

A NEW SPECIES OF *MICROACMAEODERA* COBOS
(COLEOPTERA: BUPRESTIDAE) FROM THE
PHILIPPINES

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ABSTRACT

Microacmaeodera (*Squamicroacmaeodera*) *macgregori* is described from Luzon, Philippines, illustrated and contrasted with its congeners in both a table and a key.

The buprestid genus *Microacmaeodera* Cobos was recently revised by Volkovitsh (1986), who placed four species in two subgenera. *Microacmaeodera* (*Microacmaeodera*) *longicornis* (Cobos) (type-species) and *M. wittmeri* Volkovitsh are sympatric, having been collected at the same localities in the western Himalayas. *M. (Squamicroacmaeodera) belli* (Kerremans) is from India and *M. (S.) aruensis* (Théry) is from Aru Isl. and perhaps Borneo. The discovery of four specimens of an undescribed species from Luzon Isl., Philippines in the collection of the National Museum of Natural History (NMNH) stimulates us to begin a series of cooperative projects planned during our first meeting in Leningrad in February, 1990.

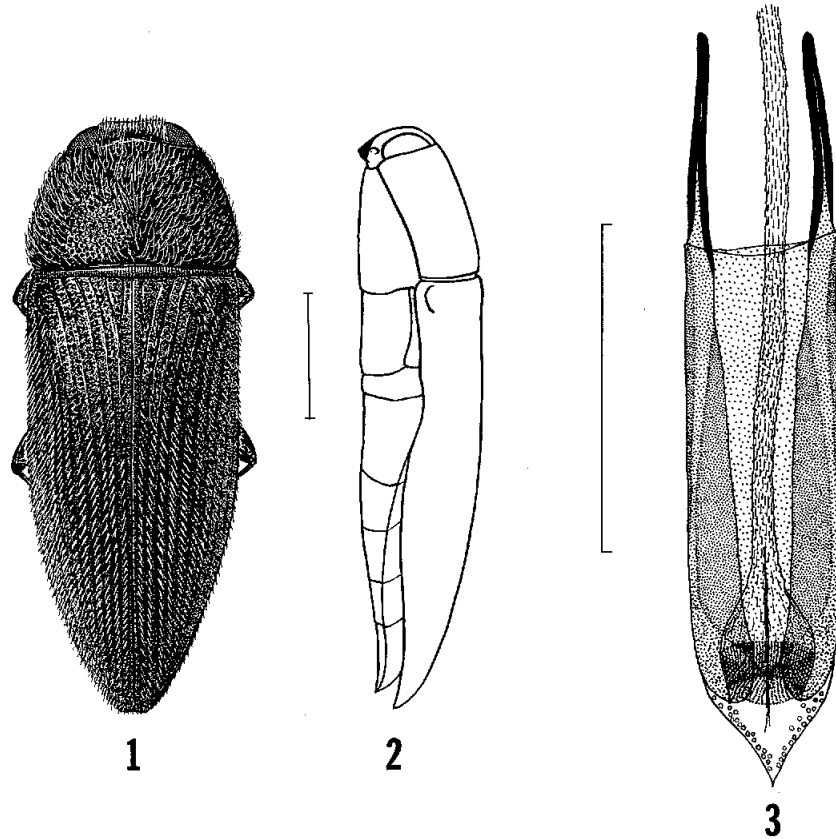
Microacmaeodera (*Squamicroacmaeodera*) *macgregori*
Bellamy and Volkovitsh, **new species**
(Figs. 1-3)

Body small, length 5.4-5.9 mm, width 1.9-2.1 mm, broad, robust, convex, with poorly marked dorsal curvature (Figs. 1, 2); black, elytra sometimes with feeble bluish sheen; covered with white hyaline scale-like setae.

Head broad; front with weak pit-like depression in lower part, nearly parallel-sided, vertex with distinct longitudinal keel. Vertex 1.88-1.94 × as wide as transverse diameter of eye and 1.03-1.11 × as wide as front above antennal depressions. Clypeus relatively wide, median emargination broadly arcuate. Front with sculpture ocellate changing to alveolate, formed by superficial umbilicate punctations, with inconspicuous granules and eccentrically placed dots; intervals shining. Antennae short, broadened from 5th antennomere in both sexes, 1.50-1.63 × as long as height of eye, sexual dimorphism not marked; 2nd antennomere irregularly rounded, weakly thickened; 3rd and 4th antennomeres similar, widened apically, particularly 4th; 5th triangular; 6-10 transverse, in male 2 ×, in female 1.5 × as wide as long; 11 irregularly rounded.

