

Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 15, Heft 23: 261-280

ISSN 0250-4413

Ansfelden, 29. Juli 1994

New Oriental Tenebrionidae ¹⁾

(Coleoptera)

Wolfgang Schawaller ²⁾

Abstract

New Oriental Tenebrionidae are described: *Platydema martensi* sp. nov., *Micropeneta leylica* sp. nov., *Uloma visca* sp. nov., *Sphingocorse philippina* sp. nov., *Spinolyprops trautneri* sp. nov., *Anaedus buricus* sp. nov., *Anaedus nepalicus* sp. nov. and *Allopezus malayensis* sp. nov.

Zusammenfassung

Neue orientalische Tenebrioniden werden beschrieben: *Platydema martensi* sp. nov., *Micropeneta leylica* sp. nov., *Uloma visca* sp. nov., *Sphingocorse philippina* sp. nov., *Spinolyprops trautneri* sp. nov., *Anaedus buricus* sp. nov., *Anaedus nepalicus* sp. nov. und *Allopezus malayensis* sp. nov.

¹⁾ Results of the Himalaya Expeditions of J. MARTENS, no. 193. - For no. 192 see Stuttgarter Beitr. Naturk. (A) 505 / 1994. - J. M. sponsored by Deutscher Akademischer Austauschdienst and Deutsche Forschungsgemeinschaft.

²⁾ Contribution to Tenebrionidae, no. 8. - For no. 9 see Fauna of Saudi Arabia 13 / 1993.

Introduction

During the determination of Oriental Tenebrionidae, some species accumulated, which are new to science. The species presented herein either belong to small and easily surveyed genera, or they have quite unusual characters. This simplifies their taxonomic recognition and may justify such single descriptions. In most other cases new descriptions have to be included in modern revisions of the corresponding genera, because in this family taxonomy is often in a typological condition.

The majority of the type material is housed in the Staatliches Museum für Naturkunde in Stuttgart (SMNS) and the remainder in the Naturhistorisches Museum Basel (NHMB), the Muséum d'Histoire Naturelle Genève (MHNG) and the Hungarian Natural History Museum (HNHM).

Platydema martensi sp. nov.

Description. Body length 6.5 - 7.0 mm. Dorsal side glabrous and unicolorous dark brown with greenish metallic shine; epipleura, ventral side, legs and antennae unicolorous brown. Head regularly and finely punctured, with a weak transverse impression on the frons. Canthus with a few short bristles, head between canthus and eyes without notch. Frons in males without any sexual characters. Proportions of the antennal segments as in Fig. 2. Pronotum lustrous, punctuation regular but sparser than on head. Sides and anterior margin of pronotum with fine and complete border, base of pronotum emarginate. Propleura in the medial part with weak longitudinal wrinkles. Elytra as lustrous as pronotum, with a short row of punctures (about 8) near suture and with 8 equal rows of punctures (third row with about 45 punctures); rows 6-8 are lacking on the shoulders, punctures of all rows posteriorly sparser. Intervals between the rows with very fine micropunctuation. Epipleura without punctures. Abdominal sternites with coarse punctuation, punctures laterally joined to longitudinal wrinkles. Legs without specific or sexual characters. Wings present. Aedeagus as in Fig. 3.

Type material. Holotype ♂: Nepal, Manang Distr., Marsyandi, Thimang / Bagarchap, 2550 m, forest with *Tsuga* / *Acer* / *Rhododendron*, 14.-17.IV.1980, leg. J. MARTENS & A. AUSOBSKY (SMNS). - Paratypes: Nepal, Thakkhola, Tukche, 2600 m, X./XI.1969, leg. J. MARTENS, 3 ex. (SMNS); Manang Distr., W Bagarchap, 2250 m, 22.IX.1983, leg. I. LÖBL & A. SMETANA, 1 ex. (MHNG); Manang Distr., 2 km N Kalopani, 2250 m, 1.X.1983, leg. I. LÖBL & A. SMETANA, 2 ex. (MHNG); Manang Distr., Pisang, 3200 m, 22.IX.1992, leg. A. WEIGEL, 1 ex. (coll. HARTMANN / Erfurt); Manang Distr., between Bhratang and Pisang, 3000 m, 27.IX.1992, leg. I. SCHMIDT, 3 ex. (SMNS); Gorkha Distr., Buri Gandaki, Nyak to lower Chuling Khola Valley, 2450-2870 m, forest with *Pinus excelsa*, 2.VIII.1983, leg. J. MARTENS & W. SCHAWALLER, 2 ex. (SMNS); Gorkha Distr., Chuling Khola Valley, 2800 m, forest with *Quercus semicarpifolia*, 2.-3.VIII.1983, leg. J. MARTENS & W. SCHAWALLER, 2 ex. (SMNS).

Derivatio nominis. Named in honour of Prof. Dr. Jochen MARTENS (Mainz), organizer of several zoological expeditions to the Himalayas. The late Dr. Zoltan KASZAB (Budapest) recognized this species as new and had labelled a part of the type series as *Platydema martensi* sp. n. However, a description was not prepared before his death in 1986.

Discussion. In external appearance *Platydema martensi* sp. nov. is very similar to *P. higonium* LEWIS, 1894 and *P. satoi* KASZAB, 1966. These two species occur in Japan. However, in contrast to *P. martensi* sp. nov. the males of *P. higonium* and *P. satoi* have diagnostic short paired horns on the frons (such a sexual dimorphism can often be found in the genus). Furthermore, *P. higonium* is somewhat smaller (body length about 5.0 mm), has a more distinct punctuation on the elytral intervals and a somewhat different aedeagus (Fig. 4).

From Nepal no species of *Platydema* was hitherto known (KASZAB 1973, 1975, 1977). *Platydema martensi* sp. nov. seems to be restricted in Nepal to mountainous forests (vertical distribution 2450-3200 m); in any case no lower records are known. In the subtropical lowland forests - if they still exist - obviously other *Platydema* species occur. We could find on our expedition in 1988 at a single locality in eastern Nepal (Ilam Distr., 5 km N Sanishare, feet of Siwalik mountains, 270-300 m, mixed forest with *Shorea*, 3.-5.IV.1988, leg. J. MARTENS & W. SCHAWALLER, SMNS) *alticorne* GROUVELLE, 1915, *haemorroidale* GEBIEN, 1913 and *subfascia* WALKER, 1858.

Micropeneta leytica sp. nov.

Description. Body length 5.0 mm. Body unicolorous brown and lustrous. Head in males with strongly developed and posteriorly bent lateral horns (Fig. 5) and with a lateral groove at the canthus; in females without such horns and with a distinct canthus of about the double length of an eye diameter. The rounded eyes can be seen in males only in ventral aspect on the horn bases; in females they can be seen in dorsal aspect as usual. In both sexes, the clypeus is separated from the vertex by a dark line. Entire head and pronotum with fine punctuation. Proportions of the antennal segments as in Fig. 6. Pronotum sexually dimorphic, in males with distinct anterior corners, in females rounded. Lateral margin of pronotum somewhat undulate because of small pores; anterior margin and base with a fine border. Disc of pronotum convex, without impressions. Elytra about 1.5 times as long as together broad, margins in the anterior half parallel, finely serrate at the shoulders. Elytra with a coarser and denser punctuation than that on pronotum, punctures forming irregular longitudinal rows, no distinct separation into rows and intervals. Wings developed. Legs without specific characters, the tip of the anterior tibia in both sexes with a dense field of hairs. Aedeagus as in Fig. 7.

Type material. Holotype ♂: Philippines, Leyte, above Visayas State College of Agriculture N Baybay, 200-500 m, primary forest, 2.III.1991, leg. K. GEIGENMÜLLER, W. SCHAWALLER & J. TRAUTNER (SMNS). - Paratype: Together with holotype, 1 ♀ (SMNS).

Derivatio nominis. Named after the Philippine island Leyte.

