

Hemipterological studies.

R. LINNAVUORI.

1. *Chiloxanthus arcticus* J. SAHLB. (*Het.*, *Saldidae*) a valid species.

SAHLBERG's *Salda arctica* (1878) has been regarded as a synonym of the common *Chiloxanthus pilosus* FALL. e.g. by OSHANIN (1912, p. 87) and even in the last check list of the *Saldidae* of the world by DRAKE and HOBERLANDT (1950, p. 4). *Ch. arcticus* is, however, a good species. The male genitalia of the two species are rather similar, but so they are in some other species of this family. *Ch. arcticus* is best distinguished from *Ch. pilosus* by the light, short, smooth hair-covering of the upper surface, while *Ch. pilosus* always has a long, dense, black and upstanding hair-covering. ED. WAGNER has informed me in a letter that in Central Europe *Ch. pilosus* always has the long hair-covering no intermediate forms are known to me either. The size of *Ch. arcticus* is also a little smaller and the colouring lighter, *Ch. pilosus* being usually distinctly darker brown and bigger. Also the living habits and the distribution are dissimilar. *Ch. pilosus* is halobiontic, being common on salty seashores of North and Central Europe, and known also from the salty biotopes near Halle in Germany (SAHLBERG 1920, p. 180). From the biological area of Finland I have seen specimens from PoL: Tschuja of 3 spp. and from Umba of 1 sp. (J. SAHLBERG leg.). *Ch. arcticus*, being a high boreal insect, occurs only on the shores of the Arctic Sea both in Europe and in Siberia. It is not confined to salty water, but may extend far into the tundra, too, (SAHLBERG 1920, p. 180 – 181). I have seen specimens from Finland: Petsamo, PSL (HÅKAN LINDBERG leg.) (determined as *pilosus*) and Nikandrowsk, Siberia (J. SAHLBERG). In addition SAHLBERG (op.c.) reports the following find localities: South Varanger (70°) (B. POPPIUS), Kola (69°) (HÆLLEN and POPPIUS), the surroundings of the mouth of the Jenissei (70° 10' – 70° 40') and the Tschuktschian peninsula (69°).

2. *Orthotylus problematicus* n. sp. (*Het.*, *Miridae*).

♂. Length 4 mm. Of the group of *O. schoberiae* REUT. Habitus much as in *O. diaphanus* KBM. (i.e. long and narrow, with large eyes, but on the ground of the long fuscous hair-covering of the upper surface and the male genitalia, it

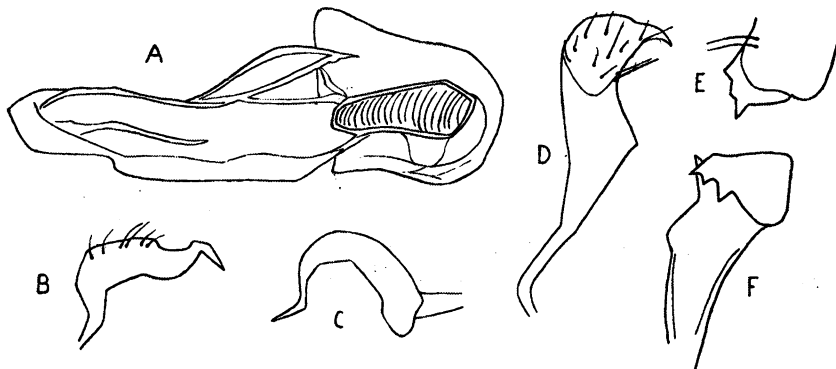


Fig. 1. *Orthotylus problematicus* n. sp.: A penis, B left stylus lateral view, C same from above, D right stylus (with greater enlargement) lateral view, E same apex from above, E same, median view. — Orig.

belongs to the group mentioned above. Colouring dirty greenish yellow. Antennae yellowish, rather strong and long, hair covering short, smooth and brownish, only the 1st joint has some longer hairs directed obliquely outwards. Proportions between the joints $11.5 + 32 + 18 + -$ (the 4th joint is lacking in the specimen). Head $1.8 \times$ as broad as long. Vertex concave, with a roundish triangular yellow spot near the basal angles of the eyes. Hind margin of the vertex rather sharp. Eyes greenish grey, large, vertex $1.48 \times$ as broad as the eye. Pronotum short and broad, $1.4 \times$ as broad as the head over the eyes. Scutellum triangular. Elytrae much longer than the abdomen, membrane opaque, light greyish, veins indistinctly yellowish. Underside yellowish. Legs yellowish, long. Tibiae with fine, light brown spines. Tarsi smoky. Hind tibia $4.8 \times$ as long as the tarsus. Male genitalia: left stylus (fig. 1 B – C) long, rather narrow, seen from above nearly semicircularly rounded. Near the upper margin of the lateral side there are long, white sensory hairs. The apex thin. Right stylus (fig. 10 – F) smaller, seen from the lateral side somewhat resembling a bird's head with a curved beak. Some long sensory hairs. The hypophysis turned medianwards, ending in a darker, more strongly chitinized apex with 3 blunt teeth. Penis flat, as in fig. 1 A.

