

## New species, a key and distribution of the genus *Proutista* (Homoptera, Derbidae) in New Guinea\*

Jan Van Stalle

Entomology section, Koninklijk Belgisch Instituut voor Natuurwetenschappen, Vautierstraat 29, B-1040 Brussels, Belgium

ABSTRACT: 12 species are recorded of New Guinea. *P. lumholtzi* and *P. moesta* are reported here for the first time. A key to the males and females is presented and for 7 species a distribution map is given. *P. awarensis* Van Stalle, 1986 is synonymized with *P. gemina* Muir, 1913. 3 new species are described and illustrated: *P. gressitti* sp.n., *P. ouini* sp.n., and *P. sepikensis* sp. n.

### 1 INTRODUCTION

In 1986 I have reviewed the *Proutista* species occurring in New Guinea. Since then I have accumulated considerable additional information during a visit to the Bishop Museum (Honolulu) and a field trip to Papua New Guinea in April-June 1988. The field trip was mainly concentrated in the northern part of PNG., in Madang province, with an excursion to the Eastern Highlands and Morobe Province. As a result 3 new species are described below and 2 further species are recorded in new Guinea: the first is *P. lumholtzi* which has been collected several times and was originally described from northern Australia; the second species is *P. moesta* which has been recorded once (3 specimens).

The distribution of *Proutista* species in New Guinea can be summarized as follows: no real mountain species are known and no species have been recorded as endemic to small geographical parts such as one valley. *P. sacchari*, *P. decisa*, *P. straminea* and *P. lutea* are limited to the southern lowland of New Guinea; on the other hand *P. gressitti* and *P. ouini* are limited to the northern part. *P. lumholtzi* and *P. lurida* have been reported from very remote places all over the island. *P. lurida* probably is the most common *Proutista* species in New Guinea.

The *Proutista* fauna of New Guinea is undoubtedly related to that of northern Australia and the whole can probably be interpreted as a monophyletic group:

\*Leopold III Biological Station, Laing Island, contribution no. 181.

most species treated here have related taxa on the Australian continent and all New Guinean and Australian species can be separated from the Malayan group by the number of medial sectors on the tegmina. The exception here is *P. moesta* which has been recorded once in the most western part of the island. This situation, its abundance in Southeast Asia, and its morphology suggest that it concerns a 'recent' introduction on the New Guinean continent. However it would be too premature to translate this information into a separate taxonomic status for the group although there are good reasons here to restore the generic concept of *Afakia* Kirkaldy, 1909, presently regarded as a synonym of *Proustista*.

Virtually nothing is known about their life history; in Madang and Morobe province I collected specimens of *P. gressitti*, *P. ouini* and *P. lurida* on the underside of banana leaves where they often sit close to the central nerve of the leaf, with their wings and tegmina in a position perpendicular to the body axis, forming a V in frontal view. *P. gressitti* has been collected on sugar cane, banana and maize; *P. lurida* on sugar cane, banana, coconut palm and *Musa sapientum*; *P. straminea* on coconut palm and *P. sacchari* on sugar cane

2 MATERIAL AND METHODS

The specimens were collected, studied and preserved dry. The male genitalia are treated with a 10% KOH solution during one night, and then washed in water. After examination they were kept in microvials containing glycerine and pinned under the insect. Drawings of homologous structures were made on the same scale as much as possible. The material studied here is deposited in the following museums; these are listed in the paper with their abbreviations.

- KBIN Koninklijk Belgisch Instituut voor Natuurwetenschappen, Belgium.
- NTMS Northern Territory Museum of Arts & Sciences, Darwin, Australia.
- CAS California Academy of Sciences, San Francisco, U.S.A.
- BPBM Bishop Museum, Honolulu, Hawaii, U.S.A.
- BMNH British Museum (Natural History), London, U.K.
- NR Naturhistoriska Riksmuseet, Stockholm, Sweden.
- MZB Museum Zoologicum Bogoriense, Bogor, Indonesia.

3 KEY TO MALES

(Male of *P. straminea* (unknown))

- 1. Tegmina dark brown mottled (Fig. 1, 26) . . . . . 2
- Tegmina hyaline, ochreous or pale brown (Fig. 3, 37) . . . . . 5

- 2. Clypeus, pronotum, mesonotum and abdomen black; anal segment with a hook-shaped apex (Fig. 2); tegmina with 6 medial sectors (Fig. 1)
  - P. moesta* (Westwood)
  - Colour brown or ochreous; apex of anal segment not as described above; tegmina with 5 medial sectors (Fig. 3) . . . . . 3
- 3. Anal segment with a long spine on apex directed ventrad; pygofer with a distinct medioventral process (Fig. 22) . . . . . *P. lumholtzi* Kirkaldy
  - Anal segment without such a spine . . . . . 4
- 4. Pygofer without a medioventral process (Fig. 31) . . . . . *P. gemina* Muir
  - Pygofer with a small medioventral process . . . . . *P. sacchari* Van Stalle
- 5. Tegmina completely hyaline except for some small spots near base; veins brown fumated . . . . . 6
  - Tegmina with ochreous to brown spots . . . . . 7
- 6. Anal segment on apex with a spinose process directed ventrad; pygofer with a triangular medioventral process (Fig. 20) . . . . . *P. decisa* (Distant)
  - Male unknown; closely related to the preceding species; the females can easily be distinguished by the shape of the pregenital sternite (Fig. 21)
  - P. straminea* Muir
- 7. Tegmina with radial cell almost completely brown (Fig. 37) . . . . . 8
  - Tegmina with major part of radial cell hyaline; only a few brown spots (Fig. 3) . . . . . 10
- 8. Tegmina with major part brown, with a hyaline 'window' on medial sectors; pygofer with a distinct medioventral process which is longer than broad . . . . . *P. lutea* Muir
  - Tegmina with inner margin hyaline; pygofer with medioventral process small or absent . . . . . 9
- 9. Pygofer with a small medioventral process and a rounded dorsolateral angle; apex of tegmina with a distinct dark spot . . . . . *P. grootaerti* Van Stalle
  - Pygofer without a medioventral process and dorsolateral angle angulate; (Fig. 39) apex of tegmina without a distinct dark spot (Fig. 37)
  - P. sepikensis* sp. n.
- 10. Genital styles appreciably longer than anal segment, and apex curved inward and spine-shaped (Fig. 5 & 6) . . . . . *P. gressitti* sp. n.
  - Genital styles as long as anal segment, with an additional spine on dorsal inner side (Fig. 16) . . . . . 11
- 11. Aedeagus as illustrated in Fig. 11; apex of genital styles as illustrated in Fig. 10 . . . . . *P. lurida* Muir
  - Aedeagus as illustrated in Fig. 14; apex of genital styles as illustrated in Fig. 13 . . . . . *P. ouini* sp. n.