Discussion. KASZAB (1978) has published a review of the 3 known species of *Micropeneta*: *excavatifrons* PIC, 1921, *testacea* PIC, 1921, both from Sumatra, and *tarandus* KASZAB, 1946 from Java. *M. leytica* sp. nov. is most similar to *M. tarandus*. Both can be separated without problems by the different form and length of the horns on the head in males (Figs 5, 8), by the quite different aedeagus (Figs 7, 10) and furthermore by the different punctuation of the elytra, which forms rows of punctures and finely punctured intervals in *M. tarandus*.

The validity of the genus *Micropeneta* PIC, 1921 compared with *Menimus* SHARP, 1876

seems not yet to be clear. The distinct sexual dimorphism in *Micropeneta* does not occur in the same extent in *Menimus*, but some species of *Menimus* show a weak sexual dimorphism on the head. Probably, *Micropeneta excavatifrons* with smaller horns in males (Fig. 11) and a different aedeagus (Figs 13-14) belongs to *Menimus*. However, it is likewise not clear, if the different types of the numerous *Menimus* species all belong to a single phylogenetic unit or if the genus should be split into smaller natural groups (one might be *Micropeneta*).

Uloma visca sp. nov.

Description. Body length 6.5 - 7.5 mm (population on Leyte, ♂ ♀), 10.0 mm (single ♂ from Mindanao). Body unicolorous brown. Head sexually dimorphic, in males with a pair of small horns on the anterior margin (Figs 15-16), in females unarmed (Fig. 17). Vertex with fine punctation as on pronotum. Proportions of the antennal segments as in Fig. 18. Form of the mentum and setation on the ligula as in Fig. 19. Pronotum in males with wing-like broadened anterior corners (Fig. 15), which can be reduced (Fig. 16), in females without such peculiarities and anteriorly without impression (Fig. 17). All margins of the pronotum bordered, this border covered by the anterior corners in males (depending on the extent of the broadening). Elytra 1.5 times as long as together broad, with 9 rows of punctures, the rows 2 and 7 and also 3 and 6 joined apically, row 8 shortened at the shoulders and at the tip, row 9 reaching the tip. Intervals with somewhat finer punctation than that on pronotum. Metasternum with a distinct medial line. Abdominal sternites equally and finely punctured, laterally with longitudinal wrinkles, anal sternite emarginate. Form of the anterior tibia as in Fig. 20; the form of the tarsal furrow is variable and more distinct in larger individuals. Aedeagus as in Figs 21-23.

Type material. Holotype ♂: Philippines, Leyte, above Visayas State College of Agriculture N Baybay, 200-500 m, primary forest, 2.III.1991, leg. K. GEIGENMÜLLER, W. SCHIAWALLER & J. TRAUTNER (SMNS). - Paratypes: Together with holotype, 1 ♂ 2 ♀ ♀ (SMNS); Philippines, Mindanao, 30 km W Maramag, 1600 m, 28.-30.XII.1990, leg. BOLM, 1 ♂ (NHMB).

Derivatio nominis. Named in honour to the Visayas State College of Agriculture (VISCA) for the kind hospitality during our stay.

Discussion. The Oriental and Papuan species of the genus *Uloma* urgently need a revision, which is already available for the Australian (KASZAB 1982) and Far East species from Japan, Korea and Taiwan (MASUMOTO & NISHIKAWA 1986). The form of the mentum and the setation of the ligula, the form of the anterior tibia, the sexually dimorphic form of the pronotum and the shape of the aedeagus are considered therein as important diagnostic characters. *Uloma visca* sp. nov. is distinguished within the genus by the wing-like broadened anterior corners of the pronotum in males, in all other species the males have specifically shaped impressions in the anterior part of the pronotum (or pronotum without peculiarities). By this character, the new species is quite isolated within the genus.

Uloma visca sp. nov. possesses a certain variability of some characters, which might be of general interest. This concerns mainly the pronotal shape in males (Figs 15-16), the form of the aedeagus (Figs 22-23) and the body length between different populations. Furthermore it is noticeable, that the form of the tarsal furrow on the anterior tibia obviously

depends on the body length of the individual.

Sphingocorse philippina sp. nov.

Description. Body length 3.5 - 4.0 mm. Body unicolorous dark brown; legs, palps and antennal segments 1-3 and 11 lighter. Head with a distinct transverse impression between clypeus and vertex, surface with coarse punctation. Proportions of the antennal segments as in Fig. 25; segments 1-3 lustrous and without fine setation, segments 4-11 matt due to the fine setation. Pronotum lustrous and with equal and coarse punctation, setae about 6-7 times as long as the diameter of the punctures. Pronotum with rounded anterior corners, undulate lateral margin and rectangular posterior corners (Fig. 24). Elytra with the same punctation and setation as that on pronotum, without recognizable rows of punctures. Lateral margin serrate from the shoulders to behind the middle, each tooth with a projecting seta. Metasternum before the posterior coxae with a round impression and with a furrow of punctures parallel to the posterior margin of the metasternum. Wings present. Legs without specific and sexual characters. Aedeagus as in Fig. 26; a single male of the type series has a longer aedeagus (Fig. 27), but shows no other differences.

Type material. Holotype ♂: Philippines, Leyte, Lake Danao, 500 m, edge of primary forest, 9.III.1991, leg. K. GEIGENMÜLLER, W. SCHAWALLER & J. TRAUTNER (SMNS). - Paratypes: Philippines, Leyte, SW Abuyog, 100-300 m, forest remnants, 8.III.1991, leg. K. GEIGENMÜLLER, W. SCHAWALLER & J. TRAUTNER, 1 ex. (SMNS); Leyte, above Visayas State College of Agriculture, 100-500 m, secondary and primary forests, 22.II.-10.III.1991, leg. K. GEIGENMÜLLER, W. SCHAWALLER & J. TRAUTNER, 9 ex. (SMNS), 3 ex. (HNHM).

Discussion. The genus was known in Asia only from the Himalayas and India (KASZAB 1979) and from Sumatra and Borneo (*borneensis* PIC, 1917, *dilatocollis* FAIRMAIRE, 1882 ex *Pseudolyprops* in the KASZAB collection of HNHM), the genus (and also *Pseudolyprops*) was hitherto unknown from the Philippines. *S. philippina* sp. nov. has similar shapes of the pronotum and shoulders as *keralensis* KASZAB, 1979 but possesses unicolorous elytra and a quite different aedeagus. The aedeagus of *madrasensis* KASZAB, 1979 is similar to the aedeagus in the Philippine species, but the shape of the pronotum is quite different.

The variation of the length of the aedeagus in the type series is quite unusual; other differences are not recognizable. The unusual individual is furthermore a juvenile, weakly sclerotized specimen.

Spinolyprops trautneri sp. nov.

Description. Body length 5.0 mm. Head with about 15 coarse punctures on the vertex between the eyes. Clypeus separated from the vertex by a distinct transverse impression between the antennal insertions. Proportions of the antennal segments as in Fig. 30. Eyes with large facets, the eye diameter consists of 6-7 facets. Shape of the pronotum as usual in the genus with acute posterior corners, lateral margins sinuate before the posterior corners, lateral margin rounded and serrate in the anterior half (Fig. 28). Pronotum coarsely punctured, medial longitudinal line without punctures and lustrous. Setae on pronotum about twice as long as diameter of the punctures (Fig. 29). Elytra including epipleura with somewhat larger punctures than those on pronotum, setae about twice as long as diameter of

the punctures (Fig. 29). Lateral margin serrate in the anterior third. Each elytra with 2 light spots, shape as in Fig. 28. Punctures on the sternites half the diameter of the elytral punctures, last sternite with somewhat coarser and denser punctation. Legs without specific and sexual characters. Wings present. Aedeagus as in Fig. 31.

Type material. Holotype ♂: Philippines, Leyte, Lake Danao, 500 m, edge of primary forest, 19.II.-18.III.1991, leg. K. GEIGENMÜLLER, W. SCHAWALLER & J. TRAUTNER (SMNS).