♀ unknown.

Locality of find: Fl. Tschu, Turkestan 1896 1 ♂ (J. SAHLBERG leg.). Type in the Zool. Mus. of the Finnish University, Turku. In addition HOBERLANDT has informed me in a letter that he has seen specimens of this species in a collection from Siwa Oasis, now belonging to the British Museum.

Discussion: The new species differs from *O. schoberiae* REUT. in the bigger size, dissimilar body form, thicker antennae and in the male genitalia.

Measurements (in mm.): Total length 4.0; length of antennal joints 0.46 (1st) 1.28 (2nd), 0.72 (3rd); length of fore tibia 1.08, mid tibia 1.28, hind tibia 2.12 and hind tarsus 0.44; breadth of head over the eyes 0.80; breadth of pronotum behind 1.12.

3. What is *Compsidolon elegantulum* REUT.?

In 1899 REUTER described the genus *Compsidolon* with one species *C. elegantulum* based on female specimens from Syria. I have now been able to examine REUTER's type of this species and it seems to me that *Compsidolon* must be considered a synonym of *Psallus* FIEB. For there are in this large genus some species, especially *Ps. carduellus* HORV., which both in the body form and in every other respect, including the female genitalia, resemble the species *elegantulum* so much that in my opinion it is impossible to think of them as belonging to different genera. In 1951 b, p. 106 – 107, I described a new *Psallus* species, *Ps. badius* LINNAV., from Palestine, since I was unable to identify the specimen with any previously known species within this genus. *Ps. badius* is, however, a synonym of REUTER's *elegantulum*. Thus *Compsidolon elegantulum* REUT. 1899 = *Psallus elegantulus* REUT. (= *Ps. badius* LINNAV. 1951).

4. *Calligypona vicina* n. sp. (Hom., Araeopidae).

♂. Body form, size, colouring, etc., as in *C. collina* BOH., male genitalia, however, dissimilar. Genital segment as in fig. 2 A – B, the ventral insinuation with no angles. Anal collar with two appendages, which are turned parallelly with the ventral margin of the collar. Styli (fig. 2 C.) much as in *C. albostriata* FIEB. Penis (fig. 2 D) nearly straight (in *collina* and *angulosa* distinctly curved), spinulation as in the figure. For comparison the penes of all the species of the *C. collina* group are figured: *C. angulosa*, RIB. fig. 2 E, *C. collina* BOH. fig. 2 F, *C. albostriata* FIEB. fig. 2 G, *C. pallens* STÅL fig. 2 H and *C. haglundii* J. SB. fig. 2 I–J. ♀ unknown.

Locality of find: Turuchansk, Siberia, 1 ♂ (J. SAHLBERG leg.). Type in the Zool. Mus. of Helsinki University.

5. *Calligypona detecta* n. sp. (Hom., Araeopidae).

♂. Body form, size and colouring as in *C. lugubrina* BOH. Vertex a little shorter and broader and the dark colouring of the elytrae perhaps faintly more brownish. Genital segment as in *C. lugubrina*, as also the stylus. Anal tube (fig. 2 R) narrower, the ventral appendages much shorter and not so strongly diverging as in *C. lugubrina*. Penis (fig. 2 P – Q) shorter, downwards broader, apical appendages short, the long side appendages reaching almost to the base of the penis, gonopore more oblong. Penis of *C. lugubrina* (fig. 20) longer, narrower and not broadening downwards. The appendages reach only to about the middle of the stem.

♀. Length 4 mm. Body form much as in *C. lugubrina* BOH., but the colouring a lighter yellow, as in *C. straminea* STÅL. The middle ridge of the frons is sharper, the frons being also distinctly narrower.