## 4 KEY TO FEMALES

(Female of *P. gemina* and *P. sepikensis* unknown)

1. Tegmina dark brown mottled (Fig. 1, 26) . . . . . 2  
Tegmina hyaline, ochreous or pale brown (Fig. 3, 37) . . . . . 4
2. Clypeus, pronotum, mesonotum and abdomen black, tegmina with 6 medial sectors (Fig. 1) . . . . . *P. moesta* (Westwood)  
Colour brown or ochreous, tegmina with 5 medial sectors (Fig. 3) . . . . . 3
3. Pregenital sternite with a large basal spine (Fig. 29) . *P. lumholtzi* Kirkaldy  
Pregenital sternite without such a spine, but apically with a broad plate-shaped process; pygofer with a large triangular projection (Fig. 2)  
*P. sacchari* Van Stalle  
Female unknown . . . . . *P. gemina* Muir
4. Tegmina completely hyaline except for some small spots near base; veins brown fumated . . . . . 5  
Tegmina with ochreous to brown spots . . . . . 6
5. Pregenital sternite with caudal margin produced into a bifurcate process slightly extending behind the abdomen; dorsolateral margin of pygofer angulate (Fig. 21) . . . . . *P. straminea* Muir  
Pregenital sternite with two small lateral processes not extending behind the abdomen; dorsolateral border of pygofer rounded (Fig. 19)  
*P. decisa* (Distant)
6. Tegmina with radial cell almost completely brown (Fig. 37) . . . . . 7  
Tegmina with major part of radial cell hyaline; only a few brown spots (Fig. 3) . . . . . 9
7. Tegmina with major part brown, with a hyaline 'window' on medial sectors; pregenital sternite with caudal margin produced into a bifurcate process appreciably extending behind abdomen (Fig. 33 & 34) .  
*P. lutea* Muir  
Tegmina with inner margin hyaline . . . . . 8
8. Apex of tegmina with a distinct dark spot; pregenital sternite with caudal process not extending behind abdomen (Fig. 35 & 36)  
*P. grootaerti* Van Stalle  
Apex of tegmina without such a dark spot (Fig. 37); female unknown  
*P. sepikensis* sp. n.
9. Pygofer with finger-shaped projection not extending behind abdomen (Fig. 7) . . . . . 10  
Pygofer with finger-shaped projection appreciably extending behind abdomen (Fig. 8) . . . . . *P. gressitti* sp. n.
10. Pregenital sternite with a distinct plate-shaped projection on caudal margin (Fig. 17 & 18) . . . . . *P. ouini* sp. n.  
Pregenital sternite with only a very small elevation on caudal border  
*P. lurida* Muir

## 5 TAXONOMY

***Proutista moesta*** (Westwood, 1851) (Figs. 1-2)

1 male, 2 females, New Guinea (Neth), Vogelkop, Manokwari, 75 m, 19.VII.1957, BPBM.

*P. moesta* is a very common species throughout Southeast Asia and it has never been recorded from New Guinea except for the above record. It is unknown if this record was an accidental introduction or if it concerns an established population. In this light it is interesting to see why it has never spread out on the New Guinean continent. Maybe this is related with the species richness and interspecific competition between these species and the immigrant species, *P. moesta*. As far as can be deduced from literature species richness in *Proutista* is much lower in other parts of Southeast Asia where *P. moesta* is present in large numbers.

***Proutista gressitti* sp. n.** (Figs. 3-9, map 1)

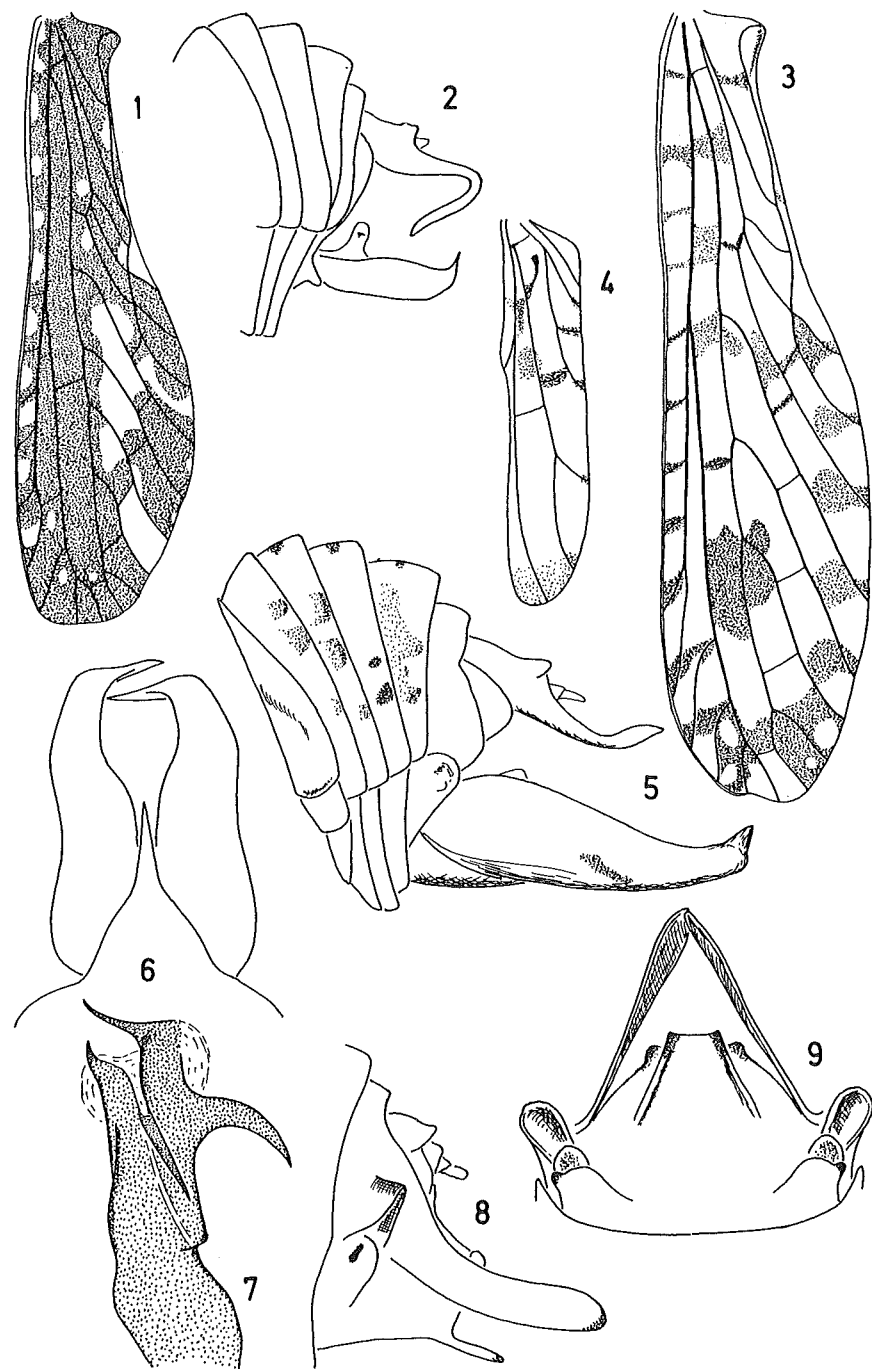
**Material:** holotype male, PNG, Madang pr., near Madang, Gogol River, 15.VI.1988, KBIN.