Derivatio nominis. Named in honour of Jürgen TRAUTNER (Filderstadt) with many thanks for his support during our joint field work on Leyte.

Discussion. The genus previously contained in Asia only 2 species: *maculatus* KULZER, 1954 from Sri Lanka and *himalayicus* KASZAB, 1965 from northern India, Nepal, Thailand and Vietnam (KASZAB 1965). In the Philippines this genus was unknown. *Spinolypros trautneri* sp. nov. can be easily separated from the two congeners by the different colour pattern on the elytra, by the rougher dorsal punctation, by the unpunctured medial line on the pronotum and by the shape of the aedeagus (Figs 31-33).

Anaedus buricus sp. nov.

Description. Body length 8.5 - 9.5 mm. Body and legs unicolorous black, setation on dorsum very dense and long. Head evenly and coarsely punctured, setae erect. Proportions of the antennal segments as in Fig. 36; antennae without sexual dimorphism. Pronotum densely and coarsely punctured, distance between the punctures about 0.5 - 2.0 as long as one diameter of the punctures, punctures partly joined on the disc. Disc of the pronotum with a longitudinal medial unpunctured line. Lateral margin of the pronotum with acute teeth, posterior corners acute and pointing outwards, anterior corners rounded (Fig. 34). Base of pronotum in both sexes before the shoulders with a single, inwardly bent tooth (Fig. 34). Scutellum with rough punctation. Elytra with the same punctation and setation as those on pronotum, setae on the lateral margin numerous and projecting, longer than the other setation on the dorsal surface. Lateral margins finely serrate in the anterior fourth. Metasternum between the posterior coxae with a round impression. Metasternum and abdominal sternites with fine punctation, in the medial region somewhat sparser than on the sides. Wings present. Legs sexually dimorphic, anterior tibia in males on the inner side with oval excavation (Fig. 37); tarsi in males not broader than in females. Aedeagus as in Fig. 38.

Type material. Holotype ♂: Nepal, Gorkha Distr., Buri Gandaki, between Suteo and Labubesi, 700-800 m, 29.VIII.1983, leg. J. MARTENS & W. SCHAWALLER (SMNS). - Paratypes: Together with holotype, 3 ex. (SMNS).

Derivatio nominis. Named after the river Buri Gandaki, in the valley where the type series was collected.

Discussion. *Anaedus buricus* sp. nov. possesses some characters, which are quite unusual within the genus (at least in the Asian species known to me). These characters are the sexually dimorphic structure of the anterior tibia with an excavation in males, the 2 teeth at the base of the pronotum and the very long and dense setation of the dorsal side. The structure of the aedeagus has the general shape of the congeners. By the 3 mentioned characters the species is quite isolated and easily distinguished from the other numerous species of the genus.

Anaedus nepalicus sp. nov.

Description. Body length 6.0 - 7.0 mm. Body unicolorous dark brown; only the flattened sides of the pronotum somewhat lighter. Setation on head erect, on pronotum and elytra pointed backwards. Head coarsely punctured, vertex more sparsely so, without unpunctured area. Proportions of the antennal segments as in Fig. 40, antennae without sexual dimorphism. Pronotum evenly, coarsely punctured, distance between the punctures as long as 2-4 puncture diameters. Sides broadly flattened, lateral margin smooth and sinuate before the rectangular posterior corners, anterior corners rounded. Scutellum lustrous, unpunctured. Elytra with the same punctation and setation as those on pronotum, lateral margin serrate in the anterior fourth (Fig. 39). Metasternum between the posterior coxae with a rounded impression, medially without punctures, laterally coarsely punctured. Abdominal sternites at the sides somewhat more coarsely and densely punctured than in the middle. Wings present. Legs without specific and sexual characters. Aedeagus as in Fig. 41.

Type material. Holotype ♂: Nepal, Dhading Distr., between Thorpu and Kordunje, 1300-1400 m, 24.VII.1983, leg. J. MARTENS & W. SCHAWALLER (SMNS). - Paratypes: Nepal, Gorkha / Dhading Distr., from Gorlabesi to Dobhan, 1000-1100 m, 30.VII.1983, leg. J. MARTENS & W. SCHAWALLER, 2 ex. (SMNS); Gorkha Distr., Arughat to Suteo, 600-700 m, 27.VII.1983, leg. J. MARTENS & W. SCHAWALLER, 1 ex. (SMNS); Gorkha Distr., Darondi Khola between Naya Sangu and Gorkha, 1200 m, 14.VIII.1983, leg. J. MARTENS & W. SCHAWALLER, 1 ex. (SMNS); Kathmandu Valley, Balaju Park, 1400 m, 23.III.1973, leg. J. MARTENS, 1 ex. (SMNS); same locality, 17.III.1980, leg. J. MARTENS & A. AUSOBSKY, 2 ex. (SMNS); Taplejung Distr., confluence of Kabeli and Tada Khola, 1000-1050 m, 23.-25.IV.1988, leg. J. MARTENS & W. SCHAWALLER, 1 ex. (SMNS); Sankhua Sabha Distr., Arun Valley bottom between Hedangna and Num, 950-1000 m, 6.-8.VI.1988, leg. J. MARTENS & W. SCHAWALLER, 1 ex. (SMNS).

Discussion. Superficially *Anaedus nepalicus* sp. nov. is very similar to *spinicornis* KASZAB, 1973; colour, proportions and flattened sides of the pronotum, punctuation and setation of the dorsal side show no differences. However, both species have different aedeagi, the parameres are asymmetrical in *A. spinicornis* and symmetrical in *A. nepalicus* sp. nov. (Figs 41-42). Furthermore, in *A. spinicornis* the males have a spiny prolonged antennal segment 5, the male tarsal segments are broader than in the female and the male tibiae have more spines at the inner side, whereas in *A. nepalicus* sp. nov. no sexual dimorphism occurs. Both species belong to the group including *Anaedus robusticollis* (PIC, 1921), but their bodies are smaller, the sides of the pronotum are more rounded and flattened and their aedeagi are different.

At a single locality in Nepal (Arun Valley bottom between Hedangna and Num) *Anaedus spinicornis* and *A. nepalicus* sp. nov. have been found together in a subtropical mixed forest.

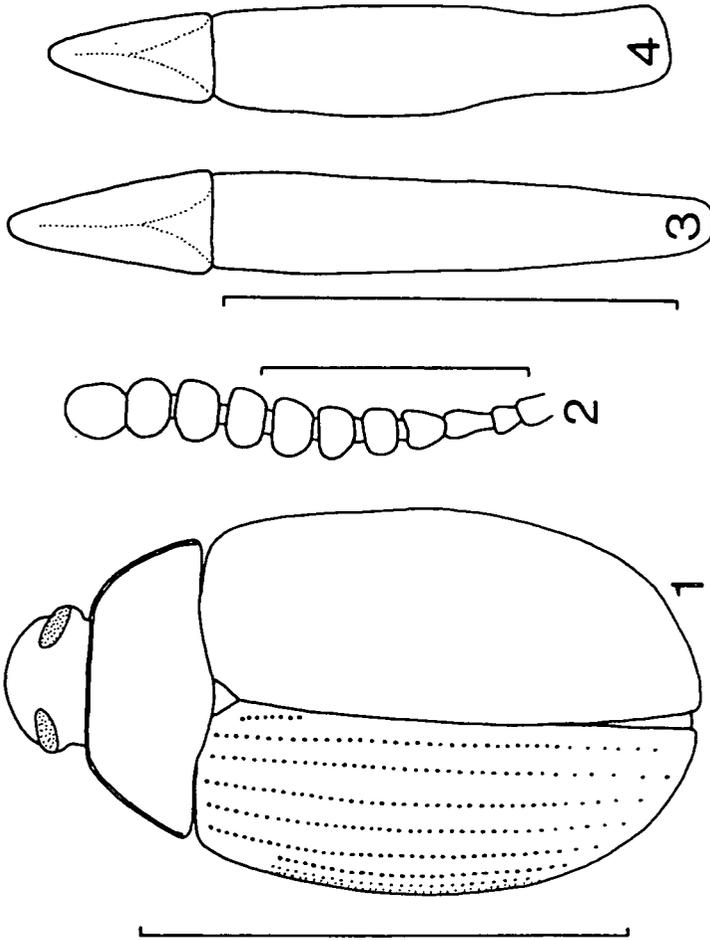
Allopezus malayensis sp. nov.