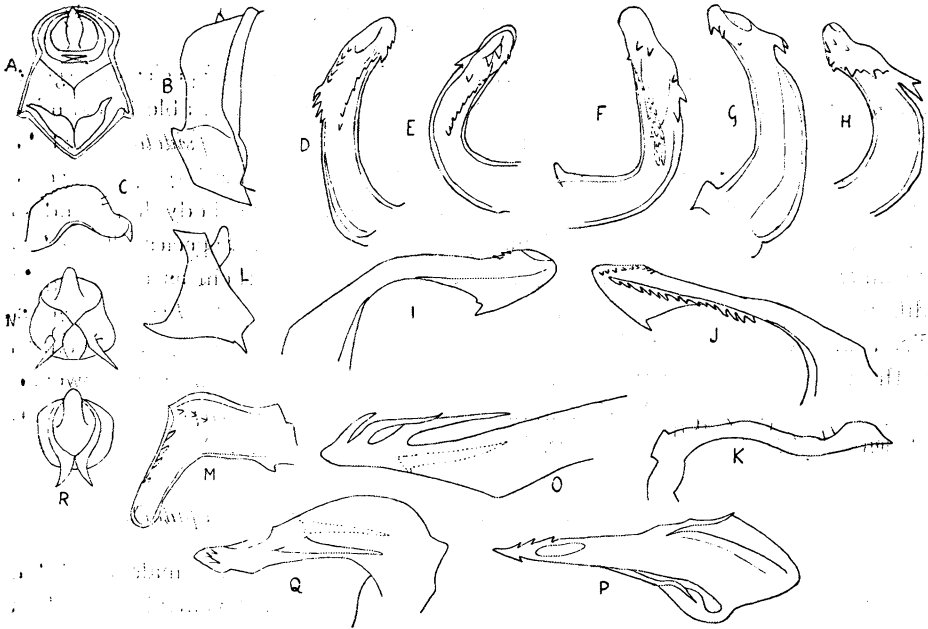


Fig. 2. *Calligypona vicina* n. sp.: A genital segment from behind, B same from the side, C stylus, D penis from the right. *C. angulosa* RIB.: E penis from the right. *C. collina* BOH.: F penis from the left. *C. albostrata* FIEB.: G penis from the left. *C. pallens* STÅL.: H penis from the left. *C. haglundii* J. SB.: I penis from the right, J same from the left. *C. lugubrina* BOH.: N anal tube, O apex of the penis. *C. detecta* n. sp.: P penis from the ventral side, Q same lateral view, R anal tube. *Criomorpha fuscus* n. sp.: K stylus, L anal tube from the side, R anal tube. *Criomorpha fuscus* n. sp.: K stylus, L anal tube from the side, M penis.—Orig.

Locality of find: Jakutsk, Siberia, 1 ♂ (POPPIUS), the type., Ytyk-haja Fl. Lenam, 2 ♀♀ (POPPIUS). Types in the Zool. Mus. of Helsinki University.

HORVATH (1904, p. 589–590) has described *Calligypona conspicua* HORV. from a macropterous female. *C. detecta* does not fit well with HORVATH's description: 1) frons of *conspicua* should be »basin versus nonnihil angustatus», in *detecta* it is totally parallel, the base of the clypeus of *conspicua* is black, in *detecta* the whole clypeus is yellow. 2) antennae should be longer than in *lugubrina*, in my species almost a little shorter and distinctly more gracile. 3) lateral ridges of the mesonotum should be parallel in *conspicua*, in my species diverging as in *lugubrina*. 4) elytrae should be hyaline, in *detecta* yellowish. A thorough comparison of the species is not, however, possible at present, for the male and the brachypterous female of *conspicua* are unknown.

6. *Criomorpha fuscus* n. sp. (Hom., Araeopidae).

♂ f. brach. Length 2.6 mm. Dark brown, much like *Cr. obliqua* W. WG. 1947. Head, pronotum and scutellum and their puncturing as in *Cr. obliqua*. Elytrae

