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A NEW GENUS OF ACMAEODERINI FROM SOUTHEAST ASIA AND THE SYSTEMATIC POSITION OF <u>Acmaeodera Philippinensis</u> OBENBERGER (COLEOPTERA, BUPRESTIDAE)

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Through the kindness of Dr. S. Bily, of the National Museum in Praha, we were able to examine the types of 2 species described by J. Obenberger from Southeast Asia. One of them, Acmaeodera quadriareolata Obenberger, has morphological characters that merit the erection of a new genus for it. The other species, Acmaeodera philippinensis Obenberger, causes us to doubt seriously that it belongs to the Southeast Asian fauna, as will be shown below.

We wish to offer our deep gratitude to the artist S. S. Kozhevnikov, who prepared the habitus drawing accompanying this article.

Genus Cochinchinula Volkovitsh, gen. n.

Elytral epipleura not reduced, its infrahumeral area completely concealing metepisternum (Fig. 2); along lateral margin with distinct denticles from base to tip. Body covered with scales. Aedeagus with dorsal part of parameres almost unsclerotized, membraneous, flattened out laterally and in anterior half covered with rows of rounded sensilla (Fig. 3).

Type species: Acmaeodera quadriareolata Obenberger, 1924.

This monotypical genus is known only from the holotype of its type species. It differs from other genera of the Acmaeoderini primarily by the presence of a plesiomorphic character -- normally developed elytral epipleura concealing the metepisternum. This character is common to most, it not all, Buprestidae, but has not been known in the Acmaeoderini. From representatives of the closely related Nearctic tribe Acmaeoderoidini, which have similar epipleura, it differs in lacking an apparent scutellum, in its aedeagal structure, in its system of coloration and pattern, as well as in several other characters, the taxonomic weight and diagnostic value of which are difficult to assess because of the uniqueness of the available material, that is to say, the description of Cochinchinula quadriareolata. In structure of the penis (Fig. 5), species of the pulchra group of the subgenus Acmaeodera are recalled to some extent, but from these it differs in being very narrow, having strongly approximated apodemes, small chamber of the ejaculatory duct, and especially in the shape and armature of the tegmen. And finally, the single species of the new genus possesses a special kind of pattern not at all characteristic of the Acmaeoderini.

Cochinchinula quadriareolata (Obenberger, 1924) (Fig. 1).

Obenberger, 1924a: 33 (Acmaeodera).

Depressed, without dorsal curvature, robust; black, elytra with 4 large

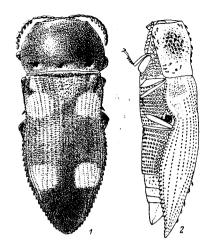


Fig. 1-2. Cochinchimula quadriareolata Obenb. 1) dorsal view; 2) lateral view (schematic). Drawn by S. S. Kozheynikov.

orange-colored spots; elytral epipleura with infrahumeral area developed to cover metepisternum completely and with row of distinct denticles along lateral margin from base to tip; covered with close-lying white scales.

Front broad, flat, without trace of longitudinal depression or furrow; lateral margins straight, diverging to occiput (head in holotype deeply inserted into prothorax and thus obviating determination of width and length relationships of front and eyes and sculpturation of posterior parts of head); covered with large umbilicate punctations forming reticulate sculpturation. Clypeus small, shagreened; its lateral processes not reaching lateral margins of front in its lower part; with shallow, arcuate median emargination.

Antennae relatively long, length nearly twice height of eye, sharply broadened from 5th segment on; 2nd segment a little narrower than tip of lst; 3rd and 4th segments rodlike, 4th slightly longer than 3rd; distal segment wider than long.

Pronotum rounded, lateral margins evenly rounded; greatest width in middle, 1.41 times length; anterior margin projecting arcuately; basal margin straight. Basal depressions small, shallow, joined by weak transverse depression. Disc evenly convex, without trace of median line or furrow. Lateral carina very weak but complete. Sculpture consisting of very large, superficial, round-umbilicate punctations (Fig. 2), all of which furnished centrally with flattened granules with large punctations. Laterally located punctations forming reticulate sculpturation, although with distinct intervals between them. Discally, granules of punctations almost completely effaced, leaving only punctations forming simple punctate sculpturation. Surface of pronotum with close-lying lanceolate or pinnate white scales.