**Paratypes:** (Indonesia) 1 male, 1 female, New Guinea: Neth., Waris, S. of Hollandia, 450 – 500 m, VIII.1959, leg T.C. Maa, BPBM; 1 male, Hollandia-Binnen, 100 m. 22.XI.1958, Leg. J.L. Gressitt, BPBM; 2 males, 2 females, New Guinea (Neth.), 'rain forest behind dock V, 20 m, Hollandia, 14.VII.1957, leg. Elmo Hardy, BPBM; 2 males, 1 female New Guinea: Neth., Cyclops Mts: Ifar, 300 m, 4.XI.1958, leg. J.L. Gressitt, BPBM;

(Papua NG) 1 female, Madang Pr., Mt Hanseman, 14.VI.1988, on Banana, KBIN; 2 males, 2 females, Madang Pr., Yoro, 31.V.1988, KBIN; 4 females, Madang Pr., near Gogol River, 15.VI.1988, KBIN; 13 males, 8 females, Eastern Highlands Pr., Sirasira, 15.V.1988, on sugar cane, KBIN; 1 male, Morobe Pr., Bulolo, 23.V.1988, on Banana, KBIN; 1 female, New Guinea: NE upper Sepik, Wagu, 5.VII.1963, leg. R. Straatman, BPBM; 3 males, 3 females, New Guinea (NE), Bulolo, 16.VIII.1956, 'on sugar cane', leg. E.J. Ford, BPBM; 2 males, 2 females, P. New Guinea, West Sepik Prov., Hufi, 'banana', XI.1985, leg. J.W. Ismay, BMNH; 2 males, PNG, W. Sepik Prov., Imonda, 'maize', XI.1985, leg. J.W. Ismay, BMNH; 1 male, PNG, W. Sepik Prov. Kandriap, 'Banana', leg. J.W. Ismay, BMNH; 7 males, 11 females, Indonesia, West Yrian, Sentani, 29.III.1973, leg S. Adisoemarto, MZB;

**General colour:** pale yellowish. Last segment of rostrum black; three keels on mesonotum distinct; brown spots on abdomen, tegmina and wings as illustrated in Fig. 3, 4 and 5. Legs pale yellowish, all tarsal segments of fore and middle legs dark brown fumated, hind legs with apex of tibia and last tarsal segment fuscous. Length tegmen: 8-8.5 mm.

Male genitalia (Figs. 5-7): anal segment with a slightly upcurved apex. Pygofer with a large, tapering medioventral process; genital styles long, apex



curved inward. Aedeagus with four spinose processes as illustrated in Fig. 7 (dorsal view).

Female genitalia (Figs. 8 & 9): female pygofer characterized by a long process on each side. Pregenital sternite with a large plate-shaped process at caudal margin.

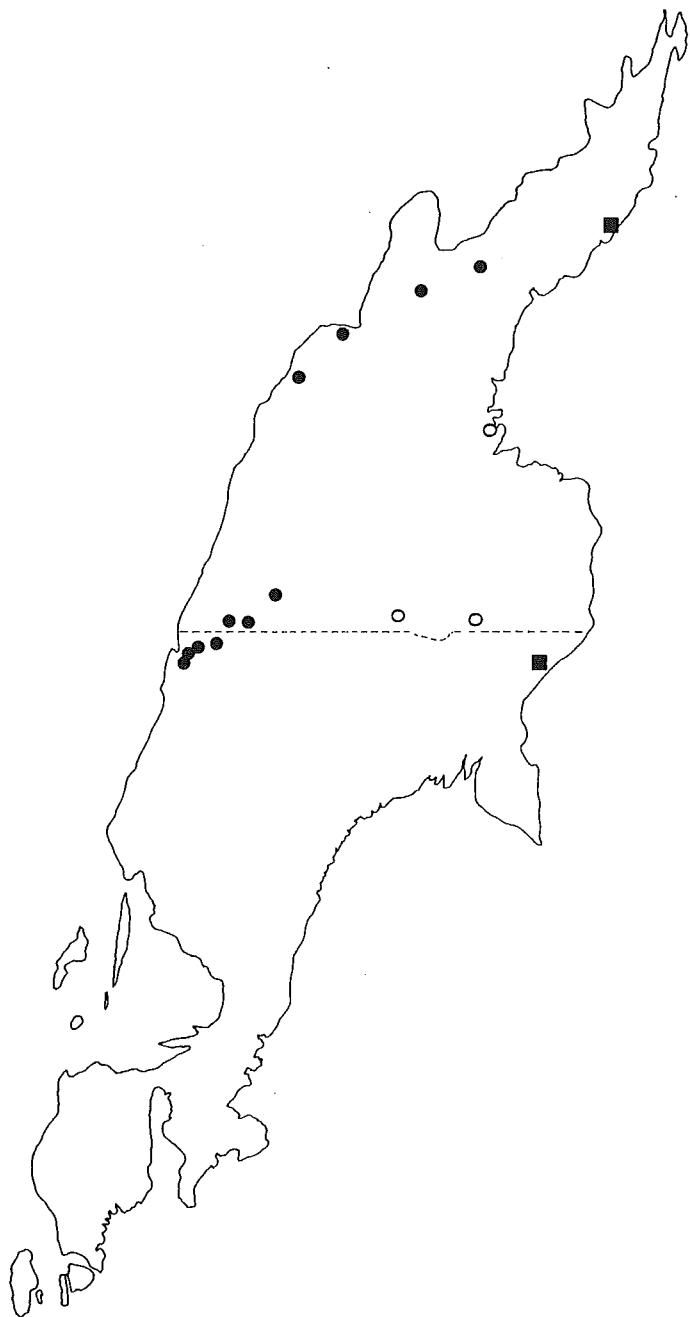
*Diagnosis:* this species closely resembles *Proutista lurida* Muir in external morphology and with which it is commonly found together (pers. obs.). *P. gressitti* can be distinguished in details of the colouration of the tegmina, namely in the presence of more brown on the tegmina than in *P. lurida*. The males can be distinguished by the presence of relatively long genital styles, which are shorter in *P. lurida*, and the females are characterized by the presence of very long appendices on the pygofer, which have a 'normal' size in *P. lurida*, namely not surpassing the level of the caudal margin of the pregenital sternite by more than its width.

