently incomplete, visible only behind and on the sides of the posterior ocelli, not visible on the temples; POL = 4; OL = 2; OOL = 9; OPL = 1; TL = 6; anterior half of frons strongly hairy; pronotum shiny, smooth, without sculpture, crossed by a strong transversal impression; disc humped; pronotal tubercles reaching tegulae; scutum, scutellum and metanotum shiny, smooth, without sculpture; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli (3,5:5); propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface granulated and with numerous irregular keels and areolae; two longitudinal and parallel keels are visible on the median region of the dorsal surface; posterior surface reticulate rugose, with two complete longitudinal keels; fore wing hyaline, without dark transversal bands; radial cell almost

closed; distal part of radial vein longer than proximal part (40:17); fore tarsal segments in following proportions: 23:5:10:47:60; fore tarsal segment 3 produced into a hook; enlarged claw (Fig. 70 D) with a subapical tooth and a row of 13 lamellae and 6 long apical bristles; segment 5 of front tarsus (Fig. 70 D) with two rows of 2 (proximal) + 12 lamellae; apex with a group of approximately 20 lamellae; maxillary palps with 3 segments; labial palps with 2 segments; tibial spurs 1, 0, 2.

Male: unknown

Locus typicus: Foulebeng (Woleu N'Tem Distr., Gabon).

Typical material: holotype F! in GX.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, Alain Pauly; the holotype was collected in a forest near a river on March 19, 1987.

***Pseudodryinus townesi* (OLMI 1984) n. comb.**

= *Thaumatodryinus townesi* Olmi 1984: 692.

The new combination is consequence of the separation of the new genus *Pseudodryinus* from *Thaumatodryinus*. The morphologic characters of *Thaumatodryinus townesi* Olmi are in fact very different from those of the other *Thaumatodryinus* and they suggest the opportuneness to propose a new genus, belonging to a different subfamily.

A key to the females of the Ethiopian *Pseudodryinus* can be proposed, as follows:

FEMALES

- 1 Thorax and propodeum fully testaceous; dorsal surface of propodeum fully or almost fully granulated, without numerous irregular keels or areolae...
.....1. *townesi* (Olmi)
- Thorax and propodeum black, except for some reddish nuances on the prothorax; dorsal surface of propodeum granulated and with numerous irregular keels and areolae.....2. *paulyi* n. sp.

The males of the Ethiopian *Pseudodryinus* are unknown.

GENUS *PSEUDODRYINUS*: ORIENTAL REGION

***Pseudodryinus beckeri* n. sp.**

Female: fully winged; length 5 mm; head black, with mandibles, clypeus, genae, ventral side and anterior region of frons (more along the orbits) testaceous; antennae brown, with segments 1-2 testaceous; propectus black-brown; pronotum black-brown, with dorsal region medially light and with lateral regions reddish-brown; scutellum, propodeum and metanotum black; mesonotum brown, with reddish nuances; abdomen testaceous, with dorsal region brown; legs testaceous; an-

tennae very slender, not distally thickened, with rhinaria in the segments 5-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 9:5:56:47:25:14:9:8:8:10; segments 6-10 with distal part slender and with proximal part broader; head flat, without sculpture, shiny; occiput excavated; frontal line complete; occipital carina complete; POL = 4; OL = 2,5; OOL = 7; OPL = 1; TL = 5; pronotum shiny, without sculpture, crossed by a strong transversal furrow, excavated; posterior tubercles reaching tegulae; scutum finely punctate, without sculpture among the punctures, shiny; notaulices complete, posteriorly separated; minimum distance between the notaulices shorter than the breadth of the ocelli; scutellum and metanotum shiny, finely punctate, without sculpture among the punctures; propodeum with a strong transversal keel between dorsal and posterior surface; dorsal surface with two median longitudinal keels; the region between the two median keels is sculptured by transversal keels; lateral areas rugose, with irregular keels; posterior surface with two longitudinal keels; median and lateral areas of the posterior surface reticulate rugose; fore wing hyaline, without dark transversal bands; distal part of radial vein longer than proximal part (36:8); fore tarsal segments in following proportions: 18:3,5:8:35:46; segments of fore legs in following proportions: 61 (coxa): 59 (trochanter): 55 (femur): 51 (tibia); enlarged claw (Fig. 70 E) with a subapical tooth and a row of 13 lamellae; segment 5 of front tarsus (Fig. 70 E) with a row of 13 lamellae; apex with a group of approximately 16 lamellae; maxillary palpi with 4 segments (Fig. 70 A); labial palpi with 2 segments (Fig. 70 B); tibial spurs 1, 0, 2. *Male*: unknown

Locus typicus: Pasoh Forest Reserve (Negri S., Malaya, Malaysia).

Typical material: holotype F! in TW.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collectors of the holotype, P. & M. Becker; the holotype was collected in primary forest on November 23, 1978.

GENUS *EUCAMPTONYX* PERKINS 1907

= *Eucamptonyx* Perkins 1907: 28.

= *Gonatopus* Ljungh *partim*: Olmi 1984: 1498.

Type species: *Eucamptonyx testaceus* Perkins 1907, monotypic.

Female (Figs. 71, 72): apterous; maxillary palps with 6 segments (Fig. 73 A); labial palps with 3 segments (Fig. 73 B); pronotum crossed by a strong transversal impression (Fig. 72); enlarged claw not pointed, without subapical tooth and with lamellae (Fig. 73 D); antennal segments 6-10 or 7-10 with rhinaria; tibial spurs 1, 0, 1.

Male: unknown

Distribution: Nearctic, Neotropic, Australian.

Hosts: unknown

Species: 7

Notes: the genus *Eucamptonyx* Perkins was considered previously a synonym of *Gonatopus* Ljungh (Olmi 1984). Recently I revised all the species with the morphologic characters of *Eucamptonyx* and I observed the presence of rhinaria in antennal segments and the presence of lamellae in the enlarged claw. I think

that these characters can suggest the separation between *Gonatopus* and *Eucamptonyx*.

GENUS *EUCAMPTONYX*: NEARCTIC REGION

***Eucamptonyx testaceus* PERKINS 1907**

nec Gonatopus testaceus Cameron 1888: 440.

Eucamptonyx testaceus Perkins 1907: 28.

= *Gonatopus translucidus* Olmi 1984: 1682; n. syn.

Gonatopus translucidus Olmi was a new name proposed by Olmi (1984) for *Eucamptonyx testaceus* Perkins. The new name was valid if *Eucamptonyx* was junior of *Gonatopus*, because *Gonatopus testaceus* (Perkins) was preoccupied by *Gonatopus testaceus* Cameron.

If the name *Eucamptonyx* is valid, the name *testaceus* Perkins can be kept.

GENUS *EUCAMPTONYX*: NEOTROPIC REGION

In the Neotropic region *Gonatopus opacithorax* Olmi 1984 and *Gonatopus purpurascens* Olmi 1984 must be transferred to the genus *Eucamptonyx*.

The following new species are, besides, belonging to the genus *Eucamptonyx*:

***Eucamptonyx woolleyi* n. sp.**

Female: apterous; length 3 mm; head black, with mandibles testaceous and eyes pink; antennae brown-testaceous; thorax and propodeum black, with sides of pronotum testaceous and with posterior half of scutum yellow; abdomen black; legs brown, with tarsi, part of trochanters, part of coxae, stalks of hind femora and articulations yellow-whitish; antennae distally thickened, with rhinaria in the segments 7-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 7:5:18:9:8:7:6:6:5:7,5; head flat, dull, granulated; frontal line absent; occipital carina absent; temples distinct; POL = 2,5; OL = 2; OOL = 8; pronotum crossed by a strong transversal impression, shiny, without sculpture, except for sides of disc granulated and sides of pronotum sculptured by strong longitudinal keels; disc of pronotum with a medial transversal impression; scutum dull, granulated, without lateral pointed apophyses; meso-metapleural suture obsolete; metanotum flat, shiny, without sculpture, not hollow behind the scutellum; metathorax + propodeum shiny, without sculpture, except for numerous transversal striae on posterior surface and on metapleura; mesopleura weakly granulated, not transversely striate; fore tarsal segments in following proportions: 13:2:5:12:20; enlarged claw (Fig. 73 D) without subapical tooth, with a row of 6 lamellae and 2 bristles; segment 5 of front tarsus (Fig. 73 D) with a short row of 4 distal lamellae; apex with a group of approximately 16 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 2 mi. N Cacahuamilpa (Guerrero, Mexico).

Typical material: holotype F! in TE.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, J.B. Woolley; the holotype was collected on July 19, 1984.

***Eucamptonyx opacus* n. sp.**

Female: apterous; length 4,12 mm; head brown-black, with mandibles testaceous and eyes pink; antennae testaceous, with segments 8-10 brown; thorax and propodeum brown-black; apex of propodeum yellow; abdomen black; legs brown, with chela whitish and with mid and hind tarsal segments 1-4 testaceous; antennae distally thickened, with rhinaria in the segments 7-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 12:6:22:13:10:9:7:7:6:9; head flat, dull, granulated; frontal line complete; occipital carina absent; temples distinct; POL = 3; OL = 3; OOL = 10; temples distinct; pronotum crossed by a strong transversal impression, dull, granulated, except for sides sculptured by longitudinal keels and without sculpture among the keels; disc of pronotum with a transversal impression; scutum dull, granulated, without lateral pointed apophyses; metanotum shiny, flat, transversely striate, without sculpture, short; meso-metapleural suture obsolete; metathorax + propodeum granulated, except for transversal striae on pleura and posterior surface; fore tarsal segments in following proportions: 15:3:7:17:29; enlarged claw (Fig. 73 E) without subapical tooth, with a row of 8 lamellae; segment 5 of front tarsus (Fig. 73 E) with two rows of 3 + 11 lamellae; apex with a group of approximately 40 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 4 mi. NE Miltepec (Oaxaca, Mexico).

Typical material: holotype F! in TE.

Distribution: only known from the typical locality.

Notes: the holotype was collected by J.B. Woolley on July 21, 1984.