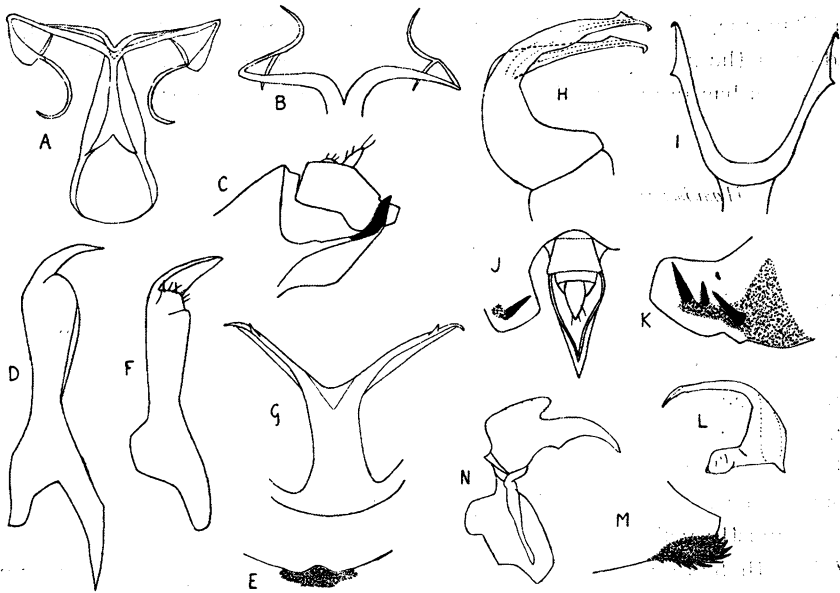


Fig. 3. *Handianus maculaticeps* REUT.: A penis, dorsal view, B same apex from above, C. pygophor and anal tube from the side, D stylus, E 7th sternite of the ♀. *H. tristipinosus* n. sp.: F stylus, G penis ventral view, H same lateral view, I same apex from above, J anal tube from above, K side lobe of the pygophor. *Hardya ribauti* n. sp.: L penis, M side lobe of the pygophor, N stylus. — Orig.

brown, semitransparent, much shorter than the abdomen. Abdomen black-brown, the dorsal surface with a light median stripe and some transverse lighter stripes along the fore margins of the segments. Legs yellow-brown. Genital segment as in *Cr. obliqua*. Penis (fig. 2 M) with spines. Anal tube (fig. 2 L) with two very short straight appendages. Stylus (fig. 2 K) very long and slender.

♀ f. macr. Length 3.5 mm. Unicoloured dark brown. Head and thorax darker than in the male. Elytrae much longer than the abdomen, brown, nearly opaque, cells with dense microsculpturing consisting of transverse furrows. Legs black-brown.

Locality of find: Amur, Siberia, 1 ♂ (the type) (STIERNKREUTZ leg.), Shigalova, Fl. Lenam 1 ♀ (POPPIUS leg.). Types in the Zool. Mus. of Helsinki University.

7. *Eurysa maculicaps* HCRV. (Hom., Araeopidae).

New find: Shigalova Fl. Lenam, Siberia 2 ♀♀ (POPPIUS leg.). This rare species has previously been known from Hungary and S. E. Finland (LINNAVUORI 1952 a p. 73). In the same leafhopper material collected by POPPIUS and now belonging to the Zool. Mus. of Helsinki University I also found 1 ♀ of the rare *Achorotile transbaikalica* V. KUSN. from Ust Aldan, Fl. Lenam, previously known in 1 ♀

from Elanskoe, Troizkosavskij Ravon, Siberia, (KUSNEZOV 1929, p. 169), and in addition the species *Chloriona chinai* OSS. 1 ♂ from Ytyk-haja, Fl. Lenam. This species has previously been known from Northern Europe.

8. *Handianus maculaticeps* REUT. 1883 (Hom., Cicadellidae).

REUTER'S *Athysanus maculaticeps*, of which I have examined the types, belongs to the genus *Handianus* RIB.

♀. Length 6.5 mm. Big and robust. Head, pronotum and scutellum yellow. In the middle of the anteclypeus there is a black spot. Frontoclypeus with 3 pairs of large, black spots and on either side about 7 smaller oblique black spots. In the fore part of the vertex there is in the middle a pair of triangular smaller black spots and on either side a long triangular black spot. Elytrae green, sometimes with dark brownish shadows, a little shorter than the abdomen. Underside and legs mostly yellowish. 7th ventral segment as in fig. 3 E.

♂ Length 5.75 mm. More gracile, colouring similar, also the black markings. Elytrae longer than the abdomen, transparent, apex smoky. Veins greenish, suture clavo-coriale and the radial vein brown. Male genitalia as in fig. 3 A - D. Penis with two long, curved and bifurcate appendages. Pygophor with no spines, the side lobe ending in a dark, more strongly chitinized apex.

New find localities: Siberia: Omsk (GRANÖ leg.), Osnatjenn. (HAMMARSTRÖM leg.), V. Sujetuk (GRANÖ leg.).

9. *Handianus trispinosus* n. sp. (Hom., Cicadellidae).

Among specimens determined as *Athysanus maculaticeps* REUT. in the Zool. Mus. of Helsinki University, I found a male of an undescribed species of this genus.