*Food plants and distribution:* the species has been recorded on banana's, sugar cane and maize. It is very common in the northern part of PNG and probably also of Irian Jaya.

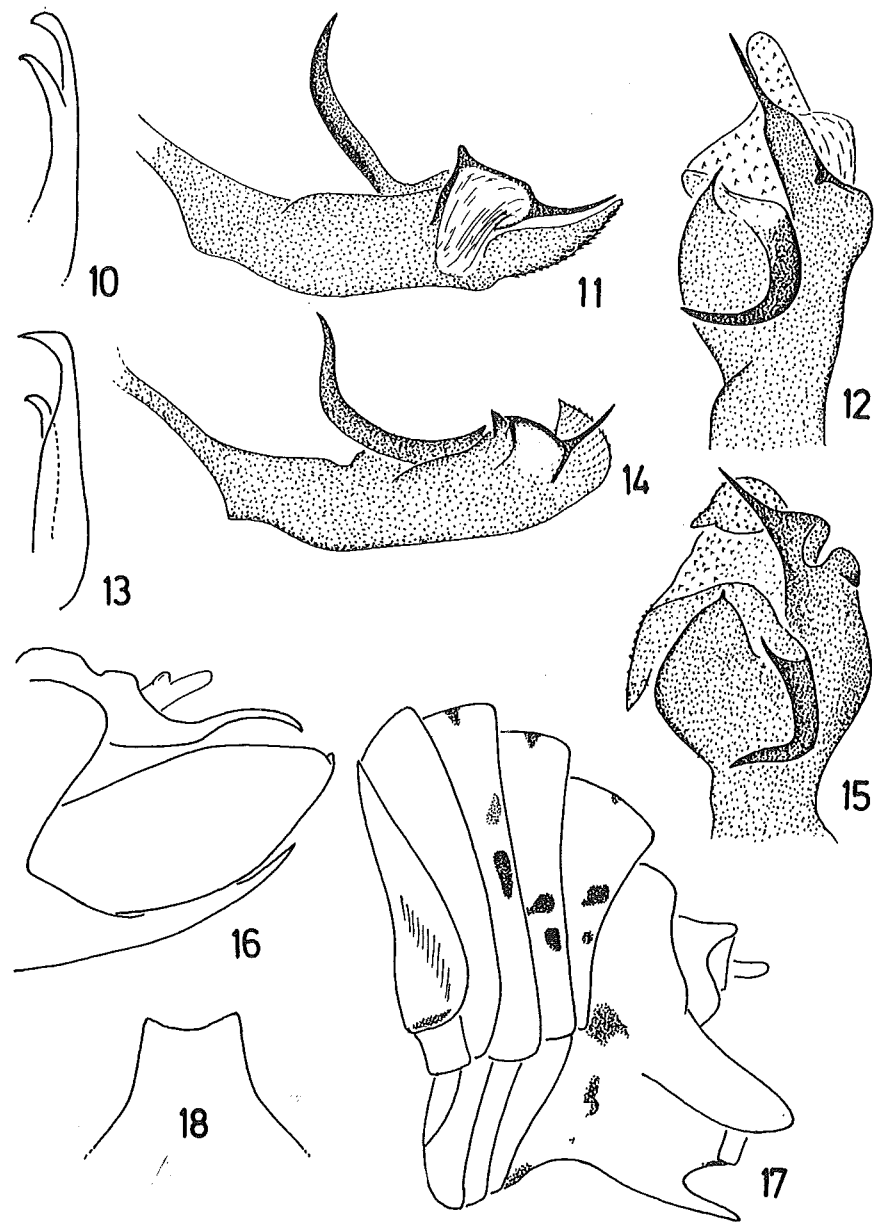
#### *Proutista lurida* Muir, 1913 (Figs. 10-12)

6 males, 11 females, Morobe Pr., Lae, 24.V.1988, KBIN; 1 female, Morobe Pr., Bulolo, 23.V.1988, KBIN; 12 males, 9 females, Morobe Pr., McArthur Nature reserve near Bulolo, 20.V.1988, KBIN; 2 males, 3 females, Madang, Sapi forest res., 5°12'S 145°30'E. 26.II.1987, leg. N.D. Penny, CAS; 6 males, 7 females, PNG, Lae, VII.1944, RE. Skinner, BPBM; 1 female New Guinea (NE), 6 mi N.W. Lae, Rain forest, 15 m, 9.VII. 1957, BPBM; 1 male, PNG, Daradae PI'n 500 m, 80 km N. to Pt. Moresby, 7.IX.1959, BPBM; 1 male, 5 females, PNG, Kokoda, Pitoki, 450 m, 24.III.1956, J.L. Gressitt, BPBM; 1 male, 1 female, Kokoda, 1200 ft, VII.1933, L.E. Cheesman, 'under stones riverside', BMNH; 1 female, PNG, Morobe Prov., Buso, IX-XI.1979, J. Martin, BMNH; 1 male, Bakahari Ptn., Popondetta, Papua, 22.I.1962, coll. A. Catley, BMNH; 2 males, 3 females, Mr Kam Nong's Plant'n, near Bubia, Markham valley, Morobe distr., New Guinea, 21.VII.1959, 'on the leaves of *Cocos nucifera* (dense populations)' and 'on the leaves of *Musa sapientum* (dense populations)', BMNH; 3 males, 5 females, Isivena area, via Popondetta, Papua, 22.II.1962, coll. A. Catley, 'feeding on sugar cane leaf', BMNH.