Description. Body length 5.0 - 5.5 mm. Body brownish, elytra with yellow spots (Fig. 43), dorsal and ventral side and legs covered with pale scales. Head with a distinct suture between clypeus and vertex. Dorsal side of the head covered with rounded and shining granules, each granule bearing a pale scale. Proportions of the antennal segments as in Fig. 44. Pronotum with long projecting anterior corners, surface structure same as that on head. Lateral margin slightly crenulated by lateral granules. Anterior and posterior margin bordered, but the border indistinct because of the covering scales. Posterior part of the pronotum laterally with a transverse impression. Elytra long oval, with a sutural stria and with 9 discal striae. Disc strongly gibbous, shoulders distinctly swollen at the base of interval 7. Intervals 3, 5 and 7 with 3-5 large, dark and shining tubercles each, number and extents of these tubercles variable in the different individuals. Legs with asymmetrical penultimate tarsal segments (characteristic for the genus), anterior tibia somewhat bent inwards at the tip. Wings present. Aedeagus as in Fig. 45, ovipositor strongly sclerotized, blade-shaped (Fig. 46).

Type material. Holotype ♂: Malaysia, Cameron Highland, Gunong Beremban, 1.-20.IV.1990, leg. A. RIEDEL (SMNS). - Paratypes: Together with the holotype, 2 ex. (SMNS); Malaysia, Cameron Highland, Tanah Rata, 1.-6.IV.1990, leg. A. RIEDEL, 1 ex. (SMNS).

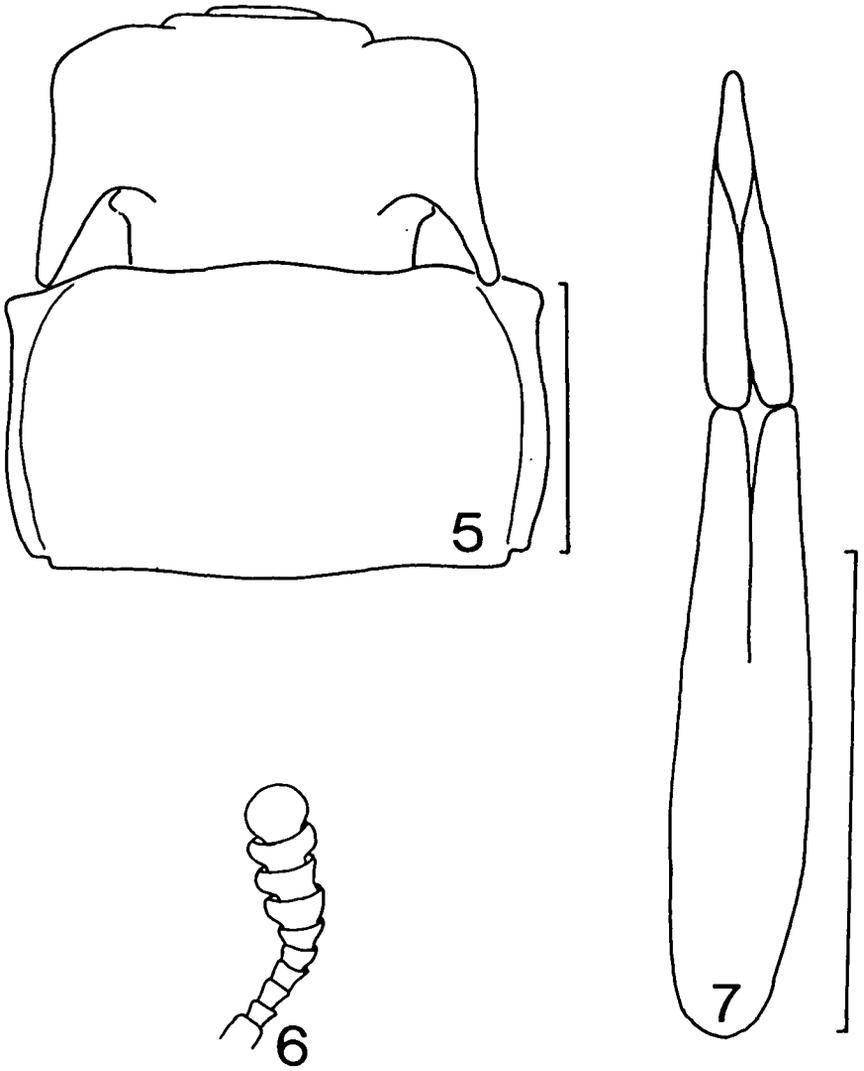
Discussion. The genus contains hitherto 2 species: *A. miritarsis* GEBIEN, 1921 from the Philippines and *A. subcarinatus* PIC, 1921 (= *xantusi* KASZAB, 1939) from Borneo. These two species distinctly differ in size (*A. miritarsis* about 5 mm, *A. subcarinatus* about 9 mm) and by different structure of the elytra (*A. miritarsis* flat and with scales, *A. subcarinatus* with keels and glabrous), nevertheless they are characterized by the significantly asymmetrical tarsal segments (GEBIEN 1921), which can be considered a synapomorphic character of the genus. *A. malayensis* sp. nov. has a similar body shape, elytral structure and colour pattern to *A. miritarsis*, but differs strongly by the tubercles on the elytral intervals, by the gibbous elytral disc, by the finer crenulated lateral margin of the pronotum and by the shape of the aedeagus (Figs 45, 47, 48).