♂. Length 5.25 mm. Body form and dark markings of the head as in *H. maculaticeps*. Pronotum and scutellum greenish yellow, the former with two large round black-brown spots. Elytrae greenish yellow, especially the veins. The following dark brown markings: a stripe along the sutura clavi, as also along the suture clavo-coriale and the radial vein. All these stripes join together in the apex, which is broadly dark brown. Abdomen blackish. There are also dark markings on the legs. Male genitalia fig. 3 F - K. The blunt side lobe of the pygophor with 3 thick black spines starting from a dark strongly chitinized stripe. Anal tube high, boat-like, tapering apically. Penis apically bifurcated, with no appendages. Genital plates as in *H. maculaticeps*.

♀ unknown.

Locality of find: Siberia: V. Sujetuk 1 ♂ (HAMMARSTRÖM leg.).

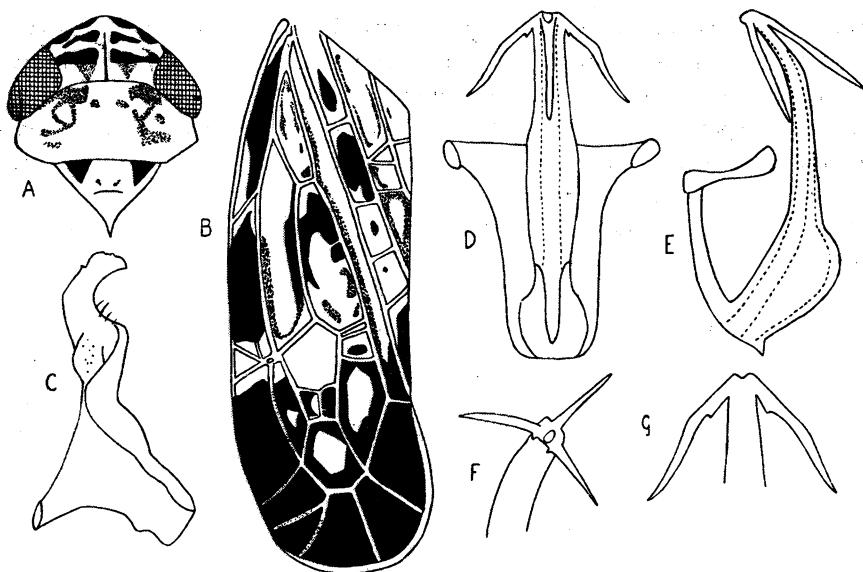


Fig. 4. *Paramesus ancorifer* n. sp.: A head, pronotum and scutellum, B elytra, C stylus, D penis ventral view, E same from the side, F same apex from above, G same dorsal view. -- Orig.

10. *Hardya ribauti* n. sp. (Hom., Cicadellidae).

Colouring, body form, size, etc., as in *H. melanopsis* HDY. Only the male genitalia dissimilar. Stylus (fig. 3 N) very dissimilar, with a deep insinuation in the hind margin. Side lobe of the pygophor as in fig. 3 M. Penis, which is rather similar in all the species of this genus, as in fig. 3 L.

Distribution: Transcaspia (AHNGER leg.), Aschabad (AHNGER leg.), Caucasus (AHNGER), several spp. Types in the Zool. Mus. of Helsinki University.

11. *Paramesus ancorifer* n. sp. (Hom., Cicadellidae).

♂. Length 4.5 mm. Head $0.75 \times$ as long as the pronotum, breadth 1.44 mm., length 0.45 mm. Vertex (base) breadth 0.68 mm. Frons rather flat, black with light paired transverse stripes. Limit between the frontal surface and the vertex rounded. Vertex level, only near the hind angles of the eyes a little concave. Eyes light reddish grey, ocellae red. On the fore margin 2 semilunar black spots on either side, behind them 2 pairs of black transverse stripes (fig. 4 A). Behind two faint triangular brownish spots. Microsculpture of the vertex formed by longitudinal furrows. Pronotum with brown markings as in the figure, microsculpturing dense, net-like. Scutellum with two dark triangular spots. Elytrae much longer than the abdomen, opaque, dirty greyish yellow with dark brown markings (fig. 4 B), veins mostly light. Subexternal apical cell divided into two

parts. Central subapical cell broadening towards both ends. The basal end of the internal subapical cell with two transverse veins. Claval cells with transverse veins as in the figure. Flying wings grey. Abdomen dark brown. Legs with dark brown spots. Penis (fig. 4 D - G) long, with 3 long apical appendages. The basal part of the ventral side of the stem with a high middle ridge. Stylus as in fig. 4 C. - ♀ unknown.