Figures 1-9. *Proutista* species. 1-2. *P. moesta* (Westwood): 1. Left tegmen; 2. Male abdomen; 3-9. *P. gressitti* sp. n.: 3. left tegmen; 4. Left wing; 5. Male abdomen; 6. caudal margin of pygofer with medioventral process and genital styles, ventral view; 7. Aedeagus holotype, dorsal view; 8. Female genitalia, lateral view; 9. Female genitalia, ventral view.



Map 1. Distribution in New Guinea of *P. gressitzi* (full circles), *P. decisa* (open circles) and *P. straminea* (squares).



Figures 10-18. *Proutista* species. 10-12. *P. lurida* Muir: 10. Left genital styles, dorsal view; 11. Aedeagus, lateral view; 12. Aedeagus, dorsal view; 13-18. *P. ouini* sp. n.: 13. Left genital style, dorsal view; 14. Aedeagus holotype, lateral view; 15. Aedeagus holotype, dorsal view. 16. Anal segment, pygofer and genital style, left lateral view; 17. Female abdomen; 18. Caudal process of pregenital sternite of female.

1 male, 4 females, New Guinea: Neth: Bodem, 10-17.VII.1959, 'Banana', T.C. Maa, BPBM; 3 males, 2 females, New Guinea: Neth: Waris, S. of Hollandia, 450-500 m, 24-31.VIII.1959, BPBM; 1 female, New Guinea: Neth: Vogelkop: Fak Agricult. St., 1.VI.1959, T.C. Maa, BPBM; 1 female New Guinea: Neth: Genjam, 40 km W of Hollandia, 100-200 m, 1-10.III.1960, T.C. Maa, BPBM;

*P. lurida* is probably the most common species of New Guinea. Most records are situated in the northern part and only a few records are available from the south, situated near Pt. Moresby, but this might be due to the fact that the southern lowlands have been less explored.

**Proutista ouini** sp. n. (Figs. 13-18, map 2)

*Material*: holotype male, Papua New Guinea, Madang Pr., Sepen village no. 2 (close to Bogia), 3.VI.1988, KBIN.

*Paratypes*: 4 males, 2 females, same data as holotype, KBIN; 1 male, 1 female, Madang Pr., nr Gogol River, 15.VI.1988, KBIN; 1 male, 1 female, Madang Pr., Sapi forest reserve (30 km West Madang), 5°12'S 145°30'E, 26.II.1987, Norman D. Penny, CAS; 1 male, 1 female Madang Pr., Nobonob Hill (7 km NW Madang), 5°10'S 145°45'E, 2.III.1987, Norman D. Penny, CAS; 1 female, Madang Pr., 4 km S. Hatzfeldhaven, 4°25'S 145°13'E, 19.III.1987, Norman D. Penny, CAS; 1 male, 10 females, PNG, Eastern Highlands Pr., Sirasira, 15.V.1988, KBIN; 1 male, Morobe Pr., Lae, 24.V.1988, KBIN.

*Colour*: identical to that of *P. lurida*. It can only be distinguished from this species by the shape of the male and female genitalia.

*Male genitalia* (Figs. 13-16): these differ from *P. lurida* in the shape of the genital styles and the aedeagus. The genital styles are slightly longer, the apex bears a larger tooth, and the distance between the apex of the dorsal spine and the apex of the genital styles is longer. In the aedeagus the processes are slightly different as expressed in Fig. 14 and 15. These differences are constant and no intermediate forms have been observed.

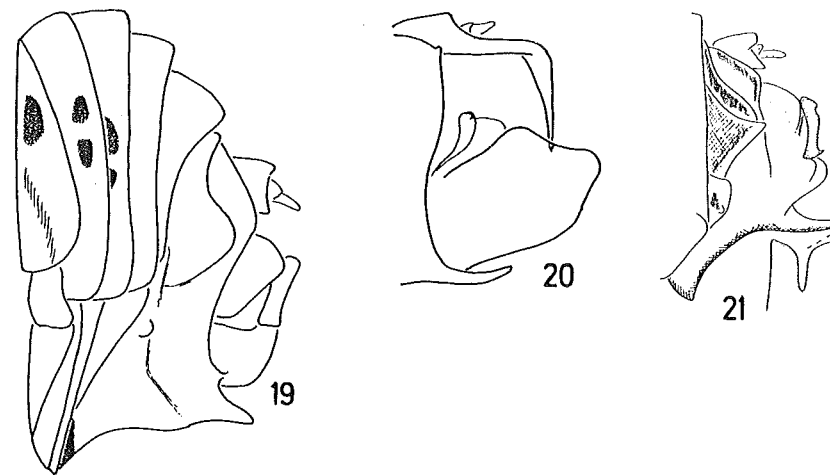
*Female genitalia* (Figs. 17-18): both species can easily be separated by the shape of the process on the pregenital sternite: the caudal border bears a very distinct quadrate process in *P. ouini* while only a small elevation is present at the same place in *P. lurida*.

*Etymology*: this species is named after J.-M. Ouin, manager of the Laing Island Biological Station, who's help was greatly appreciated during my stay in PNG.

*Distribution*: probably a common species in the northern part of New Guinea which has about the same distribution as the closely related *P. lurida*.

**Proutista decisa** (Distant, 1907) (Figs. 19-20, map 1)

3 males, 2 females, PNG, Kiunga, Fly river, 28-31.VIII.1957, leg. W.W. Brandt, BPBM; 6 males, 5 females, Middle Fly river, VII.1928, coll. Pemberton,



Figures 19-21. *Proutista* species. 19-20. *P. decisa* (Distant): 19. Female abdomen; 20. Anal segment, pygofer and genital style. 21. *P. straminea* Muir: Female genitalia.

BPBM; 1 male, New Guinea, Kikori, 12.VII.1928, coll. Pemberton, BPBM.

Only recorded in the southern lowland parts of PNG. The female genitalia and the brown spots on the abdomen are illustrated in Fig. 19.

**Proutista straminea** Muir, 1913 (Fig. 21, map 1)

1 female, New Guinea: Neth. Eramboe, 80 km ex Merauke, 30.I.1960, 'coconut Palm' leg. T.W. Maa, BPBM.