***Eucamptonyx hansonii* n. sp.**

Female: apterous; length 3,81 mm; head brown, with mandibles and front part of vertex (more along the orbits) testaceous; antennae brown, with segment 10 testaceous; thorax and propodeum black, with propectus and lateral sides of pronotum testaceous and with posterior half of scutum and posterior apex of propodeum yellow; abdomen brown; fore legs testaceous, with coxae, trochanters, clubs of femora and tibiae partly brown; antennae distally thickened, with rhinaria in the segments 6-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 9:6:23:13:12:10:7:7:6:8; head shiny, smooth, without sculpture, weakly excavated; frontal line absent; occipital carina very short, only visible on the sides of the posterior ocelli; POL = 2; OL = 2; OOL = 8; pronotum shiny, smooth, without sculpture, with two lateral pointed apophyses at the posterior margin; metanotum shiny, smooth without sculpture, not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for posterior surface, posterior

half of metapleura and posterior apex of the mesopleura transversely striate; fore tarsal segments in following proportions: 10:3:7:15:25; enlarged claw (Fig. 73 F) without teeth, with apex rounded, not pointed, with a row of 5 lamellae + 5 bristles; segment 5 of front tarsus (Fig. 73 F) with a row of 4 lamellae and a few bristles; apex with a group of approximately 15 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov., Costa Rica).

Typical material: holotype F! in OL; 1 paratype F! in GC.

Distribution: COSTA RICA: 08°45'N 83°20'W (10 Km W Piedras Blancas, m 100, Golfo Dulce Forest Reserve, Puntarenas Prov.), OL! Estacion Sirena (m 50, Corcovado Nat. Park, Puntarenas Prov.), GC!

Notes: the species is named in honor of the collector of the typical series, Paul Hanson; the holotype was collected in March - May, 1989; the paratype was collected in April - August, 1989.

After the descriptions of the above new species, the following key to the females of the Neotropic *Eucamptonyx* can be proposed, as follows:

FEMALES

- 1 Head flat, dull, granulated.....2
- Head excavated, shiny, without sculpture.....3
- 2 Anterior surface of metathorax + propodeum, disc of pronotum and anterior collar of pronotum shiny, without sculpture.....1. *woolleyi* n. sp.
- Anterior surface of metathorax + propodeum, disc of pronotum and anterior collar of pronotum dull, granulated.....4. *opacus* n. sp.
- 3 Thorax and propodeum dull, granulated, with transversal striae on posterior surface of metathorax + propodeum.....3. *opacithorax* (Olmi)
- Thorax and propodeum shiny, smooth, without sculpture, except for transversal striae on pleura and on posterior surface of metathorax + propodeum.....4
- 4 Scutum without lateral pointed apophyses.....2. *purpurascens* (Olmi)
- Scutum with two lateral pointed apophyses.....5. *hansoni* n. sp.

The males of the Neotropic species of *Eucamptonyx* are unknown.

GENUS *EUCAMPTONYX*: AUSTRALIAN REGION

Eucamptonyx papuensis n. sp.

Female (Figs. 71, 71): apterous; length 5,62 mm; head black, with mandibles and sides of clypeus brown-testaceous; antennae testaceous-dark, with segments 1-2 light; thorax, propodeum and abdomen black; sides of pronotum with testaceous nuances; legs brown, with chelae and mid and hindtarsi testaceous; antennae distally thickened, with rhinaria in the segments 6-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 12:8:37:23:20:15:12:10:9:12; head weakly excavated, shiny, weakly granulat-

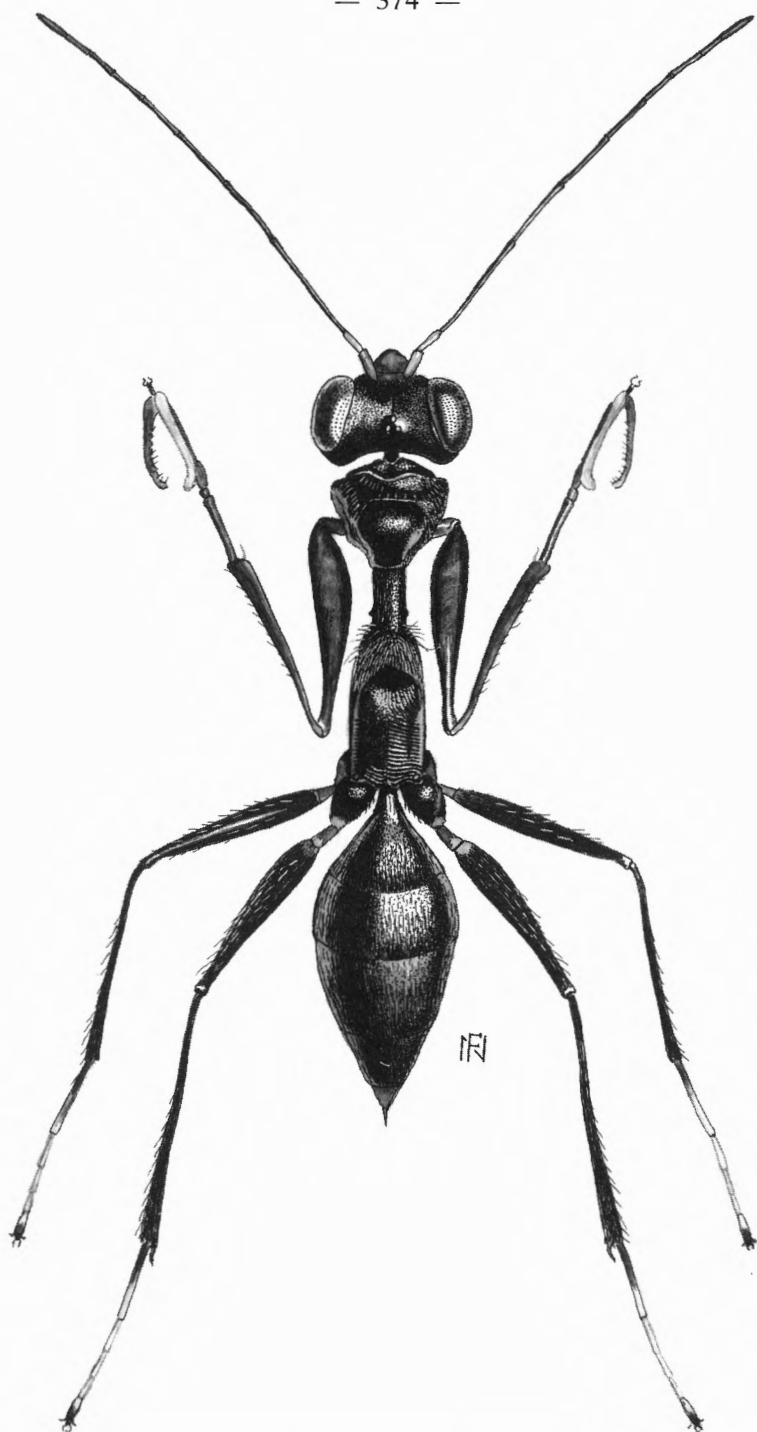


Fig. 71 - Female of *Eucamptonyx papuensis* n. sp. (holotype).

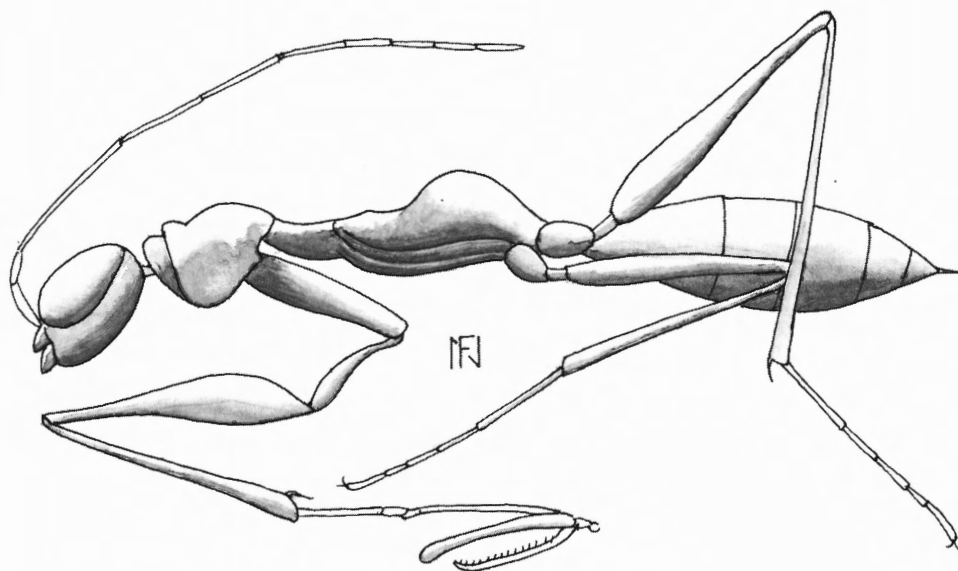


Fig. 72 - Female of *Eucamptonyx papuensis* n. sp. (holotype).

ed; frontal line absent; occipital carina absent; temples distinct; POL = 3; OL = 3; OOL = 10; pronotum crossed by a strong transversal impression, dull, hairy, without sculpture; scutum dull, transversely striate, with two lateral pointed apophyses; scutellum dull, finely sculptured by transversal striae; meso-metapleural suture distinct and complete; metanotum flat, not hollow behind the scutellum, dull, transversely striate; metathorax + propodeum dull, hairy, with posterior surface strongly transversely striate; anterior surface sculptured by fine longitudinal striae; pleura sculptured by fine transversal striae; fore tarsal segments in following proportions: 22:4:10:22:38; enlarged claw (Fig. 73 G) without teeth, with apex rounded and with a row of 9 lamellae + 1 bristle; segment 5 of front tarsus (Fig. 73 G) with a row of 12 lamellae; apex with a group of approximately 25 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: Kokoda (N Distr., Papua, New Guinea).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the holotype was collected by P.M. Room on April 6, 1972.

PAREUCAMPTONYX, NEW GENUS

Type species: *Pareucamptonyx costaricanus* n. sp.