Locality of find: Lesbos 1 ♂ 23. V. 1904 (J. SAHLBERG), the type in the Zool. Mus. of Helsinki University.

Discussion: The new species is very near *P. paludosus* RIB. (for description see RIBAUT 1952, p. 199 - 200) of which I have no material. RIBAUT, who has examined the specimen, reports, however, that it belongs to a new species. It differs from *paludosus* in the bigger size, dissimilar colouring, dissimilarly shaped cells of the elytrae, longer apical appendages of the penis and longer and narrower stylus.

12. *Neolimnusus* n. gen. (Hom., Cicadellidae).

Body form, colouring, etc., much as in *Scaphoideus* UHL., of which I have studied the genotype, *Sc. immistus* SAY. Frontal region and position of the ocellae as in *Scaphoideus*. Head (fig. 5 A) blunter, vertex with a fishscale-like microsculpturing, a little convex (concave in *Scaphoideus*). Pronotum more tapering forwards, puncturing fine and not dense. Scutellum with a transverse curved furrow. Nervation of the elytrae (fig. 5 B) mostly as in *Scaphoideus* but the intermediate apical cell much narrower, not broadening apically, the external subapical cell shorter, triangular and the outer claval vein rather oblique to the commissural margin. Appendix reduced. ♂ Anal tube reduced, membranous. Pygophor (fig. 5 C) with spines, side lobes long and narrow, more chitinized dorsally. Macrochaetes of the blunt and rather short genital plates (fig. 5 E) in two rows. Dorsal surface of the genital plate with a sharp sclerified hook (fig. 5 F), resembling a stylus. Stylus (fig. 5 D st) peculiar, long and narrow, apex more strongly chitinized. Valve long, oval. Connective (fig. 5 G) long, robust, basally bifurcate. Penis (fig. 5 G - H) simple, curved, gonopore apical, large and round. ♀ Pygophor with spines, the 7th sternite (fig. 5 I) short with a darker triangular exsinuation in the middle.

The new genus differs greatly from the other genera of this group (the Palearctic *Metalimnusus* RIB. and the Nearctic *Scaphoideus* UHL., *Cantura* OMAN, *Osbornellus* BALL and *Prescottia* BALL) in the genitalia.

Typ.gen. *Scaphoideus aegyptiacus* MATSUMURA 1908.

N. aegyptiacus MATS.

Length 4.2 mm. Colouring much as in *Scaphoideus immistus* SAY. Yellowish grey-brown. Eyes red-grey, ocellae pale red. Frons yellow, excl. the brown side margins of the frontoclypeus. Vertex with dark grey-brown markings (fig. 5 A)

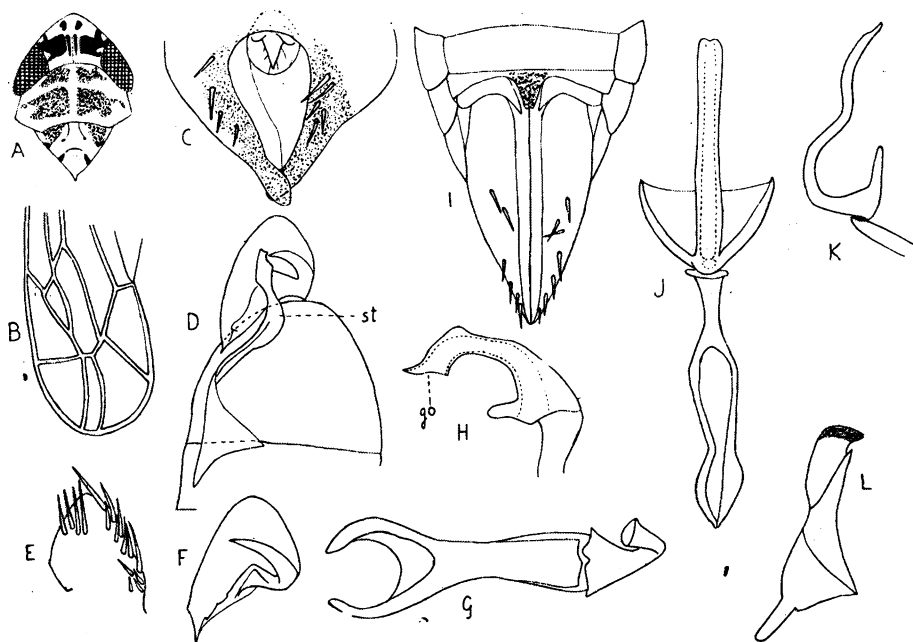


Fig. 5. *Neolimnus aegyptiacus* MATS.: A head, pronotum and scutellum, B apex of the elytra, C genital segment from above, D valve, left genital plate, and stylus dorsal view, E genital plate ventral view, F same dorsal view, G penis and connective dorsal view, H penis from the side (go = gonopore), I ♀ apex of the abdomen ventral view. *Psammotettix alboniger* LETH.: J penis from behind, K same from the side, L stylus. — Orig.