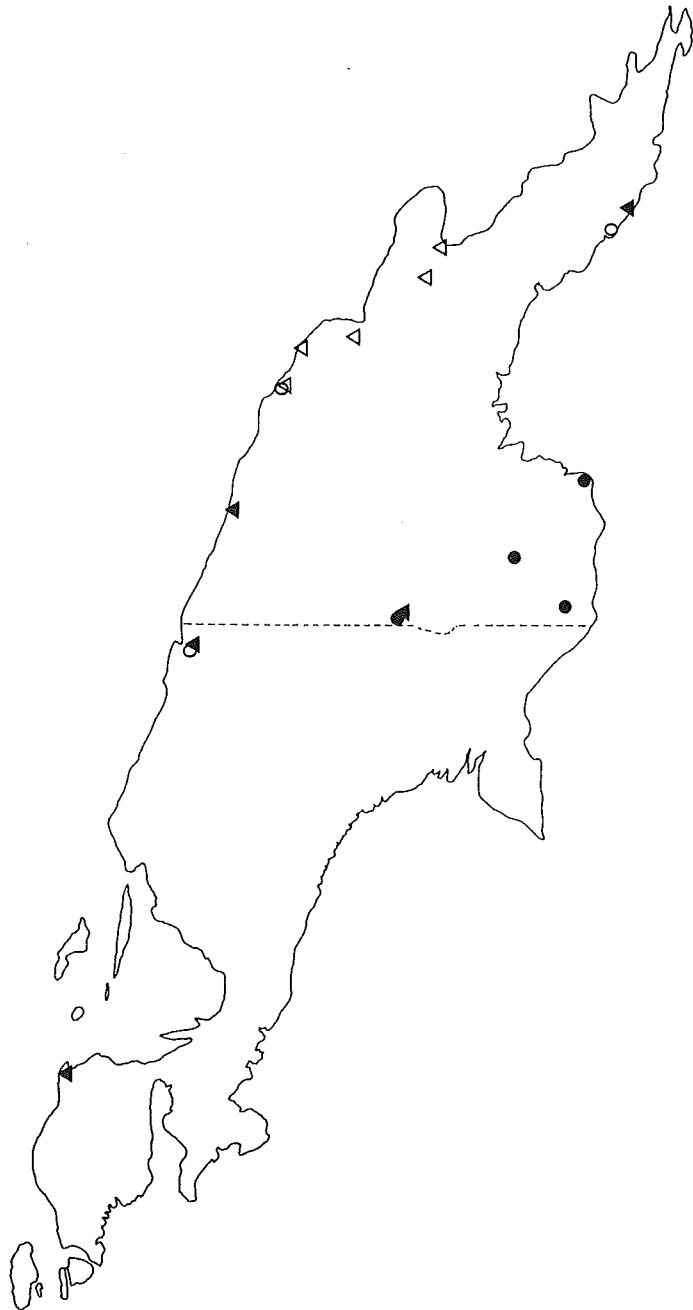
The female genitalia agree well with those of the type. The veins of the tegmina are much darker. The colouration of the specimen listed here is identical to that of *P. decisa*; both species can only be distinguished by the shape of the female genitalia (the male of *P. straminea* is unknown).

Like *P. decisa*, only recorded from the southern lowland parts of PNG.

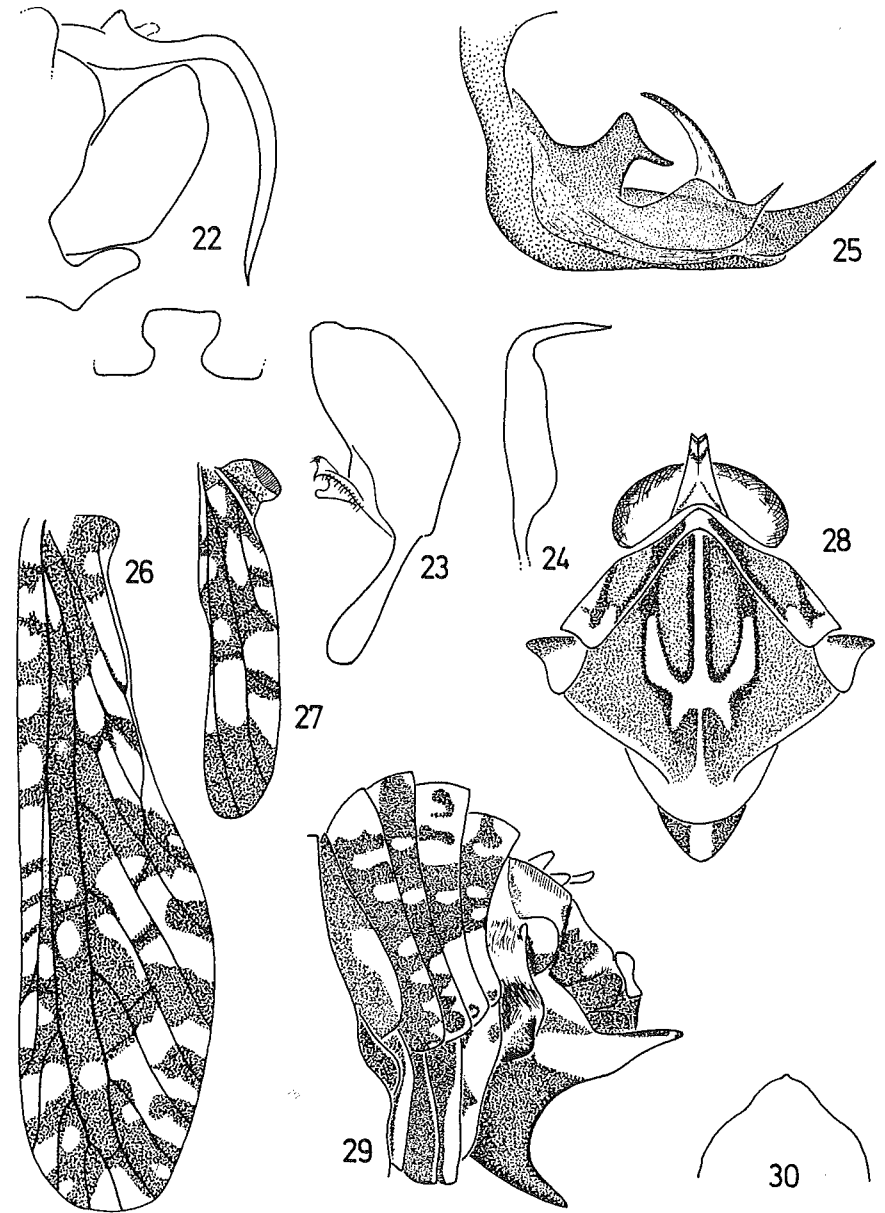
**Proutista lumholtzi** Kirkaldy, 1907 (Figs. 22-30, map 2)

*Material*: PNG, 12 males, 10 females, PNG, Kiunga, Fly River, 28-31.VIII.1957, leg. W.W. Brandt, BPBM; 2 males, 11 females, New Guinea (Neth.), Vogelkop: Manokwari, 18-24.VII.1957, leg. W.W. Brandt, BPBM; 1 male, PNG, Sepik, Maprik area, 160 m., 28.VIII.1957, leg. D.E. Hardy, BPBM; 4 males, 3 females, New Guinea, Koitaki 1500 ft, X-XI.1928, coll. Pemberton, BPBM; 1 male, 4 females, New Guinea (Neth., Cyclops Mts., Ifar 300 m, 22.VI.1959, BPBM.