Female (Figs. 74, 75): apterous; maxillary palps with 6 segments; labial palps with 3 segments; pronotum crossed by a strong transversal impression (Fig. 75); enlarged claw not pointed, without subapical tooth, with bristles, without lamellae (Fig. 76); antennae with rhinaria; tibial spurs 1, 0, 1.

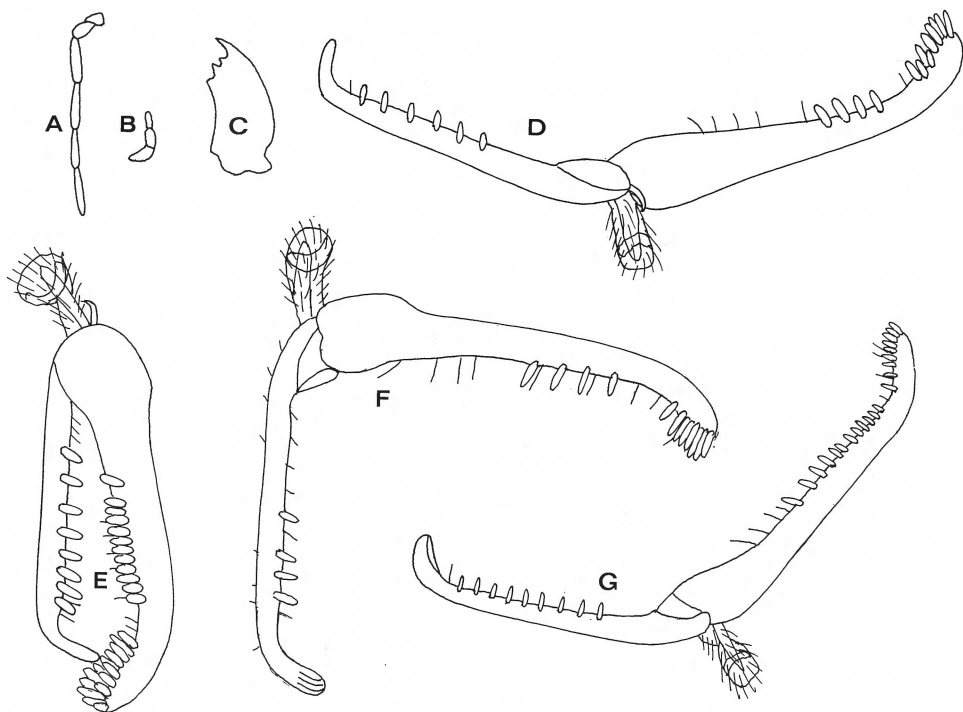


Fig. 73 - Maxillary palp (A), labial palp (B), mandible (C) and chela (G) of female of *Eucamptonyx papuensis* n. sp. (holotype); chela of *Eucamptonyx woolleyi* n. sp. (holotype) (D), *opacus* n. sp. (holotype) (E), *hansonii* n. sp. (holotype) (F).

Male: unknown

Distribution: Neotropic

Hosts: unknown

Species: 1

GENUS *PAREUCAMPTONYX*: NEOTROPIC REGION

Pareucamptonyx costaricanus n. sp.

Female (Fig. 74, 75): apterous; length 3,43 mm; head black, with mandibles testaceous; antennae brown, with segment 1 testaceous and with segment 10 whitish; thorax, propodeum and abdomen black; legs black, with articulations, chelae and tarsal segments 2-4 testaceous; antennae distally thickened, with rhinaria in the segments 8-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 11:6,5:20:11:10:8:7:6:5:8; head excavated, shiny, smooth, finely punctate, without sculpture among the punctures; frontal line incomplete, only visible in front of the anterior ocellus; occipital carina absent; POL = 1; OL = 4; OOL = 9; pronotum crossed by a strong transversal impression, shiny, smooth, without sculpture, except for a median longitudinal stria; scutellum invisible; metanotum shiny, smooth, without sculpture, inclined,

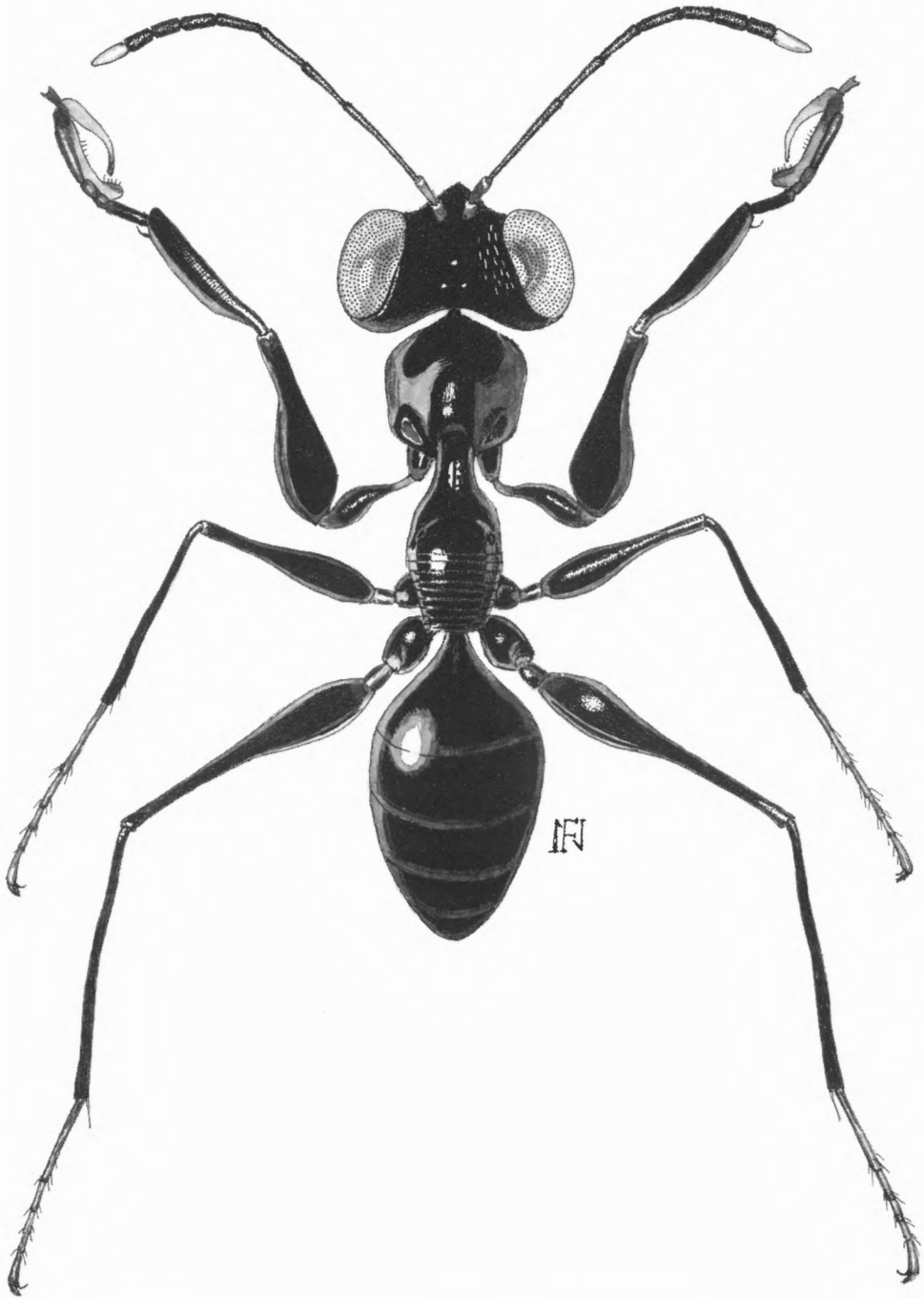


Fig. 74 - Female of *Pareucamptonyx costaricanus* n. sp. (holotype).

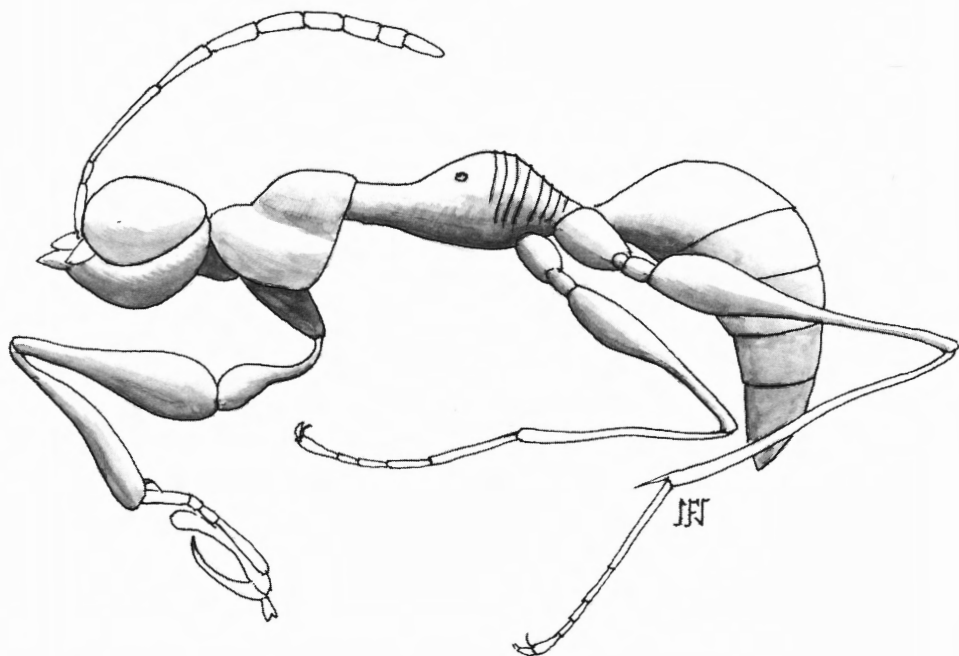


Fig. 75 - Female of *Pareucamptonyx costaricanus* n. sp. (holotype).

not hollow behind the scutellum; meso-metapleural suture obsolete; metathorax + propodeum shiny, without sculpture, except for posterior surface transversely striate; metapleura transversely striate; mesopleura without sculpture, except for posterior third transversely striate; fore tarsal segments in following proportions: 16:4:6:15:26; enlarged claw (Fig. 76) with apex rounded, not pointed, without subapical tooth, with a row of 7 bristles; segment 5 of front tarsus (Fig. 76) with two rows of 17 lamellae; apex with a group of approximately 33 lamellae; maxillary palps with 6 segments; labial palps with 3 segments; tibial spurs 1, 0, 1.