Figures

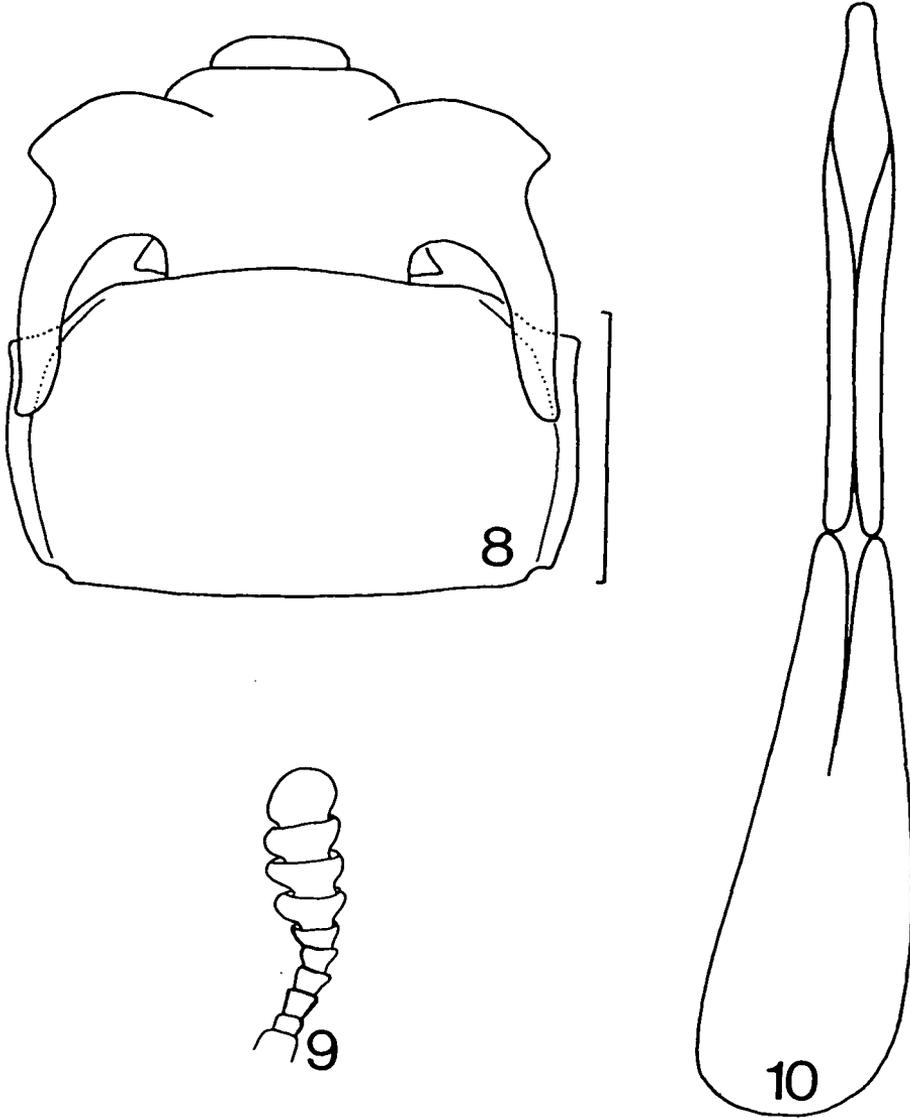


Figs 1-3: *Platydema martensi* sp. nov. - 1) dorsal view of holotype ♂, scale 5 mm; 2) antenna, scale 1 mm; 3) aedeagus, scale 1 mm.

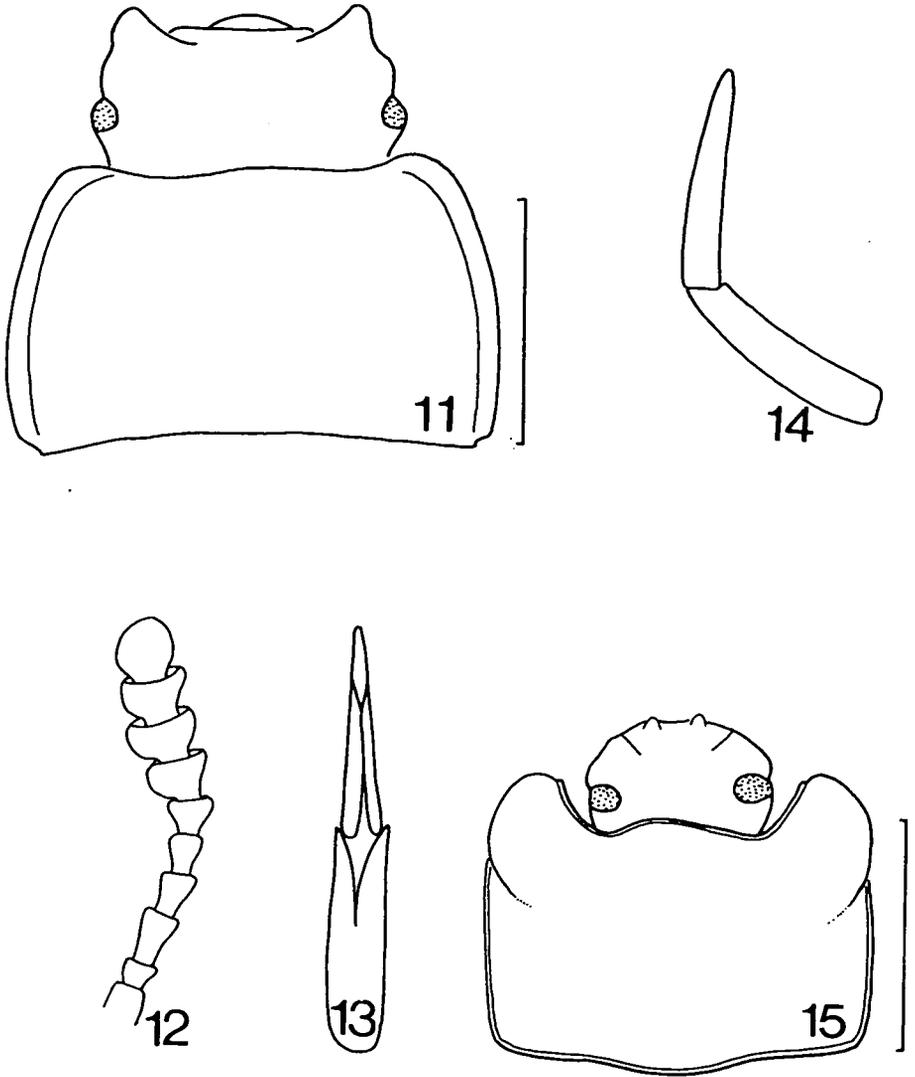
Fig. 4: *Platydema higonium* LEWIS, 1894. - aedeagus of a specimen from Japan in Zoologische Staatssammlung München.



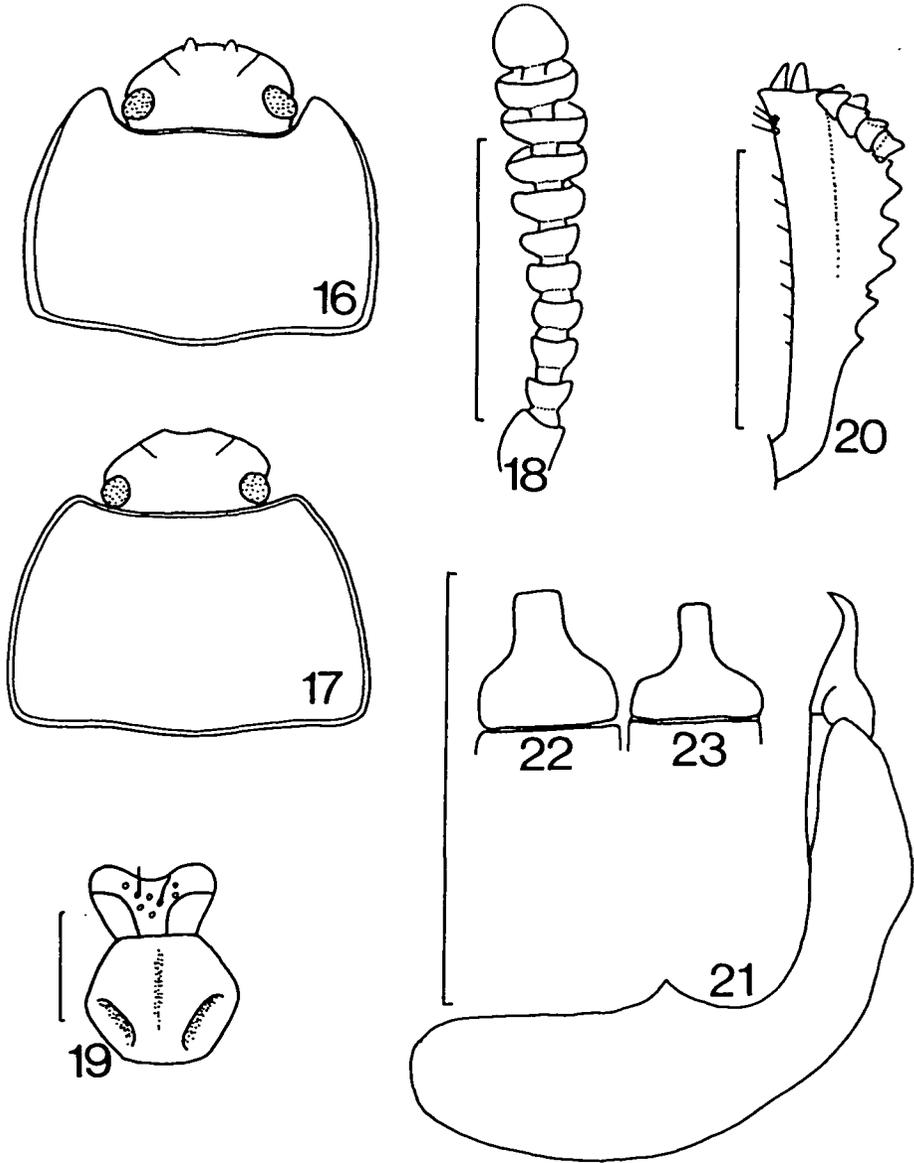
Figs 5-7: *Micropeneta leytica* sp. nov. - 5) head and pronotum in dorsal view of holotype ♂, scale 1 mm; 6) antenna, scale as pronotum; 7) aedeagus, scale 0.5 mm.