Vertex and frons whitish, frons slightly embrowned near eye, sometimes with three small spots on keels. Postclypeus and anteclypeus dark brown, a narrow



Map 2. Distribution in New Guinea of *P. gemina* (open circles), *P. sacchari* (full circles), *P. ouini* (open triangle) and *P. lumholtzi* (closed triangle).



Figures 22-30. *Proutista lumholtzi* Kirkaldy, specimens PNG, Vogelkop: 22. Male genitalia, with a ventral view of the medioventral process of the pygofer; 23 & 24. Left genital style, lateral and ventral view; 25. Aedeagus, lateral view; 26. Left tegmen (dark specimen); 27. Left wing; 28. Head, pronotum and mesonotum; 29. Female abdomen; 30. Caudal margin of pregenital sternite, ventral view.

longitudinal spot on postclypeus and a roundish spot in upper half of lorum whitish. Rostrum whitish, last segment dark brown. Antennae slightly embrowned. Pronotum and mesonotum partly embrowned, as illustrated in Fig. 28. Legs yellowish, in fore and middle legs second and third tarsite black, in hind legs last segment of tarsi and apex of tibia black, and proximal half of femur slightly embrowned. Tegmina and wings densely dark brown mottled, as illustrated in Fig. 26 and 27. Abdomen predominantly brown with whitish irregular spots, in female proximal part of pregenital sternite black, in male anal segment whitish-yellowish, apical spine brown, and genital styles partly yellowish and brown. Chaetotaxy hind tarsi 6/6. Length tegmen: 7 mm.

Male genitalia (Figs. 22-25): anal segment with a long spinose process. Pygofer with obtuse laterodorsal angles and a short, but broad medioventral process. Genital styles with an apical spine pointed medially. Aedeagus with three spinose processes and a short unmovable process near base.

Female genitalia (Figs. 29-30): pregenital sternite with a large spine on base.

**Diagnosis:** *P. lumholtzi* can be recognised from all other Australian and New Guinean species by the presence of a large spine on the anal segment. No closely related species have been observed.

**Distribution:** *P. lumholtzi* is widespread in northern Australia and is reported here for the first time. It has been recorded from very remote places as well in the south as in the north which suggests that it is also common in New Guinea.

***Proutista gemina* Muir, 1913 (Fig. 31, map 2)**

*Proutista gemina* Muir, 1913: 74.

*Proutista awarensis* Van Stalle, 1986: 89, syn. n.

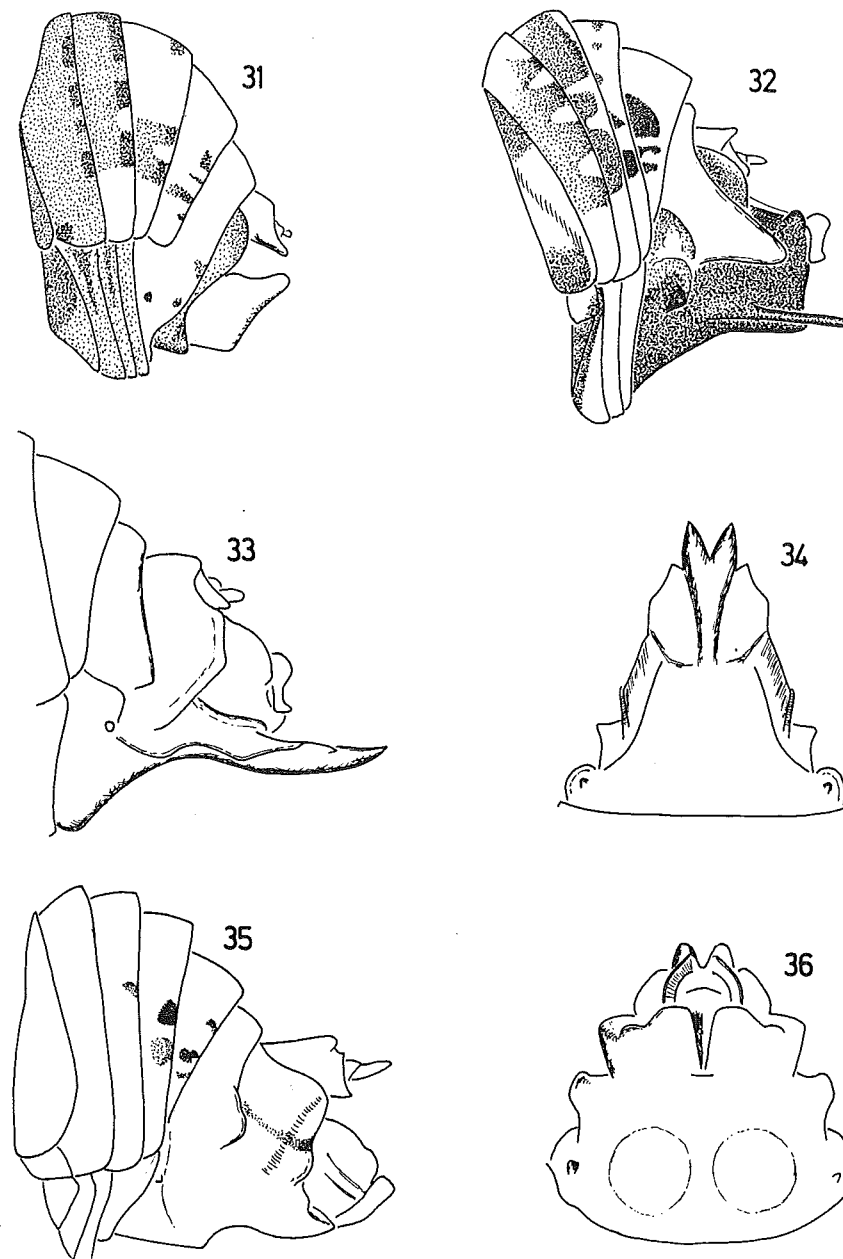
Holotype male *P. gemina*. Papua, Laloki, F. Muir, 1909, BPBM; holotype male *P. awarensis*, PNG, Awar airfield (Madang Prov.), 11.V.1982, KBIN; 1 male, New Guinea: Neth., Cyclops Mts: Ifar, 300 m, 22.VI.1959, leg. T.C. Maa, BPBM.