Male: unknown

Locus typicus: 08°45'N 83°26'W (24 Km W Piedras Blancas, m 200, Golfo Dulce Forest Reserve, Puntarenas Prov., Costa Rica).

Typical material: holotype F! in OL.

Distribution: only known from the typical locality.

Notes: the holotype was collected by a malaise trap by Paul Hanson in June - August, 1989.

After the descriptions of the above new genera *Pareucamptonyx*, *Pseudodryinus*, *Paraneodryinus* and the revaluation of the genus *Eucamptonyx* Perkins, a new key to the genera of *Gonatopodinae* can be proposed, as follows:

FEMALES

- 1 Species with reduced wings (Figs. 1250, 1251 in Olmi 1984).....
.....18. *Gynochelys* Brues

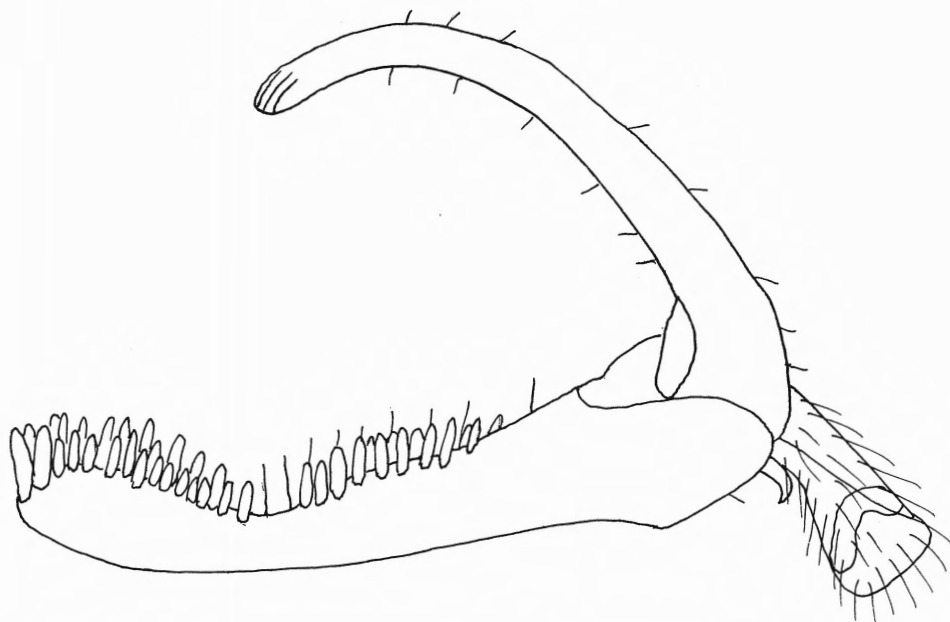


Fig. 76 - Chela of *Pareucamptonyx costaricanus* n. sp. (holotype).

- Species apterous (Figs. 74, 75).....2
- Species fully winged (Figs 65, 66).....19
- 2 Enlarged claw without subapical tooth, with or without a small tooth at the end of a longitudinal furrow (this furrow is only visible by scanning microscope; the small tooth, on the contrary, is easily visible) (Figs 60 A, 60 B, 73 G, 76); if the small tooth is absent, the enlarged claw never has an apical group of lamellae.....3
- Enlarged claw with a big subapical tooth (Figs. 54 D, 56 B); rarely without teeth, but in this case with a group of apical lamellae (Fig. 31 in Olmi 1986)..... 10
- 3 Pronotum crossed by a strong transversal impression (Fig. 72); antennae usually without rhinaria, rarely with rhinaria.....4
- Pronotum not crossed by a transversal impression or very weakly impressed (Fig. 992 in Olmi 1984); antennae without rhinaria.....9
- 4 Maxillary palps with 2 segments.....15. *Epigonatopus* Perkins
- Maxillary palps with 3-6 segments.....5
- 5 Antennae with rhinaria.....6
- Antennae without rhinaria.....7
- 6 Enlarged claw with lamellae (Fig. 73 G).....22. *Eucamptonyx* Perkins
- Enlarged claw with bristles, without lamellae (Fig. 76).....
-23. *Pareucamptonyx* n. gen.
- 7 Maxillary palps with 3-5 segments.....17. *Gonatopus* Ljungh
- Maxillary palps with 6 segments.....8
- 8 Labial palps with 2 segments.....16. *Esagonatopus* Olmi
- Labial palps with 3 segments.....17. *Gonatopus* Ljungh

9 Labial palps with 3 segments.....	14. <i>Trichogonatopus</i> Kieffer
— Labial palps with 2 segments.....	13. <i>Tetrodontochelys</i> Richards
10 Pronotum not crossed by a transversal impression or weakly impressed (Fig. 948 in Olmi 1984).....	11
— Pronotum crossed by a strong transversal impression (Fig. 799 in Olmi 1984).....	14
11 Labial palps with 1 segment.....	10. <i>Haplogonatopus</i> Perkins
— Labial palps with 2-3 segments.....	12
12 Labial palps with 3 segments.....	12. <i>Plectrogonatopoides</i> Ponomarenko
— Labial palps with 2 segments.....	13
13 Maxillary palps with 5 segments.....	11. <i>Pentagonatopus</i> Olmi
— Maxillary palps with 2-4 segments.....	9. <i>Dicondylus</i> Haliday
14 Enlarged claw without subapical tooth, with a group of apical lamellae (Fig. 31 in Olmi 1986).....	19. <i>Paradicondylus</i> Olmi
— Enlarged claw with a subapical tooth, without an apical group of lamellae (Fig. 54 D).....	15
15 Enlarged claw without lamellae, with or without bristles or peg-like hairs (Fig. 795 in Olmi 1984).....	4. <i>Acrodontochelys</i> Currado
— Enlarged claw with lamellae (Fig. 53 D).....	16
16 Labial palps with 2 segments.....	17
— Labial palps with 3 segments.....	18
17 Maxillary palps with 2-4 segments.....	5. <i>Pseudogonatopus</i> Perkins
— Maxillary palps with 5 segments.....	6. <i>Donisthorpina</i> Richards
18 Maxillary palps with 6 segments.....	8. <i>Apterodryinus</i> Perkins
— Maxillary palps with 5 segments.....	7. <i>Agonatopoides</i> Perkins
19 Tibial spurs 1, 0, 2.....	20
— Tibial spurs 1, 0, 1.....	22
20 Pronotal tubercles present.....	21. <i>Pseudodryinus</i> n. gen.
— Pronotal tubercles absent.....	21
21 Notaulices invisible.....	1. <i>Neodryinus</i> Perkins
— Notaulices distinct, complete or incomplete.....	20. <i>Paraneodryinus</i> n. gen.
22 Notaulices distinct, complete (Fig. 767 in Olmi 1984).....	3. <i>Echthrodolphax</i> Perkins
— Notaulices invisible (Fig. 754 in Olmi 1984).....	2. <i>Adryinus</i> Olmi

After the descriptions of males of *Gonatopodinae*, new keys to the males must be proposed, as follows:

KEY TO THE KNOWN MALES OF PALAEARCTIC GONATOPODINAE

1 Antennal segment 3 four or more than four times as long as broad.....	2
— Antennal segment 3 less than three and a half times as long as broad.....	21
2 Head with a distinct occipital carina from posterior ocelli to the ventral side of the head (Fig. 779 in Olmi 1984).....	3
— Head without occipital carina or with an occipital carina very short, only shortly visible behind and on the sides of the posterior ocelli, but never reaching the temples (Fig. 836 in Olmi 1984).....	4

- 3 Dorsal process of gonoforceps transverse (Fig. 770 in Olmi 1984).....
.....*Echthrodolphax hortusensis* (Abdul-Nour)
- Dorsal process of gonoforceps approximately parallel to the penis (Fig. 781
in Olmi 1984).....*Echthrodolphax fairchildii* Perkins
- 4 Labial palps with 1 segment.....5
- Labial palps with 2-3 segments.....6
- 5 Dorsal process of gonoforceps broadened near the apex (Fig. 980 in Olmi 1984)
.....*Haplogonatopus apicalis* Perkins
- Dorsal process of gonoforceps not broadened near the apex (Fig. 977 in Olmi
1984).....*Haplogonatopus oratorius* (Westwood)
- 6 Dorsal process of gonoforceps very short (Figs. 808, 893 in Olmi 1984); gonofor-
ceps more than three times as long as dorsal process (Figs. 808, 893 in Olmi
1984).....7
- Dorsal process of gonoforceps very long (Figs 804, 818 in Olmi 1984); gonofor-
ceps less than three times as long as dorsal process (Figs. 804, 818 in Olmi
1984).....8
- 7 Head with frons dull, without a median deep and shiny furrow; dorsal process
of gonoforceps slender (Fig. 808 in Olmi 1984).....
.....*Pseudogonatopus flavifemur* Esaki & Hash.
- Head with frons shiny, with a median deep and shiny furrow; dorsal process
of gonoforceps with apex broadened (Fig. 893 in Olmi 1984).....
.....*Donisthorpina pallida* (Ceballos)
- 8 Head with OOL approximately as long as or much shorter than the breadth
of the ocelli.....9
- Head with OOL much longer than the breadth of the ocelli.....12
- 9 Propodeum reticulate rugose; notaulices complete; head with OOL approxi-
mately as long as the breadth of the ocelli.....
.....*Pseudogonatopus fulgori* (Nakagawa)
- Propodeum smooth, fully or almost fully without sculpture; notaulices incom-
plete; breadth of the ocelli much longer than OOL.....10
- 10 Propodeum almost fully without sculpture; only granulated on the dorsal sur-
face near the longitudinal furrow; dorsal process of gonoforceps straight (Fig.
59 A).....*Gonatopus visticus* Olmi
- Propodeum fully without sculpture; dorsal process of gonoforceps curved (Fig.
787 in Olmi 1984; Fig. 59 B).....11
- 11 Antennal segment 3 at most four times as long as broad.....
.....*Acrodontochelys bouceki* Currado
- Antennal segment 3 at least four and a half times as long as broad.....
.....*Gonatopus horvathi* Kieffer
- 12 Dorsal process of gonoforceps with apical and inner margin distinctly serrate
(Fig. 818 in Olmi 1984).....*Pseudogonatopus distinctus* (Kieffer)
- Dorsal process of gonoforceps with apical and inner margin not serrate (Figs.
901, 903, 995 in Olmi 1984); occasionally dorsal process of gonoforceps with
a track of serrate apex.....13
- 13 Dorsal process of gonoforceps slender and with apex pointed (Figs. 901, 903,
995 in Olmi 1984).....14
- Dorsal process of gonoforceps with apex broadened (Fig. 946 in Olmi 1984)
.....16
- 14 Dorsal process of gonoforceps much shorter than the gonoforceps (Fig. 901
in Olmi 1984).....*Agonatopoides solidus* (Haupt)