Pronotum evenly convex, without basal depression, lateral cavities practically indistinct; slightly wider than long, basal width 1.59-1.64 × length, greatest width in posterior 1/3 or in front of base; sides shortly divergent or almost parallel toward anterior 1/4, then longly arcuately converging anteriorly; anterior margin angularly projecting, clearly bisinuate; basal margin straight. Lateral carina thin, distinct, complete, sometimes obliterated in anterior corners, slightly arcuate. Sides with alveolate sculpture of superficial cells with smooth or slightly rough bottoms and inconspicuous dots, sometimes the sides of cells forming barely visible rugae; disk with asperate sculpture, sometimes with a little area

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Figs. 1, 2. *Microacmaeodera* (*Squamicroacmaeodera*) *macgregori*, n. sp. 1, dorsal habitus. 2, lateral aspect. Scale line = 1.0 mm.

Fig. 3. *Microacmaeodera* (*Squamicroacmaeodera*) *macgregori*, n. sp., median lobe, dorsal aspect. Scale line = 0.5 mm.

of sparse, fine, simple punctations in the middle. Pubescence consisting of short, decumbent, very fine, scale-like setae, hardly longer than diameter of punctations. Anterior prothoracic margin slightly arcuately truncate, slightly short of attaining anterolateral angle and bordered by a very narrow groove; prothoracic sculpture consisting of small, sparse, medially umbilicate punctations. Sculpture of metathorax and hind coxae consisting of dense round, deep, umbilicate punctations. Projection of hypomera with abundant, very large, round, superficial, umbilicate rugose punctations.

Elytra 2.07–2.12 \times as long as wide at base; sides almost parallel on anterior $\frac{1}{2}$, evenly arcuately converging to regularly jointly rounded apices. Denticles on posterior $\frac{1}{3}$ of epipleura small, inconspicuous; incisure behind humeri very shallow, hardly visible (Fig. 2). Punctations of striae deep, oval, coalescent, forming grooves on almost whole length of elytron. Intervals similar, flat, 2–3 \times as wide as striae, covered with large, superficial, mostly uniseriate punctations; two sutural intervals with double-seriate punctations on barely rugulose background and with white, hyaline scale-like setae approximately as long as width of interval.

Legs black; metacoxae with posterior margin barely curved, slightly emarginate laterally but without a lateral tooth. Tibiae slightly curved, foretibiae markedly broadened

Table 1. Diagnostic differences between three species of *Microacmaeodera* (*Squamicroacmaeodera*).

<i>M. (S.) belli</i> (Kerremans)	<i>M. (S.) aruensis</i> (Théry)	<i>M. (S.) macgregori</i> , n. sp.
Front parallel-sided, not widening posteriorly, with alveolate sculpture of umbilicate punctations with eccentric punctures.	Front decidedly broadened posteriorly, with ocellate sculpture of umbilicate punctations bearing punctures in their middle.	Front parallel-sided, not widened posteriorly, with ocellate to alveolate sculpture of umbilicate punctations with eccentric punctures.
Pronotum with greatest width in posterior 1/2; width at base 1.3 x length.	Pronotum with greatest width behind middle; width at base 1.44 x length.	Pronotum with greatest width in posterior 1/3 or just anterior to base; width at base 1.59-1.64x length.
Lateral keel of pronotum distinct, entire.	Lateral keel of pronotum not distinct, markedly developed only at posterolateral angles.	Lateral keel of pronotum distinct, entire.
Sides of pronotum with reticulate-rugose sculpture; disk with simply punctate sculpture.	Sides of pronotum with reticulate or reticulate-rugose sculpture; disk with simply punctate sculpture.	Sides of pronotum with cellulate sculpture, disk with asperate sculpture.
Elytral epipleura with shallow but distinct incisure behind humeri.	Elytral epipleura with shallow but distinct incisure behind humeri.	Elytral epipleura practically without incisure behind humeri.
Elytral striae visible only on posterior 1/2.	Elytral striae distinct on entire length.	Elytral striae distinct on entire length.
Hind coxa with large rectangular lateral tooth.	Hind coxa without lateral tooth.	Hind coxa without lateral tooth.
Abdomen with simple or asperate punctations, except on sternite 1.	Abdomen wholly covered with fine reticulate sculpture of umbilicate punctations.	Abdomen with asperate punctations, except on sternite 1.
Aedeagus unknown.	Median lobe with lamina divided, consisting of two sclerites.	Median lobe without lamina.
Body covered with thin squamae.	Body covered with thin squamae.	Body covered with flattened setae.

apically, covered with inconspicuous hairs. Plantar brush well developed on all tarsomeres, larger toward distal end. Claws short, broad, with large sharp tooth at internal margin.