Pronotum shining with red-brown shadows. Scutellum with red-brown basal spots and 6 smaller dark grey-brown spots. Elytrae red-grey, semitransparent, cells with brown shadows, veins brown. The subexternal apical cell with a round black-brown spot.

Distribution: Egypt. New find localities: Deschena and Luxor (J. SAHLBERG leg.).

13. *Psammotettix similis* W. Wg. (Hom., Cicadellidae).

I have previously reported (LINNAVUORI 1952 b, p. 184) a *Psammotettix* species from Minusinsk. I have now seen normally coloured spp. of *Ps. similis* from Nikolskaja, Fl. Lena, Siberia (POPPIUS leg.), and therefore think that the first-mentioned specimen from Minusinsk also belongs to this species, being perhaps parasitized and so abnormally coloured. I have also seen another *Psammotettix* species, *Ps. alienus* DHLB., previously known from Northern and Central Europe and from Siberia: Agrafena, Lena infer. (POPPIUS leg.).

14. *Psammotettix alboniger* LETH. (*Hom.*, *Cicadellidae*).

Described as belonging to the genus *Deltocephalus* BURM. by LETHIERRY 1899 Length 2.5 mm. Small, head rather blunt, a little longer than the pronotum. Colouring grey-yellow. Eyes red-grey. Frons black, excl. a yellow median stripe and faint paired yellow transverse side stripes. Apex of the vertex with two triangular brownish spots, behind them 2 triangular brown spots. In the base two faint red spots. Pronotum with several, large \pm triangular brown spots. Scutellum yellow. Elytrae as long as the abdomen, grey, veins whitish, 2 \pm complete dark brown transverse bands and in addition a dark spot at the base. Abdomen dark brown. Penis (fig. 5 J - K) with a long narrow stem. Stylus as in fig. 5 L.

New find locality: Ytyk-haja Fl. Lenam, Siberia (POPPIUS leg.).

15. *Sorhoanus bicornis* n. sp. (*Hom.*, *Cicadellidae*).

δ . Length 4.5 mm. Head yellow, frons with only faint brown transverse stripes, vertex concave with a dark median stripe. Ocellae black. Pronotum green, scutellum yellow. Elytrae longer than the abdomen, green, faintly semi-transparent, veins green; apex clear, veins whitish. Legs yellow, abdomen dark. Male genitalia: penis (fig. 6 A - B) with only two long, curved apical appendages. Connective as in the other species in this genus. Genital plates (fig. 6 E) long, sclerified, apex rounded. Stylus as in fig. 6 C. Side lobe of the pygophor (fig. 6 D) with a dark, strongly chitinized ventral appendage. ♀ unknown.

Locality of find: Ust Vilui Fl. Lenam, Siberia, 1 δ (POPPIUS leg.), the type in the Zool. Mus. of Helsinki University.

Discussion: The species differs from the other similar species of the genus in the bigger size and in the male genitalia.

16. *Dikraneura lenensis* n. sp. (*Hom.*, *Cicadellidae*).

δ . Length 3 mm. Near *D. variata* HDY., but smaller, more gracile and head and pronotum much broader and shorter. Head distinctly blunter. Hind margin of the pronotum more insinuated. Colouring as in *D. variata* (f. typica). Penis (fig. 6 F - G) much as in *variata*, but the apical appendages much longer and broader and the dorsal appendage in the middle of the stem much longer and sharper. Penis stem distinctly tapering apically, equal by broad in *variata*. Other genital parts as in *variata*. - ♀ unknown.

Locality of find: Ust. Kut Fl. Lenam, Siberia, 1 δ (POPPIUS leg.), the type in the Zool. Mus. of Helsinki University.