- Dorsal process of gonoforceps approximately as long as or slightly shorter than the gonoforceps (Figs. 903, 995 in Olmi 1984).....15
- 15 Fore wing with radial vein regularly curved.....
.....*Agonatopoides canariensis* Olmi
- Fore wing with radial vein not regularly curved; radial vein with an angle between proximal and distal part.....
.....*Tetrodontochelys pedestris* (Dalman)
- 16 Notaulices posteriorly joint.....*Pseudogonatopus rosellae* Currado & Olmi
- Notaulices posteriorly separated.....17
- 17 Minimum distance between the notaulices much longer than the breadth of the ocelli.....*Apterodryinus europaeus* Olmi
- Minimum distance between the notaulices as long as or shorter than the breadth of the ocelli.....18
- 18 Dorsal process of gonoforceps with a broad proximal region; apical region broad (Fig. 52 D) or narrow (Fig. 69 in Olmi 1987a).....19
- Dorsal process of gonoforceps with a narrow proximal region (Fig. 946 in Olmi 1984).....20
- 19 Dorsal process of gonoforceps with distal apex narrow and pointed (Fig. 69 in Olmi 1987a).....*Pseudogonatopus camelinus* (Kieffer)
- Dorsal process of gonoforceps with distal apex broad and rounded (Fig. 52 D).....*Pseudogonatopus rosellae* Currado & Olmi
- 20 Minimum distance between the notaulices approximately as long as the breadth of the ocelli.....*Dicondylus bicolor* (Haliday)
- Minimum distance between the notaulices shorter than the breadth of the ocelli.....*Dicondylus dichromus* (Kieffer)
- 21 Notaulices incomplete.....22
- Notaulices complete.....24
- 22 Propodeum fully smooth, not rugose.....
.....*Acrodontochelys bouceki* Currado
- Propodeum at least partly rugose; at least the dorsal surface is slightly rugose.....23
- 23 Dorsal process of gonoforceps long and fully slender (Fig. 70 in Olmi 1987a).....*Pseudogonatopus dromedarius* (A. Costa)
- Dorsal process of gonoforceps with proximal half broad and with distal half slender (Fig. 59 C).....*Gonatopus albolineatus* Kieffer
- 24 Propodeum fully or almost fully smooth, not reticulate rugose.....25
- Propodeum fully or almost fully reticulate rugose.....26
- 25 Dorsal process of gonoforceps very short and reduced (Fig. 51 E); head with face almost fully testaceous.....*Pseudogonatopus azorensis* n. sp.
- Dorsal process of gonoforceps longer (Fig. 59 E); head with face black.....*Gonatopus brunneicollis* (Richards)
- 26 Minimum distance between the notaulices as long as antennal segment 2.*Gonatopus distinguendus* Kieffer
- Minimum distance between the notaulices much shorter than antennal segment 2.....27
- 27 Head with a very prominent apophysis on the sides of the posterior ocelli (Fig. 59 F).....28
- Head without a very prominent apophysis on the sides of the posterior ocelli (Fig. 59 G).....29

- 28 Head with clypeus, anterior and median region of frons, lateral regions of frons around the orbits yellow-testaceous; dorsal process of gonoforceps broadened (Fig. 1255 in Olmi).....*Labeo albosignatus* Kieffer
— Head fully black, except for mandibles testaceous; dorsal process of gonoforceps slender (Fig. 1071 in Olmi 1984).....*Gonatopus lunatus* Klug
- 29 Dorsal process of gonoforceps transverse and with membranous band visible on proximal and distal region (Fig. 1095 in Olmi 1984).....*Gonatopus sepsoides* Westwood
— Dorsal process of gonoforceps not transverse and with membranous band located on distal apex (Fig. 1049 in Olmi 1984; Figs. 58 E, 59 D).....30
- 30 Dorsal process of gonoforceps broader, less slender (Fig. 58 E).....*Gonatopus lycius* n. sp.
— Dorsal process of gonoforceps very slender (Fig. 1049 in Olmi 1984; Fig. 59 D).....31
- 31 Dorsal process of gonoforceps short (Fig. 59 D); propodeum with areolae smaller.....*Gonatopus formicarius* Ljungh
— Dorsal process of gonoforceps long (Fig. 1049 in Olmi 1984); propodeum with areolae wider.....*Gonatopus striatus* Kieffer

KEY TO THE KNOWN MALES OF ETHIOPIAN GONATOPODINAE

- 1 Head with a distinct occipital carina from posterior ocelli to the ventral side of the head.....2
— Head without occipital carina or with occipital carina very short, only visible near the ocelli.....3
- 2 Notaulices almost joint at posterior margin of scutum (Fig. 10 in Olmi 1989).....*Echthrodelfax afer* Olmi
— Notaulices distinctly separated at posterior margin of scutum (Fig. 8 in Olmi 1989); approximately the minimum distance between the notaulices is 0,5 as long as the breadth of the ocelli.....*Echthrodelfax migratorius* Benoit
- 3 Notaulices absent.....*Gonatopus incognitus* Olmi
— Notaulices at least partly visible.....4
- 4 Notaulices complete.....5
— Notaulices incomplete.....9
- 5 Antennal segment 3 less than three times as long as broad.....6
— Antennal segment 3 more than three times as long as broad.....7
- 6 Region of the head between eyes and posterior ocelli with a shiny, ovoidal area not delimited by a strong horn-shaped keel.....*Gonatopus okahandjae* Olmi
— Region of the head between eyes and posterior ocelli with a shiny, ovoidal area anteriorly delimited by a strong horn-shaped keel.....*Pseudogonatopus cornutus* (Benoit)
- 7 Labial palps with 1 segment.....*Haplogonatopus katangae* (Benoit)
— Labial palps with 2-3 segments.....8
- 8 Scutum with numerous, longitudinal and weak keels; minimum distance between the notaulices longer than the breadth of the ocelli.....*Neodryinus bellicosus* Benoit
— Scutum without longitudinal striae; minimum distance between the notaulices shorter than the breadth of the ocelli.....*Pseudogonatopus ruens* Olmi

- 9 Clypeus very prominent, sticking out as a bill.....
*Pseudogonatopus harteni* Olmi
 — Clypeus not prominent, not sticking out as a bill.....10
 10 Notaulices reaching approximately 0,75 length of scutum.....
*Gonatopus inexpectatus* Benoit
 — Notaulices shorter, reaching at most 0,5 length of scutum.....11
 11 Propodeum with irregular striae, without sculpture among the striae; notaulices
 reaching approximately 0,25-0,30 length of scutum.....12
 — Propodeum fully without sculpture; notaulices reaching approximately 0,5
 length of scutum.....13
 12 Dorsal process of gonoforceps distally broad (Fig. 57 E).....
*Tetrodontochelys ochreus* Olmi
 — Dorsal process of gonoforceps slender (Fig. 1121 in Olmi 1984).....
*Gonatopus incognitus* Olmi
 13 Distal part of radial vein approximately as long as proximal part; propodeum
 with dorsal surface approximately as long as posterior surface; fore wing
 only with costal cell distinctly enclosed by pigmented veins.....
*Aphelopus africanus* Benoit
 — Distal part of radial vein much longer than proximal part; propodeum with
 dorsal surface approximately twice as long as posterior surface; fore wing
 with three cells distinctly enclosed by pigmented veins.....
*Acrodontochelys ugandanus* (Benoit)

KEY TO THE KNOWN MALES OF ORIENTAL GONATOPODINAE

- 1 Temples absent; occiput almost straight or weakly curved.....2
 — Temples distinct; occiput strongly concave.....4
 2 Fore wing with a dark transversal band beneath the pterostigma.....
*Neodryinus reticulatus* (Fouts)
 — Fore wing hyaline, without dark transversal bands.....3
 3 Scutellum granulated.....*Neodryinus javanus* (Roepke)
 — Scutellum punctate, without sculpture among the punctures.....
*Neodryinus diffusus* Olmi
 4 Head with a distinct occipital carina from posterior ocelli to the ventral side
 of the head.....*Echthrodolphax fairchildii* Perkins
 — Head without occipital carina or with occipital carina very short, only visible
 behind and on the sides of the posterior ocelli, but never reaching the temples..5
 5 Labial palps with 1 segment.....*Haplogonatopus apicalis* Perkins
 — Labial palps with 2-3 segments.....6
 6 Notaulices complete and separated.....7
 — Notaulices complete and joint (or very near, almost joint).....11
 7 Dorsal process of gonoforceps longer than penis (Figs. 914, 917 in Olmi
 1984).....8
 — Dorsal process of gonoforceps shorter than penis (Figs. 841, 878 in Olmi 1984)
9
 8 Head fully yellow; antennal segment 3 more than four times as long as broad;
 dorsal process of gonoforceps with distal apex sharp (Fig. 914 in Olmi 1984)
*Agonatopoides borneanus* Olmi
 — Head brown; antennal segment 3 less than three times as long as broad; dor-
 sal process of gonoforceps with apex rounded (Fig. 917 in Olmi 1984).....
*Agonatopoides pyrillae* (Mani)