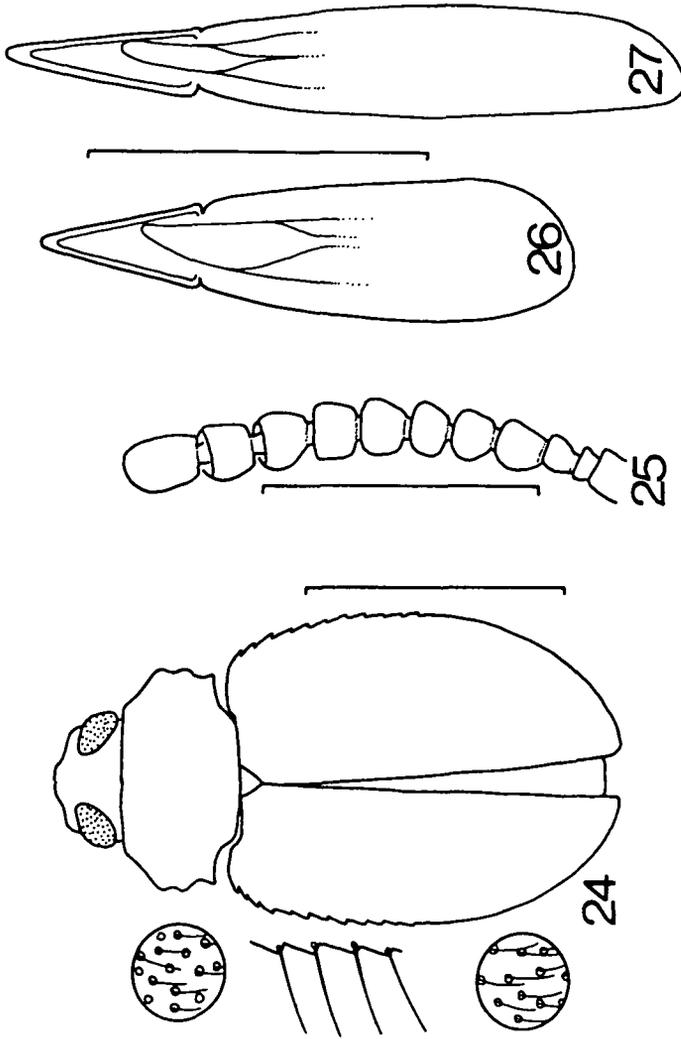
Figs 8-10: *Micropeneta tarandus* KASZAB, 1946. - 8) head and pronotum in dorsal view of holotype ♂ from HNHM; 9) antenna; 10) aedeagus.



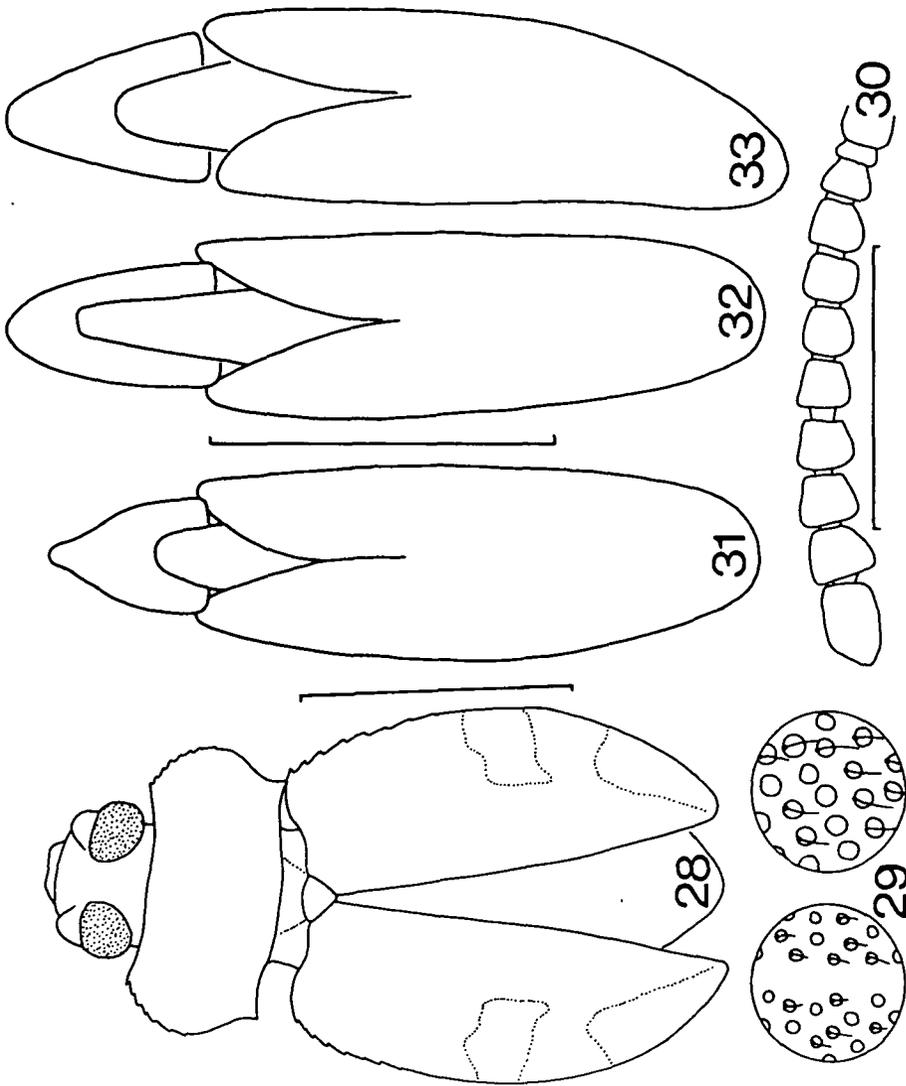
Figs 11-14: *Micropeneta excavatifrons* Pic, 1921. - 11) head and pronotum in dorsal view of a specimen from Borneo in HHNM; 12) antenna; 13) aedeagus in ventral view; 14) aedeagus in lateral view.



Figs 15-23: *Uloma visca* sp. nov. - 15) head and pronotum in dorsal view of holotype ♂, scale 2 mm; 16) head and pronotum of paratype ♂; 17) head and pronotum of paratype ♀; 18) antenna, scale 1 mm; 19) mentum and ligula, scale 0.25 mm; 20) anterior tibia, scale 1 mm; 21-23) aedeagus, scale 1 mm.