Abdomen wholly black, sides of 1st sternite alveolately sculptured with large, elongate, umbilicate punctations; remaining surface with asperate punctations. Pubescence consisting of fine, white, decumbent hair-like setae. Anal sternite of both sexes short, broadly rounded, slightly truncate at apex, without depressions.

Genitalia. Male: exerted part of tegmen similar to tegmen of *M. aruensis* (Théry) in shape (see Volkovitsh 1986, Fig. 18). Median lobe (Fig. 3) elongate with parallel sides, without lamina, and with relatively long apophyses. Female: ovipositor of tubular type, rather elongate; similar to *M. belli* (Kerremans) in shape (see Volkovitsh 1986, Fig. 27).

The remaining parts of the male and female genitalia are damaged and thus not fit for illustration.

Type Material. Holotype, male: Philippines, Llocos(?) Sur, Luzon, McGregor, 1 male, 2 female paratypes, same data. All specimens deposited in NMNH.

Remarks. *Microacmaeodera macgregori* differs from both the other species in this subgenus by the shape of the pronotum, which is widest near base; pronotal sculpture consisting of alveolate punctations at sides and asperate ones on disk; elytral epipleura practically without incisure behind humeri; very thin pubescence consisting of scale-like setae; and from *M. (S.) aruensis* by the structure of the aedeagus (male of *M. (S.) belli* unknown). Additionally, it differs from *M. (S.) aruensis* by having the front parallel-sided, not widening to vertex; pronotum more transverse and with well developed lateral keel; from *M. (S.) belli* by having the pronotum more transverse, elytral striae distinct for entire length of elytra, and hind coxa without lateral tooth.

These three species are contrasted in Table 1.

KEY TO SUBGENERA AND SPECIES OF *Microacmaeodera*

1. Body broad and robust, elytra not longer than $2.3 \times$ basal width; dorsum with thin transparent squamae or flattened setae. Antenna no more than twice as long as height of eye. Sides of pronotum with alveolate or alveolate-rugose sculpture, disk with asperate or finely, separately calloused sculpture. Elytral intervals no less than $2.5 \times$ as wide as striae..... subgenus *Squamicroacmaeodera* Volkovitsh..... 2
- Body elongate and narrow, elytra at least $2.4 \times$ ($2.44-2.49$) as long as basal width; dorsum with short simple setae. Antenna longer, in female more than $2.2 \times$ as long as height of eye, in male up to half length of body. Pronotum wholly covered with simple punctations. Elytral intervals equal to or not more than $2 \times$ as wide as punctate striae..... subgenus *Microacmaeodera*..... 4
2. Punctate striae distinct on entire length of elytra. Hind coxa without tooth 3
- Punctate striae visible only on posterior $\frac{1}{2}$ of elytra, anteriorly fused with punctations of intervals. Hind coxa with large rectangular lateral tooth *M. (S.) belli* (Kerremans)
3. Front distinctly broadened to vertex. Lateral keel of pronotum markedly developed only at posterolateral angles. Elytral epipleura with shallow but distinct incisure behind humeri. Abdomen wholly covered with fine alveolate sculpture of umbilicate punctures. Pubescence consisting of thin squamae. Aedeagus with lamina divided, consisting of two sclerites on anterior $\frac{1}{2}$ *M. (S.) aruensis* (Théry)

- Front parallel-sided, not widening to vertex. Lateral keel of pronotum distinct, entire. Elytral epipleura practically without incisure behind humeri. Abdomen with asperate sculpture of partly obliterated umbilicate punctures, except laterally on sternite 1. Pubescence consisting of flattened setae. Aedeagus without lamina *M. (S.) macgregori*, n. sp.
- 4. Body black with bluish sheen. Front parallel-sided or slightly widened to vertex. Antenna in male attaining half of body length, not less than 5 ×, in female 2.5 × eye height. Sides of pronotum weakly arcuate, without tubercles laterally. Aedeagus with entire lamina displaced to base of apophyses. Ovipositor greatly elongated, total length 5 × that of its widest part *M. (M.) longicornis* Cobos
- Body bronzy black. Front slightly narrowed to vertex. Length of antenna in male 3.5 ×, in female 2.25 × eye height. Sides of pronotum with weak tubercles in middle. Aedeagus with lamina displaced to anterior part, divided, consisting of 2 sclerites. Ovipositor relatively short, 3 × length of widest part *M. (M.) wittmei* Volkovitsh

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