- 9 Dorsal process of gonoforceps slender (Fig. 33 in Olmi 1987c).....
.....*Gonatopus superbus* Olmi
— Dorsal process of gonoforceps broadened (Figs. 841, 878 in Olmi 1984)..10
10 Dorsal process of gonoforceps with distal half broadened; proximal half slender
(Fig. 878 in Olmi 1984).....*Pseudogonatopus hospes* Perkins
— Dorsal process of gonoforceps almost fully regularly broadened (Fig. 841 in
Olmi 1984).....*Pseudogonatopus malesiae* Olmi
or *Pseudogonatopus sarawakensis* Olmi
Type B (see Olmi 1984, pp. 1241-1245)
11 Propodeum with dorsal surface sculptured by areolae much smaller than the
areolae of the posterior surface.....*Pseudogonatopus sarawaki* Moczar
— Propodeum with dorsal surface sculptured by areolae approximately as wide
as the areolae of the posterior surface12
12 Dorsal process of gonoforceps very long and broad, easily visible (Fig 840
in Olmi 1984).....*Pseudogonatopus malesiae* Olmi
or *Pseudogonatopus sarawakensis* Olmi
Type A (see Olmi 1984, pp. 1241-1245)
— Dorsal process of gonoforceps very reduced, almost invisible (Fig. 954 in Olmi
1984).....*Dicondylus indianus* Olmi

KEY TO THE KNOWN MALES OF NEOTROPIC GONATOPODINAE

- 1 Temples absent; occiput straight.....*Neodryinus trinitatis* Richards
— Temples present, more or less prominent; occiput concave.....2
2 Antennal segment 3 less than three times as long as broad.....3
— Antennal segment 3 more than three times as long as broad.....4
3 Notaulices complete; propodeum reticulate rugose.....
.....*Labeo sanctivincenti* Ashmead
— Notaulices incomplete; propodeum smooth and irregularly striate, not reticu-
late rugose.....*Tetrodontocheilus zolnerowichi* n. sp.
4 Propodeum fully reticulate rugose.....5
— Propodeum at most partly reticulate rugose, fully or partly smooth, occasion-
ally rugose.....11
5 Dorsal process of gonoforceps longer than penis (Fig. 1266 in Olmi 1984).
.....*Laberinus paranensis* Ogloblin
— Dorsal process of gonoforceps shorter than penis (Figs. 939, 1259 in Olmi
1984).....6
6 Dorsal process of gonoforceps with distal apex pointed (Figs 53 B, 63 C).
.....7
— Dorsal process of gonoforceps with distal apex broadened (Figs. 939, 1259
in Olmi 1984).....10
7 Notaulices posteriorly joint.....*Pseudogonatopus flavus* Olmi
— Notaulices posteriorly separated.....8
8 Head almost fully testaceous, except for vertex darkened.....
.....*Pseudogonatopus pecki* n. sp.
— Head black, with mandibles testaceous.....9
9 Dorsal process of gonoforceps slender and approximately as long as gonofor-
ceps (Fig. 75 in Olmi 1987a).....*Apterodryinus arnaudi* Olmi
or *Apterodryinus rabidanus* Olmi

- Dorsal process of gonoforceps with median region broadened and much shorter than the gonoforceps (Fig. 312).....*Gonatopus flavipes* Olmi
- 10 Dorsal process of gonoforceps with distal apex slightly broadened (Fig. 939 in Olmi 1984).....*Apterodryinus tijucanus* (Arlé)
- Dorsal process of gonoforceps more broadened (Fig. 1259 in Olmi 1984).....*Labeo grenadensis* Ashmead
- 11 Notaulices complete.....12
- Notaulices incomplete.....14
- 12 Dorsal process of gonoforceps short and with distal apex slender (Fig. 56 A).....*Dicondylus costaricanus* n. sp.
- Dorsal process of gonoforceps long and with apex broadened (Figs. 1220, 1268 in Olmi 1984).....13
- 13 Propodeum not smooth, fully weakly rugose; dorsal process of gonoforceps with distal apex slightly broadened (Fig. 1220 in Olmi 1984).....*Gonatopus bartletti* Olmi
- Propodeum with dorsal surface fully smooth; posterior surface reticulate rugose; dorsal process of gonoforceps with distal apex more broadened (Fig. 1268 in Olmi 1984).....*Labeo simulans* Ashmead
- 14 Dorsal process of gonoforceps much shorter than penis (Fig. 1206 in Olmi 1984).....*Gonatopus fernandinae* Olmi
- Dorsal process of gonoforceps slightly shorter than penis (Fig. 1208 in Olmi 1984).....15
- 15 Legs brown-dark, with distal apex of coxae, trochanters and femora yellow; proximal apex of tibiae and tarsi yellow.....*Acrodontochelys cubensis* Richards
- Legs testaceous-dark, with distal apex of coxae, trochanters and femora slightly light; proximal apex of tibiae and tarsi slightly light.....*Gonatopus breviforceps* Kieffer

KEY TO THE KNOWN MALES OF AUSTRALIAN GONATOPODINAE

- 1 Temples absent; occiput straight or almost straight.....*Neodryinus koebelei* Perkins
- Temples present; occiput concave; occasionally temples absent, but then occiput concave.....2
- 2 Head with a distinct occipital carina from posterior ocelli to the ventral side of the head.....3
- Head without occipital carina or with occipital carina short, only visible behind or on the sides of the posterior ocelli, but never reaching the temples..4
- 3 Notaulices posteriorly joint.....*Echthrodolphax fairchildii* Perkins
- Notaulices posteriorly separated.....*Echthrodolphax nigricollis* Perkins
- 4 Labial palps with 1 segment.....5
- Labial palps with 2-3 segments.....7
- 5 Dorsal process of gonoforceps broad and with apical margin serrate (Fig. 980 in Olmi 1984).....*Haplogonatopus apicalis* Perkins
- Dorsal process of gonoforceps slender and with apical margin serrate (Fig. 974 in Olmi 1984) or rounded (Fig. 983 in Olmi 1984).....6
- 6 Dorsal process of gonoforceps with apical margin rounded (Fig. 983 in Olmi 1984).....*Haplogonatopus vitiensis* Perkins

- Dorsal process of gonoforceps with apical margin serrate (Fig. 974 in Olmi 1984).....*Haplogonatopus oratorius* (Westwood).....8
- 7 Notaulices incomplete.....8
- Notaulices complete.....13
- 8 Propodeum smooth and shiny, not reticulate rugose.....9
- Propodeum dull, reticulate rugose.....11
- 9 Head black or brown, with frons, clypeus, mandibles and ventral side testaceous or whitish; dorsal process of gonoforceps broadened and with papillae on distal apex (Fig. 58 B).....*Tetradontochelys anomalus* (Perkins)
- Head black or brown, at most with mandibles and clypeus testaceous; dorsal process of gonoforceps slender and without papillae on distal apex (Fig. 1236 in Olmi 1984; Fig. 51 B).....10
- 10 Dorsal process of gonoforceps approximately as long as basivolsella or slightly longer (Fig. 1236 in Olmi 1984).....*Gonatopus melanias* (Perkins)
- Dorsal process of gonoforceps at least as long as basivolsella + distivolsella (Fig. 51 B).....*Acrodontochelys vitiensis* (Perkins)
- 11 Gonoforceps with dorsal process reduced to a membranous band located along the gonoforceps (Fig. 64 B).....*Gonatopus visendus* n. sp.
- Gonoforceps with dorsal process long and well separated from the gonoforceps (Figs. 1239, 1246 in Olmi 1984).....12
- 12 Dorsal process of gonoforceps approximately as long as gonoforceps (Fig. 1239 in Olmi 1984).....*Gonatopus zealandicus* Olmi
- Dorsal process of gonoforceps much shorter than the gonoforceps (Fig. 1246 in Olmi 1984).....*Gonatopus optabilis* (Perkins)
or *Gonatopus decoratus* (Perkins)
- 13 Notaulices posteriorly separated.....14
- Notaulices posteriorly joint.....19
- 14 Dorsal surface of propodeum smooth, not reticulate rugose, with a median longitudinal furrow.....*Pseudogonatopus saccharetorum* Perk.
- Dorsal surface of propodeum fully reticulate rugose.....15
- 15 Dorsal process of gonoforceps long, slightly shorter than the gonoforceps (Fig. 878 in Olmi 1984; Figs. 57 B, 57 D).....16
- Dorsal process of gonoforceps much shorter than the gonoforceps (Fig. 960 in Olmi 1984; Fig. 56 F).....18
- 16 Dorsal process of gonoforceps slender (Fig. 57 B).....*Dicondylus primitivus* Olmi
- Dorsal process of gonoforceps with distal half of distal apex broadened (Fig. 878 in Olmi 1984; Fig. 57 D).....17
- 17 Dorsal process of gonoforceps with distal apex pointed (Fig. 878 in Olmi 1984).....*Pseudogonatopus hospes* Perkins
- Dorsal process of gonoforceps with distal apex rounded and with margin serrate (Fig. 57 D).....*Plectrogonatopoides fijianus* n. sp.
- 18 Maxillary palps with segment 4 approximately twice as long as segment 3 (Fig. 56 G); dorsal process of gonoforceps larger and with papillae on apical region (Fig. 56 F).....*Dicondylus rufus* (Fouts)
- Maxillary palps with segment 4 less than twice as long as segment 3 (Fig. 56 H); dorsal process of gonoforceps smaller and without papillae (Fig. 960 in Olmi 1984).....*Dicondylus perkinsi* (Ashmead)
- 19 Propodeum smooth, not reticulate rugose.....*Pseudogonatopus dichromus* Perkins

- Propodeum fully or almost fully reticulate rugose.....20
- 20 Dorsal process of gonoforceps with numerous short and pointed lamellae (Fig. 969 in Olmi 1984); propodeum fully reticulate rugose.....*Dicondylus alpinus* (Gourlay)
- Dorsal process of gonoforceps smooth, without short lamellae (Figs. 875, 876 in Olmi 1984); propodeum reticulate rugose, but with dorsal surface showing two lateral smooth areas.....*Pseudogonatopus nigricans* Perkins

SUBFAMILY APODRYININAE

AUSTRALODRYINUS, NEW GENUS

Type species: Australodryinus naumanni n. sp.