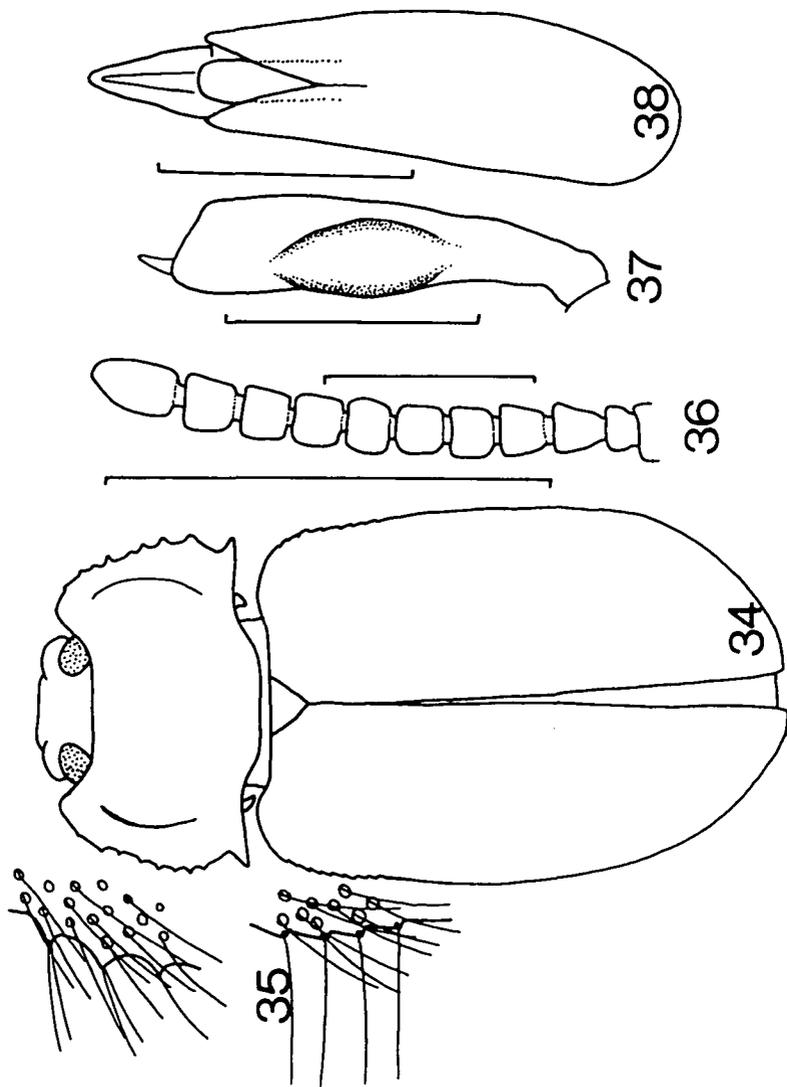
Figs 24-27: *Spingocorse philippina* sp. nov. - 24) dorsal view of holotype δ , scale 2 mm; 25) antenna, scale 1 mm; 26) aedeagus of holotype, scale 0.5 mm; 27) aedeagus of paratype.



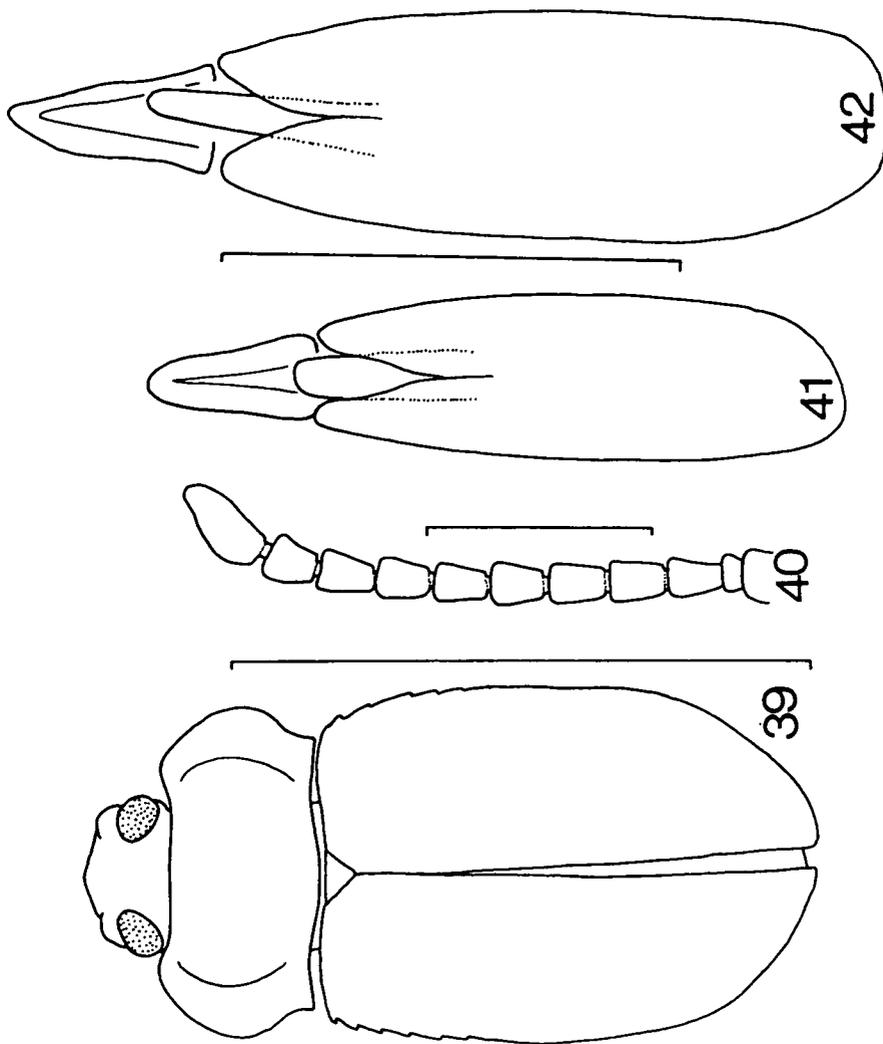
Figs 28-31: *Spinolyprops trautneri* sp. nov. - 28) dorsal view of holotype ♂, scale 2 mm; 29) punctuation and setation on medial part of pronotum (left) and on disc of elytra (right); 30) antenna, scale 1 mm; 31) aedeagus, scale 0.5 mm.

Fig. 32: *Spinolyprops himalayicus* KASZAB, 1965. - aedeagus of a specimen from Thailand in SMNS.

Fig. 33: *Spinolyprops maculatus* KULZER, 1954. - aedeagus of a specimen from Sri Lanka in SMNS.