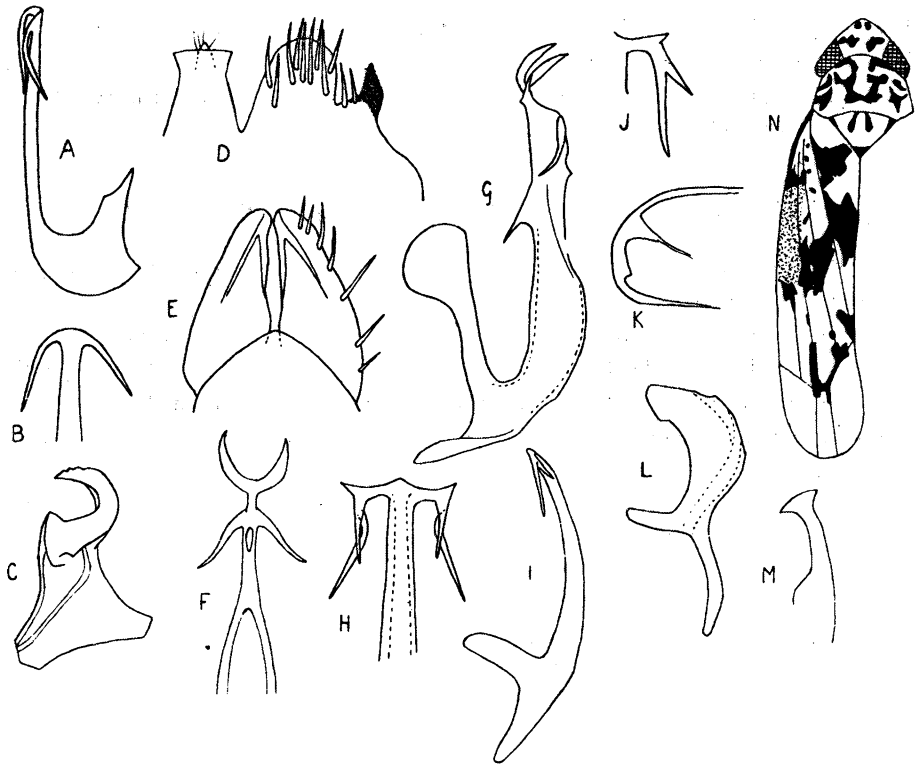


Fig. 6. *Sorhoanus bicornis* n. sp.: A penis side view, B same apex from behind, C stylus, D pygophor and anal tube from above, E genital plates. *Dikraneura lenensis* n. sp.: F penis apex from behind, G penis from the side. *Eupteryx iranica* n. sp.: H penis apex from behind, I penis side view, J apical appendages of the penis, K side lobe of the pygophor from the median side. *Erythroneura pulcherrima* n. sp.: L penis, M apex of the stylus, N ♂. — Orig.

17. *Empoasca borealis* LINDB. 1952 = *E. lindbergi* LINNAV. 1951 (Hom., Cicadellidae).

LINDBERG (1952, p. 144 – 145) described as new *E. borealis* LINDB., on the basis of 1 ♂ and 2 ♀ from Rovaniemi in North Finland. His species is, however identical with my *E. lindbergi*. If a larger numbers of specimens is studied, an individual variability is apparent, with all possibly intermediate forms in the position of the lateral appendages of the penis (as in figs. LINNAVUORI 1951 a, p. 60 and LINDBERG 1952, p. 145). Food plants of the species are *Betula verrucosa*, *B. pubescens* and *B. nana*.

18. *Eupteryx iranica* n. sp. (Hom., Cicadellidae).

♂. Length 2.75 mm. Colouring and dark markings of the head as in *E. zelleri* KBM. (f. typica). Frons light with a pair of black spots. Antennal pits black.

Penis (fig. 6 H - J) much dissimilar to that of *zelleri*. Median side of the side lobe of the pygophor as in fig. 6 K. - ♀ unknown.

Locality of find: Teheran, Keredj, Iran 1 ♂ (F. BRANDT leg.), the type in the Zool. Mus. of Helsinki University.

19. *Erythroneura pulcherrima* n. sp. (Hom., Cicadellidae).

Length 2.5 mm. Near *E. rorida* M. R. Yellow with blood-red markings as in fig. 6 N. Eyes dark grey. The punctured area of the elytrae in the figure orange coloured. Hind tarsi (♂) two basal joints long, the 1st being a little longer than the 2nd the 3rd joint short and black. Hind tarsi of the ♀ totally pale. Penis (fig. 6 L) much broader than in *rorida*. Stylus as in fig. 6 M. The ♀ is distinguished from *rorida* by the dissimilar colouring (similar to the male) and in the distinctly blunter and shorter head.

Locality of find: Elis, Greece, 23. XII 1903 7 spp. (U. SAALAS leg.), types in the Zool. Mus. of the Finnish University, Turku.

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