Elytra flat, 2.17 times as long as greatest basal width; maximal width at postterior 1/3, whence lateral margins meeting in nearly right angle at rather sharply rounded tip; infrahumeral field developed on epipleura, completely covering metepisternum (Fig. 2); lateral margin of epipleura from very base bearing distinct denticles. Striae formed of small superficial punctations becoming elongated and fusing with each other in posterior 1/3 of elytra; intervals completely flat, coarsely rugulose and indistinctly punctate. Pattern consisting of 4 large orange-

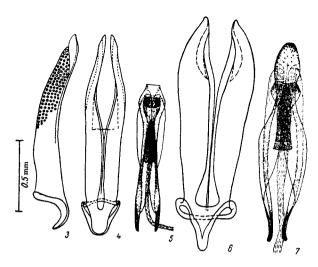


Fig. 3-7. Cochinchinula quadriareolata Obenb. 3-5 (3 - tegmen in profile; 4) tegmen in ventral view; 5 - penis).

Acmaeodera philippinensis Obenb. - 6-7 (6 - tegmen; 7 - penis).

colored spots; one pair more or less round, behind humeral tubercles on 4th-9th intervals, another pair in posterior 1/3 on 3rd-10th intervals. Vestiture consisting of broadly lanceolate scales.

Anterior margin of prosternum not reaching forecorners; posterior process covered with small, elongate, umbilicate punctations; hypomeres with large round umbilicate punctations; Mesosternum, metasternum, hindcoxal covers, and sides of abdominal sternites with large umbilicate punctations with central flattened granules (as on pronotum). Abdominal sternites toward middle with umbilicate punctations becoming effaced and central parts of abdomen only simply punctate. Anal sternite truncate apically. Scales in holotype preserved only on anal sternite, large, dense, broad-oval.

Aedeagus as in Fig. 3-5 (cf. generic description and diagnosis).

Hindcoxae with long sharp teeth, their apices visible from above (Fig. 1). Legs covered exclusively with scales (possibly on hindtibia with row of setae, characteristic of many genera of Acmaeoderini). Setose hairs almost identical on all tarsal segments. Claw segments almost as long as other tarsal segments together. Claws with large basal tooth of shape recalling those of subgenus Acmaeodera.

Length of body 4.8 mm, width 1.7 mm.

Holotype: J, "Cochinchina" (National Museum in Praha).

Besides the characters cited in the generic diagnosis, Cochinchinula quadri areolata differs from other representatives of the Acmaeoderini in its unusual sculpture of the sides of the pronotum and undersurface of the body. There is in this species a unique combination of primitive characters (epipleural development, absence of dorsal curvature, primitive penidial structure along with unusual structure and armature of tegmen) and specialized characters (long, conspicuously

broadened σ antenna, scaly vestiture). This species apparently is a strongly modified descendant of a group ancestral to all modern representatives of the tribe.

Acmaeodera philippinensis Obenberger, 1924.

Obenberger, 1924b: 94.

Long, slender, almost cylindrical, with scarcely noticeable dorsal curvature; black, with 2 lateral red spots on midlength of elytra; covered with long wooly hairs.

Front flat, weakly longitudinally depressed in middle; lateral margins hardly divergent posteriorly, straight; occiput 1.76 times as wide as transverse diameter of eye and 1.03 times width of frontal at level of antennal concavity. Clypeus with deep angular anterior emargination. Sculpture consisting of small, shiny-bottomed, non-granulate punctures separated by intervals with trace of shagreening.

Antennae relatively short, moderately broadened from 5th segment on (10th-11th segments of holotype broken off).

Pronotum rounded, 1.44 times as wide as long, broadest in middle; nearly parallel-sided from base to middle, only slightly diverging, then arcuately coming together anteriorly, only very slightly retracting before tip; anterior margin scarcely perceptibly arcuate forward; basal margin scarcely concave. Basal depressions small, poorly marked; disc convex, without trace of median line or furrow. Lateral carina distinct, complete. Sculpturation consisting of large, flat-bottomed punctations and indistinct minute punctations; punctations laterally very dense, contiguous, discally thinned out. Pronotum with long, wooly, erect and decumbent, whitish hairs.

Elytra elongate, narrow, 2.83 times as long as width at base, sides almost parallel to middle, then smoothly and inconspicuously converging to rounded tip. Epipleura markedly curved below humerus, but without emargination, sparsely serrate in posterior 1/3. Anterolateral angles of elytra sharp, strongly projecting anteriorly. Striae formed of large rounded punctations, with surfaces in anterior half running together in posterior half impressed furrowwise. Intervals as wide as striae, with fine uniseriate punctations; in anterior half of wing sculpturation appearing very coarse. Elytra black, with 2 transverse red lateral spots at midlength, starting at margin and extending to 5th interval. Elytra anteriorly covered with long hairs, posteriorly with setulae.