Female (Figs. 77, 78): apterous; maxillary palps with 4-5 segments (Fig. 79 A, B); labial palps with 3 segments (Fig. 79 C); occipital carina absent; ocelli absent; mesosoma composed of fused segments; only the propectus is mobile and articulated; the mesosoma sutures are partly visible and partly obliterated; the suture between pronotum and mesothorax is fully visible, laterally and dorsally; the suture between propodeum and metathorax can be fully or partly visible; scutum and scutellum not distinct; pronotum visible, but not mobile, because not articulated to mesothorax; antennae geniculated, with rhinaria in segments 3-10 (one per segment, except for segment 10, which has 2 rhinaria); enlarged claw (Figs. 79 D, E) with 2-3 subapical teeth and lamellae; segment 5 of front tarsus (Figs. 79 D, E) with rows of lamellae; pronotum not crossed by a transversal impression; tibial spurs 1, 1, 1.

Male: unknown

Distribution: Australian

Hosts: unknown

Species: 2

Notes: *Australodryinus* n. gen. is the second known genus of the subfamily *Apodryininae*. The other genus, *Apodryinus* Olmi, is present, with one only species, in Chile. The subfamily *Apodryininae* so has a very interesting transantarctic distribution.

The following key to the genera of *Apodryininae* can be proposed:

FEMALES

- 1 Suture between pronotum and mesothorax incomplete, only visible on the sides, not visible dorsally (Figs. 15, 1253 in Olmi 1984).....1. *Apodryinus* Olmi
- Suture between pronotum and mesothorax complete, laterally and dorsally visible (Figs. 77, 78).....2. *Australodryinus* n. gen.

The males of *Apodryininae* are unknown.

GENUS AUSTRALODRYINUS: AUSTRALIAN REGION

Australodryinus naumanni n. sp.

Female (Figs. 77, 78): apterous; length 3,37-3,62 mm; head black, with mandibles

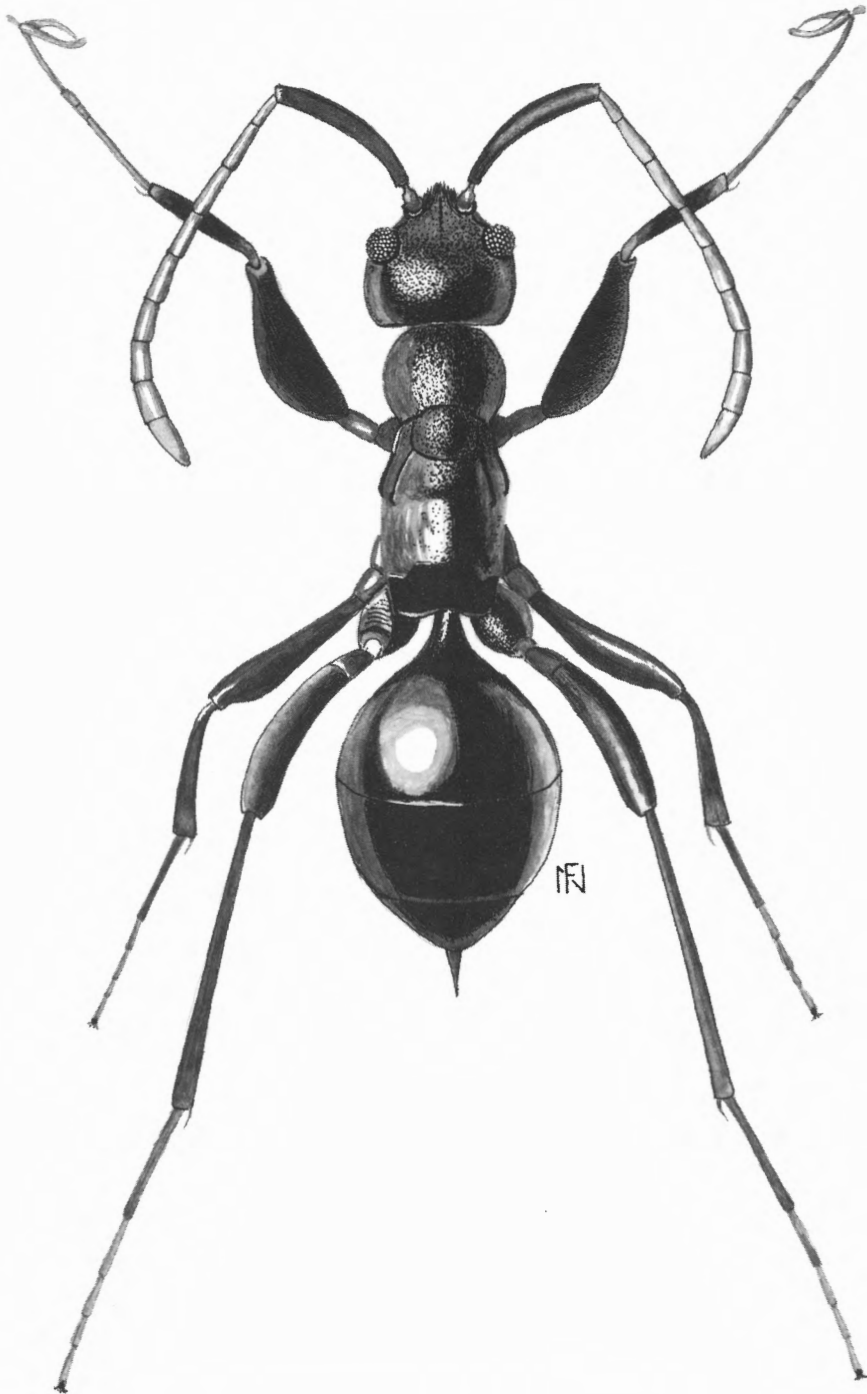


Fig. 77 - Female of *Australodryinus naumanni* n. sp. (holotype).

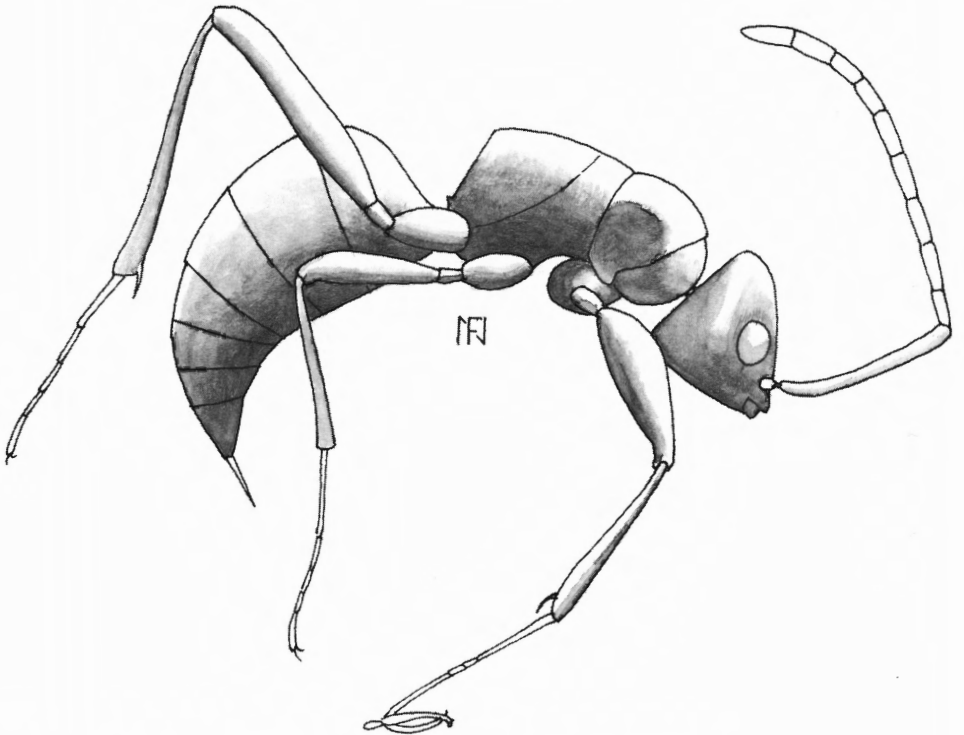


Fig. 78 - Female of *Australodryinus naumanni* n. sp. (holotype).

and clypeus testaceous; antennae testaceous-dark, with segment 1 brown; thorax and propodeum black; abdomen black, with distal apex testaceous; legs brown; antennae geniculated, distally thickened, with rhinaria in the segments 3-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 23:6:8:8:7:7:6:6:6:9; head swollen, dull, granulated, hairless; only temples, occiput and lower face with fine and short hairs; temples very long, approximately twice as long as eyes (10:5); occipital carina absent; ocelli absent; frontal line visible from clypeus to central area of frons; clypeus with ventral margin rounded; subocular sulcus absent; mandibles with 4 irregular teeth; antennal toruli contiguous with upper margin of clypeus; propectus not dorsally visible, visible under the anterior margin of the pronotum; pronotum clearly distinct, with a visible complete suture separating pronotum from mesothorax + metathorax + propodeum; pronotum dull, humped, irregularly rugose, with lateral regions longitudinally striate; pronotum not crossed by a transversal impression, without posterior tubercles; mesothorax, metathorax and propodeum fused, not distinctly separated by sutures; the following sutures are visible: a complete meso-metapleural suture; a complete suture around the posterior surface of the propodeum; a weak dorsal track of transversal suture, apparently between propodeum and mesonotum + metanotum; an incomplete longitudinal suture on the sides of the spiracles (it's probably a track of the suture separating propodeum from