The type locality of *P. gemina* was not listed in the original description, and listed as 'unknown' in Metcalf (1945). I have seen the type specimen during a visit in the BPBM and it is clearly labelled 'Papua, Laloki'. Unfortunately it is conspecific with my *P. awarensis*, which is therefore a new junior synonym of *P. gemina*. The aedeagus of the type of *P. gemina* is somewhat shorter and the genital styles are slightly excavated along their caudal margin (see Fig. 31) but this is estimated here to fall into the infraspecific variability of the species.

*P. gemina* has been recorded three times in small numbers in very remote parts near the coast or in lowland conditions, which suggest that it is probably widespread but present in low numbers.

***Proutista sacchari* Van Stalle, 1986 (Fig. 32, map 2)**

1 female, PNG, Kiunga, VIII.1969, leg. M. Sedlacek, BPBM; 4 males, 1 female, PNG, Kiunga, Fly River, 28-31.VIII.1957, leg. W.W. Brandt, BPBM; 3 females,



Figures 31-36. *Proutista* species. 31. *P. gemina* Muir: male abdomen. 32. *P. sacchari* Van Stalle: female abdomen. 33-34. *P. lutea* Muir: female genitalia, lateral and ventral view. 35-36. *P. grootaerti* Van Stalle: female genitalia, lateral and ventral view.



PNG, W. District, Oriomo Govt. Sta., 26-28.X.1960; 2 males, PNG, Moorhead, 18 m, 30.VI.1964, BPBM.

Probably a common species in the southern lowland parts of PNG and Irian Jaya.

**Proutista lutea** Muir, 1913 (Figs. 33-34)

*Material*: 2 females, PNG, Brown River, 5 m., 23.X.1960, J.L. Gressitt, BPBM.

*Female*: vertex and frons yellow, base of the latter embrowned. Entire clypeus and rostrum brown, middle keel of clypeus yellowish. Last segment of rostrum brown to black. Pronotum, mesonotum and abdomen yellowish brown, abdomen and processes on pregenital sternite of female embrowned. Legs pale yellowish, last segment of all tarsi brown to black.

*Female genitalia* (Figs. 33-34): pregenital sternite with a plate-shaped process provided with a bifurcate projection; base of pregenital sternite with a small elevation, not visible on figure.

**Proutista grootaerti** Van Stalle, 1986 (Figs. 36-36)

*Material*: 1 female, N. Guinea, Lae, VIII.1944, F.E. Skinner, BPBM (Compared to holotype).

The specimen has been compared with the holotype and agrees well with it.

*Female genitalia* (Figs. 35-36): pregenital sternite with a deep, narrow incision and near base with two lateral elevations as illustrated on ventral view in Fig. 36.

**Proutista sepikensis** sp. n. (Figs. 37-40)

*Material*: holotype male, New Guinea (NE), Dreikikir, Sepik distr., 350 m, 23.VI.1961., leg J.L. & M. Gressitt, BPBM.

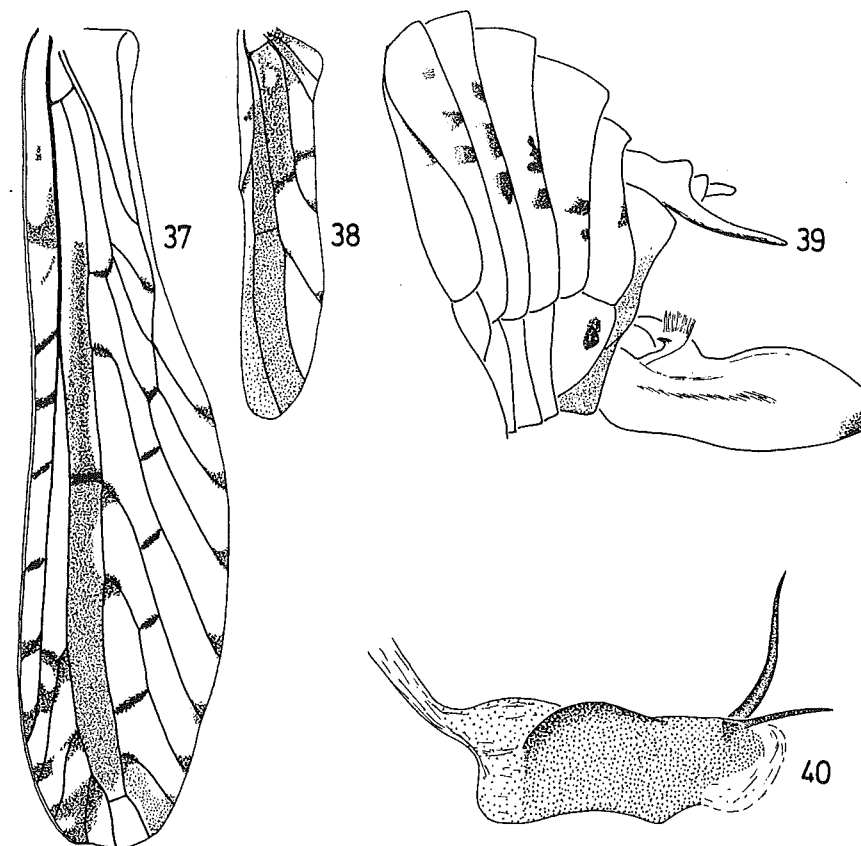
*Paratype*: 1 male, same data as holotype, BPBM.

General colour yellowish. Anteclypeus and lateral keels of postclypeus embrowned. Last segment of rostrum black. Pronotum and mesonotum whitish, fumated with yellow laterally. Abdomen with brown to black spots as illustrated. Tegmina and wings with pale brown spots as illustrated in Fig. 37 and 38. Legs yellow, last segment of all tarsi black. Length tegmen: 8 mm.

*Male genitalia* (Figs. 39 and 40): anal segment short. Pygofer without a medioventral process. Genital styles large, apex slightly curved inward. Aedeagus with two slender spines.

*Female* unknown.

*Diagnosis*: closely resembles *P. grootaerti* and *P. perkinsi* from which it can be distinguished by details in the colouration of the apex of the tegmina, namely the absence of a dark spot and the extension of the brown colouration, and in the different shape of the pygofer, genital styles and aedeagus.



Figures 37-40. *Proutista sepikensis* sp. n., holotype: 37. Left tegmen; 38. Left wing (damaged); 39. Male abdomen; 40. Aedeagus.

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