Anterior margin of prosternum with 2 strong processes placed laterally of mentum (of structure similar to that of anterior margin of prosternum characteristic of several Nearctic species). Hypomeres with large umbilicate punctations; other prosternal surfaces similar to that of pronotum. Sculpture of abdomen somewhat effaced. Anal sternite smoothly rounded apically.

Aedeagus as in Fig. 6, 7.

Hindcoxa without tooth. Legs covered with hairs and setae. Claws with large, apically well-blunted tooth at base.

Length of body 6.7 mm, width 1.9 mm.

Holotype: o, "Philippin." (National Museum in Praha).

In shape of body and color pattern of elytra, this species is close to Acmaeodera (Cobosiella) luzonica Nonf., however, in the shape of the lateral margin of the elytra, the sculpture, pubescence, and especially in the adeagal structure it has nothing in common with this species, as Obenberger thought, nor with any Indo-Malayan or Palaearctic representative of the Acmaeoderini. A. philippinensis is actually extremely close to the Nearctic species A. bivulnera Horn and A. acanthicola Barr and certainly belongs to the same group with these species. From them

A. philippinensis differs in its strongly elongated body and black rather than blue elytral coloration; in aedeagal structure all 3 species are quite close. It is possible that the name philippinensis is a synonym of some Nearctic species unknown to us. In any case, its existence in Southeast Asia as a representative of a rather specialized Nearctic group we consider improbable. It may be assumed that the specimen was placed among specimens of A. luzonica because of its deceptive similarity and Obenberger described it as a new species from the Philippines, one recalling A. luzonica, without the author noting its distinct similarity to Nearctic forms. Its very poorly legible and vague label gives no clue as to where A. philippinensis was actually collected.

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OF AUSTRALIA. II. GENERA <u>Parahyocis</u> KASZ. AND <u>Csiro</u> GEN. N.

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The tribe Hyocini, subtribe Hyocina includes the genera Hyocis Pasc., Parahyocis Kasz., and Csiro gen. n. Hyocis was treated previously (Lawrence and Medvedev, 1982; Medvedev and Lawrence, 1983); the present contribution contains a review of Parahyocis and Csiro.

Types of the species herein described are preserved in the Australian National Insect Collection, Canberra (C) and part of the paratypes in the Zoological Institute of the Academy of Sciences of the USSR in Leningrad. Material was also used from the collections of the National Museum of Victoria, Melbourne (M), the South Australian Museum, Adelaide (A), and the Australian Museum, Sydney (S).

GENUS Parahyocis KASZAB, 1955

Type-species: Hyocis championi Fauvel, 1904.

Body and antennae black. Hairy vestiture of dorsum weakly marked, consisting of very short setulae on elytral intervals. Head small, but sharply protruding, weakly transverse. Margins of head capsule below antennal bases without pointed subgenal processes. Pronotum only in basal 1/3 with median furrowlike impression. Hindcorners of pronotum not sharply pointed apically. Lateral elytral margins markedly projecting outward, visible from above in entire length. Outer margin of forefemur straight. Body small, 2-2.3 mm.

The genus includes 2 species, one of which was described from New Caledonia and the other from northwestern Australia.

Parahyocis kaszabi G. Medvedev and Lawrence, sp. n.

Body black, weakly shining, appearing bare above; clypeus, legs, and lateral margins of elytra slightly brownish.

Anterior margin of clypeus shallowly arcuately emarginate, anterior corners rounded. Cheeks before eyes parallel-sided for short distance, then suddenly narrowed forwardly. Occiput very short, in form of narrow declivity behind eye. Margin of occiput forming obtuse angle with lateral margin of cervical constriction. Eye small, weakly narrowed below. Width of head at level of eyes 1.48 times that of front between eyes. Surface of head at borders of front and clypeus with weak transverse impression. Sculpture of head consisting of fine uniform rugulose granulation. Labrum black. Antenna black, relatively short, tip reaching midlength of pronotum, clothed with pale hairs; length of 2nd segment equal to width; 3rd segment 1.5 times as long as wide and 1.5 times as long as 4th; 4th-8th segments of equal length, 4th as long as wide; 5th-8th 1.3 times as wide as long; 9th-11th

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