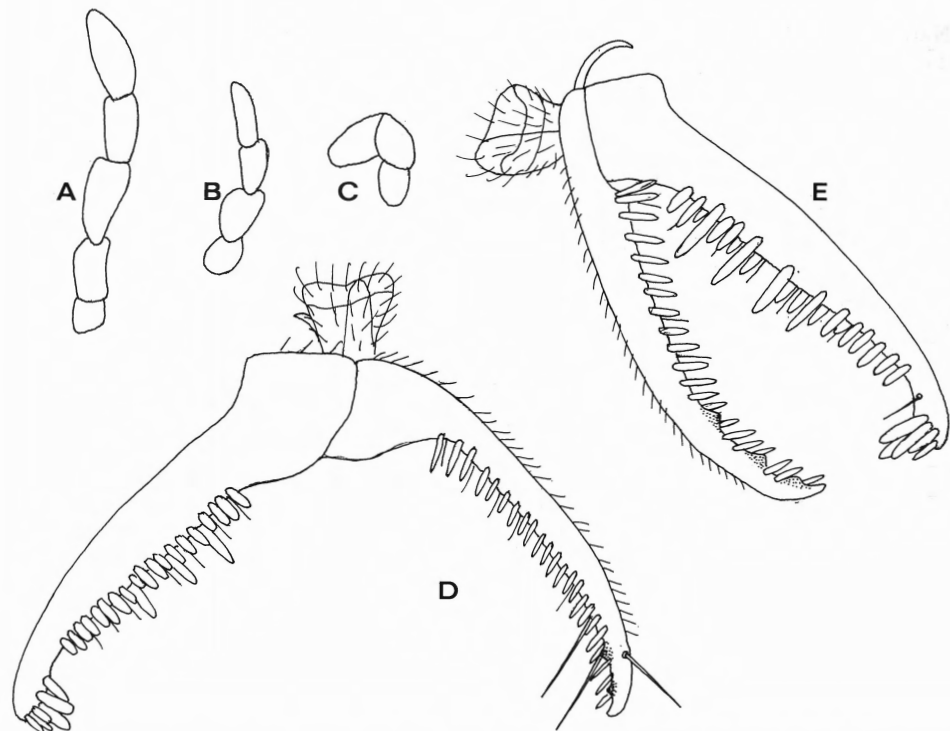


Fig. 79 - Maxillary palp (A), labial palp (C) and chela (D) of female of *Australodryinus naumanni* n. sp. (holotype); maxillary palp (B) and chela (E) of female of *Australodryinus monteithi* n. sp. (holotype).

mesothorax + metathorax); scutum and scutellum are not recognizable; the dorsal area corresponding to mesonotum + metanotum is dull and longitudinally striate; the dorsal surface of the propodeum is shiny and irregularly rugose; the posterior surface of the propodeum is shiny, irregularly rugose and with a transversal stria near the petiole; mesopleura reticulate rugose; metapleura weakly reticulate rugose; thorax + propodeum hairless, only with some fine hairs on the dorsal surface of the pronotum; the propodeal spiracles are normally prominent; fore tarsal segments in following proportions: 14:2,5:3:10:13; segment 3 of front tarsus produced into a hook; fore trochanters approximately twice as long as broad (7:3,5); enlarged claw (Fig. 79 D) with 2 subapical teeth, a row of approximately 23 lamellae and numerous hairs in the external side; segment 5 of front tarsus (Fig. 79 D) with two rows of 3 (long) + 19 (short) lamellae; apex with a group of approximately 5 lamellae; maxillary palps with 5 segments (Fig. 79 A); labial palps with 3 segments (Fig. 79 C); tibial spurs 1, 1, 1.

Male: unknown

Locus typicus: 35°16'S 149°06'E (Black Mtn, A.C.T., Australia).

Typical material: holotype F! in CB; 1 paratype F! in OL.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the typical series, I.D.

Naumann; the typical series was collected by an interception trap on October 24 - November 1, 1982.

Australodryinus monteithi n. sp.

Female: apterous; length 2,5 mm; head black, with mandibles and clypeus testaceous-brown; antennae testaceous-dark, with segment 1 brown; abdomen brown; legs brown; antennae geniculated, distally thickened, with rhinaria in the segments 3-10 (one per segment, except for segment 10, which has 2 rhinaria); antennal segments in following proportions: 25:5:8:8:8:7:6:6:6:8; head swollen, shiny, without sculpture, hairless; only temples and genae with a few fine hairs; temples very long, approximately twice as long as eyes (10:5); occipital carina absent; ocelli absent; frontal line short, visible from clypeus to anterior third of frons; clypeus with ventral margin rounded; subocular sulcus absent; mandibles with 4 irregular teeth; antennal toruli contiguous with upper margin of clypeus; propectus not dorsally visible, visible under the anterior margin of the pronotum; pronotum clearly distinct, with a visible complete suture separating pronotum from mesothorax + metathorax + propodeum; pronotum shiny, humped, without sculpture, hairless, not crossed by a transversal impression, without posterior tubercles; pronotum not mobile; mesothorax, metathorax and propodeum fused, with only a few sutures visible, as follows: a complete suture separating propodeum from mesothorax + metathorax; an incomplete meso-metapleural suture; mesothorax, metathorax and propodeum shiny, without sculpture, except for the visible sutures and for the numerous transversal striae on posterior surface of propodeum; thorax + propodeum hairless; the propodeal spiracles are normally prominent; fore tarsal segments in following proportions: 14:2,5:3:10:14; segment 3 of front tarsus produced into a hook; fore trochanters approximately 1,5 as long as broad (6:4); enlarged claw (Fig. 79 E) with 3 subapical teeth, a row of approximately 20 lamellae and numerous hairs on the external sides; segment 5 of front tarsus (Fig. 79 E) with two rows of 4 (long) + 16 (short) lamellae; apex with a group of approximately 5 lamellae; maxillary palps with 4 segments (Fig. 79 B); labial palps with 3 segments; tibial spurs 1, 1, 1.

Male: unknown

Locus typicus: 16°25'S 145°20'E (Mossman Gorge, NE Queensland, Australia).

Typical material: holotype F! in CB.

Distribution: only known from the typical locality.

Notes: the species is named in honor of the collector of the holotype, G. Monteith; the holotype was collected by Berlesate in sieved litter in rain forest on October 20, 1980.

After the descriptions of the above new species, the following key to the Australian *Australodryinus* can be proposed:

- 1 Suture between propodeum and mesothorax + metathorax fully visible, laterally and dorsally; head smooth, without sculpture; thorax + propodeum smooth, except for the visible sutures and for numerous transversal striae on posterior surface of propodeum; enlarged claw with 3 subapical teeth (Fig. 79 E).....2. *monteithi* n. sp.

— Suture between propodeum and mesothorax + metathorax only laterally visible (Figs. 77, 78); head dull, granulated; thorax and propodeum irregularly rugose; posterior surface of propodeum irregularly rugose, without numerous transversal striae, only with a transversal stria near the petiole; enlarged claw with 2 subapical teeth (Fig. 79 D).....1. *naumanni* n. sp.

The males of the *Australodryinus* are unknown.

LABERITINAE, NEW SUBFAMILY
(fossil)

Type genus: Laberites N. Ponomarenko 1988.

Female: unknown

Male: fully winged; fore wing with costal, median and submedian cells clearly enclosed by pigmented veins; palpal formula not distinct, because the palps are not well visible through the amber (apparently 6/3); occipital carina complete; fore wing with metacarpus shorter than the pterostigma; mandibles not distinct through the amber; tibial spurs 1, 2, 2 .

Distribution: only known from Baltic amber (fossil).

Genera: Laberites N. Ponomarenko.

Species: Laberites polonicus N. Ponomarenko 1988 (holotype M! in WR).

Notes: the new subfamily is proposed after study of Laberites polonicus, species described by N. Ponomarenko (1988: p. 107). The main character of this species is the presence of two spurs at the distal apex of the mid tibiae (tibial spurs 1, 2, 2). It's the only subfamily of Dryinidae with tibial spurs 1, 2, 2; the other subfamilies have the following tibial spurs: in the females 1, 0, 1 or 1, 0, 2 or 1, 1, 1 or 1, 1, 2; in the males always 1, 1, 2. For other characters Laberites polonicus is like the other males of the family.

L. polonicus N. Ponomarenko seems the only species belonging to the genus *Laberites*. Ponomarenko (1988a) proposed to include also *Laberius antiquus* N. Ponomarenko 1981: I don't agree, because *L. antiquus* has tibial spurs 1, 1, 2, and not 1, 2, 2 as in *Laberites*.

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SUMMARY

This paper is a supplement to the previous revision of the world *Dryinidae* (*Hymenoptera Chrysoidea*), published by Olmí (1984).

The following new genera are described: *Paraphelopus* (*Aphelopinae*); *Bocchopsis* (*Bocchinae*); *Gonadryinus* (*Dryininae*); *Transgonatopus* (*Transdryininae*); *Paraneodryinus*, *Pseudodryinus*, *Pareucamptonyx* (*Gonatopodinae*); *Australodryinus* (*Apodryininae*).

The new fossil subfamily *Laberitinae* is proposed for *Laberites polonicus* N. Ponomarenko.

Numerous new species are described in the following subfamilies: *Aphelopinae* (10 new species); *Biaphelopinae* (a new species); *Conganteoninae* (3 new species); *Anteoninae* (94 new species); *Bocchinae* (19 new species); *Thaumatodryininae* (2 new species); *Dryininae* (28 new species); *Transdryininae* (a new species); *Gonatopodinae* (43 new species); *Apodryininae* (2 new species).

The new fossil species, *Bocchus vetustus*, from amber of the Dominican Republic, is described.

Numerous males and females, previously unknown opposite sexes, are described.

RIASSUNTO

La presente pubblicazione costituisce un supplemento alla revisione dei *Dryinidae* (*Hymenoptera, Chrysoidea*) di Olmí (1984). Sono descritti i seguenti nuovi generi: *Paraphelopus* (*Aphelopinae*); *Bocchopsis* (*Bocchinae*); *Gonadryinus* (*Dryininae*); *Transgonatopus* (*Transdryininae*); *Paraneodryinus*, *Pseudodryinus*, *Pareucamptonyx* (*Gonatopodinae*); *Australodryinus* (*Apodryininae*). Il vecchio genere *Eucamptonyx* Perkins 1907, in precedenza considerato sinonimo di *Gonatopus* Ljungh, viene rivalutato e considerato valido.

Una nuova sottofamiglia, *Laberitinae*, viene proposta per la specie fossile dell'ambra baltica, *Laberites polonicus* N. Ponomarenko.

Numerose specie nuove vengono descritte, insieme a maschi e femmine di specie di cui si conosceva soltanto il sesso opposto.

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