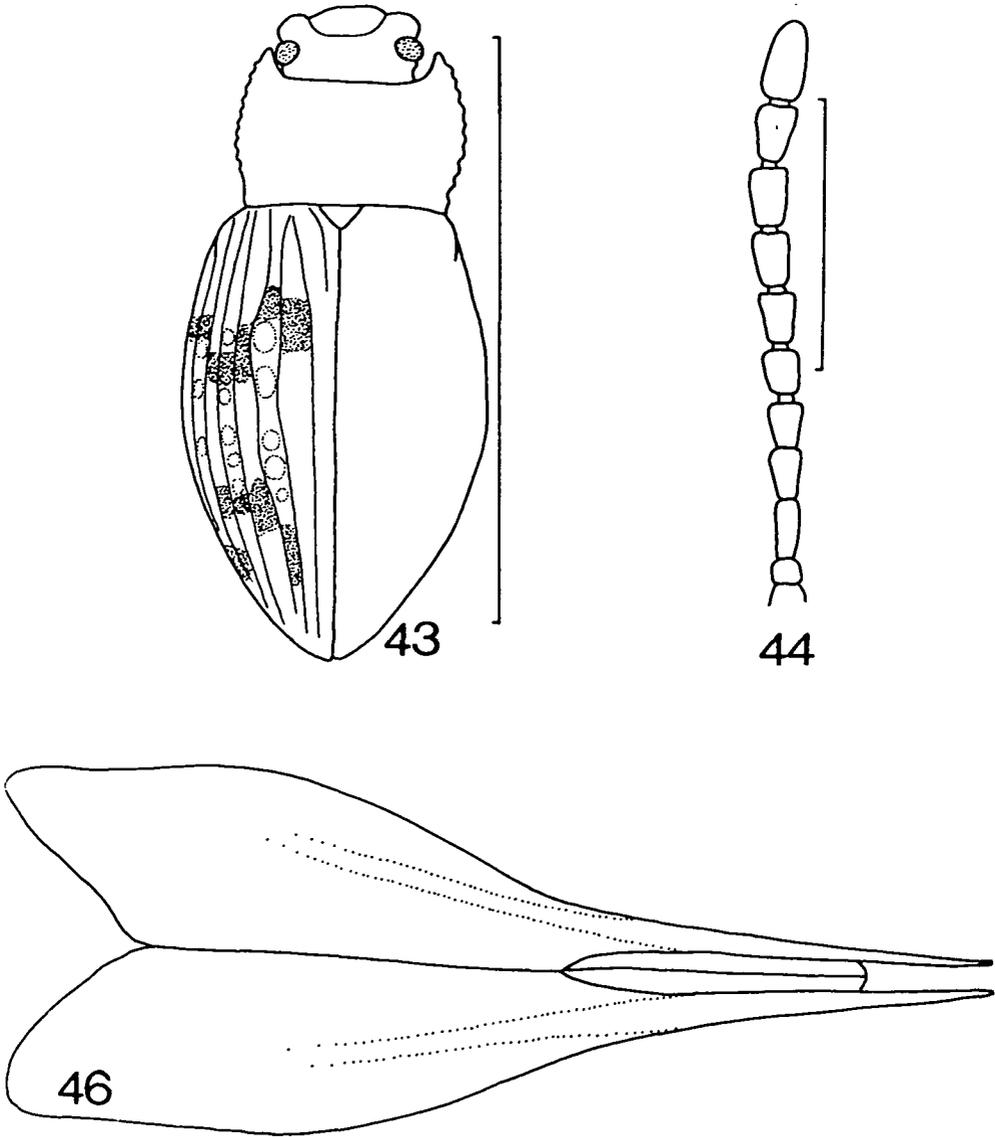


Figs 34-38: *Anaedus buricus* sp. nov. - 34) dorsal view of holotype ♂, scale 5 mm; 35) punctation and setation on the lateral sides of pronotum and elytra; 36) antenna, scale 1 mm; 37) inner side of anterior tibia in males, scale 1 mm; 38) aedeagus, scale 1 mm.



Figs 39-41: *Anaedus nepalicus* sp. nov. - 39) dorsal view of holotype ♂, scale 5 mm; 40) antenna, scale 1 mm; 41) aedeagus, scale 1 mm.

Fig. 42: *Anaedus spinicornis* KASZAB, 1973. - aedeagus of a specimen from Nepal in SMNS.



Figs 43-44, 46: *Allopezus malayensis* sp. nov. - 43) dorsal view of paratype ♀, scale 5 mm; 44) antenna, scale 1 mm; 46) ovipositor, scale as aedeagus.

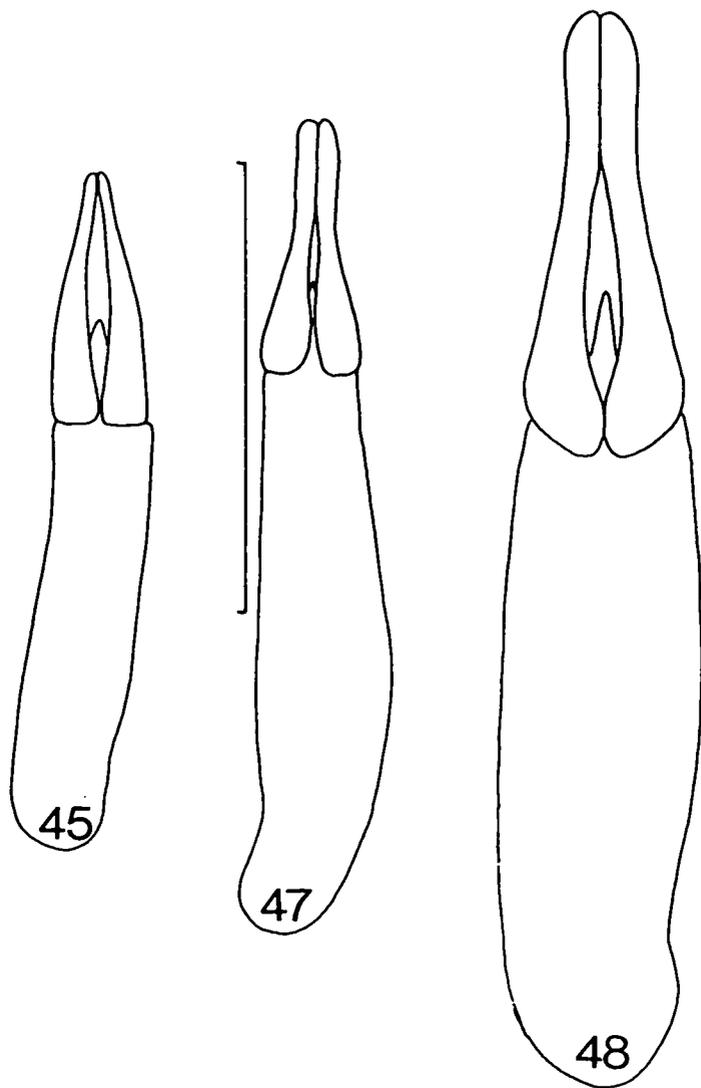


Fig. 45: *Allopezus malayensis* sp. nov. - aedeagus of holotype ♂, scale 1 mm;
Fig. 47: *Allopezus miritarsis* GEBIEN, 1921. - 47) aedeagus of a specimen from the Philippines in Zoologische Staatssammlung München.
Fig. 48: *Allopezus subcarinatus* PIC, 1921. - 48) aedeagus of a specimen from Borneo in Zoologische Staatssammlung München.

Acknowledgements

Thanks are due to Dr. I. LÖBL (Genève), Dr. O. MERKL (Budapest) and Dr. G. SCHERER (Munich) for the access to and the hospitality in the corresponding collections.

References

- GEBIEN, H. - 1921. Philippine Tenebrionidae, II. - *Philippine J. Sci.* 19: 439-515.
- KASZAB, Z. - 1965. Wissenschaftliche Ergebnisse der von Dr. F. Schmid in Indien gesammelten Tenebrioniden (Coleoptera). - *Misc. Zool.* 2: 107-130.
- KASZAB, Z. - 1973. Tenebrioniden (Coleoptera) aus Nepal. - *Acta Zool. Acad. scient. Hung.* 19: 23-74.
- KASZAB, Z. - 1975. Tenebrioniden (Coleoptera) aus Nepal, II. - *Ann. hist.-nat. Mus. natn. Hung.* 67: 119-126.
- KASZAB, Z. - 1977. Tenebrionidae der Nepal-Expeditionen von Dr. J. Martens (1969-1974) (Insecta: Coleoptera). - *Senckenbergiana biol.* 57: 241-283.
- KASZAB, Z. - 1978. Australische und südpazifische Tenebrioniden der Tribus Phrenapatini und Gnathidiini (Coleoptera) sowie synonymische Bemerkungen. - *Ann. hist.-nat. Mus. natn. Hung.* 70: 163-177.
- KASZAB, Z. - 1979. Tenebrioniden aus Südindien (Coleoptera). - *Acta Zool. Acad. scient. Hung.* 25: 259-310.
- KASZAB, Z. - 1982. Revision der Australischen Uloma-Arten (Coleoptera: Tenebrionidae). - *Acta Zool. Acad. scient. Hung.* 28: 233-291.
- MASUMOTO, K. & NISHIKAWA, N. - 1986. A revisional study of the species of the genus *Uloma* from Japan, Korea and Taiwan (Tenebrionidae, Coleoptera). - *Insecta Matsumurana* 35: 17-43.

Anschrift des Verfassers:

Wolfgang SCHAWALLER
Staatliches Museum für Naturkunde
Rosenstein 1
D-70191 Stuttgart
Germany

Druck, Eigentümer, Herausgeber, Verleger und für den Inhalt verantwortlich: Maximilian Schwarz, Konsulent für Wissenschaft der O.Ö. Landesregierung, Eibenweg 6, A - 4052 Ansfelden.

Redaktion: Erich Diller, Münchhausenstraße 21, D-81247 München;

Michael Hiermeier, Allacher Str. 273 d, D-80999 München;

Max Kühbandner, Marsstraße 8, D-85609 Aschheim;

Wolfgang Schacht, Scherrerstraße 8, D-82296 Schöngeising;

Erika Scharnhop, Wemer-Friedmann-Bogen 10, D-80993 München;

Thomas Wilt, Tengstraße 33, D-80796 München 40;

Postadresse: Entomofauna, Münchhausenstraße 21, D-81247 München; Tel. 089/8107-0, Fax -300.