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TWO NEW SPECIES OF THE GENUS *ACMAEODERELLA* COBOS (COLEOPTERA, BUPRESTIDAE) FROM SOUTH WEST ASIA

M.G. VOLKOVICH (VOLKOVITSH)

When examining the materials of the Zoological Institute of the USSR Academy of Sciences (ZIN), the Hungarian Museum (Természettudományi Múzeum, Budapest, Hungary - TMB), the National Museum for Natural History in Paris (Muséum National d'Histoire Naturelle - MNHN), the National Museum in Prague (Národní muzeum v Praze - NMP), and also the collections of S. Bilý (Prague, Czechoslovakia) and P. Brandl and H. Mühle (Munich, German Federal Republic), we found 2 species of the genus *Acmaeoderella* new to science, descriptions of which are presented below.

The author wishes to express his gratitude to all persons who sent him material to study.

Acmaeoderella (Euacmaeoderella) safavii Volkovitsh, sp.n.

Elongated, dark bronze, elytra sometimes with slight brassy sheen; above covered with fine setaceous or narrow lanceolate white scales, below with sparse trichoid scales, forming small accumulations on sides of thorax and abdomen.

Frons narrow, widely longitudinally flattened or impressed; vertex with slight longitudinal carina. Sides convergent towards upper part of frons, then divergent towards upper margins of eyes. Breadth of vertex 1.07-1.26 times diameter of eye and 1.06-1.16 times breadth of frons above antennal fossae. Sculpture formed of round umbilicate punctations with large central granules and excentrically located dots; punctations sparse in middle of frons, interstices shiny. Pubescence formed of short setaceous and narrow lanceolate white scales.

Antennae short, their length exceeding height of eye by 0.93-1.15 times, 2nd and 3rd segments slightly dilated towards apex, but without tooth; 5th-10th segments triangular, only slightly broader than 4th.

Pronotum convex, slightly transverse; breadth at base 1.33-1.54 times length. Sides very mildly, slightly arcuately divergent towards base and more markedly so towards apex; maximal breadth in posterior third. Basal pits small, hardly discernible; disc without groove, only sometimes preserving faint trace of median line. Lateral carina thin, not extending to anterior angles, sometimes absent. Sculpture laterally formed of irregular alveolar cells with smooth shiny bottom without granules, with inconspicuous speckles; toward center of disc walls of cells become smooth and speckles enlarge. Disc with half-eroded cells; simple punctations noted only in anterior part. Pubescence formed by erect narrow lanceolate scales, not concealing lateral surface.

Elytra elongated, 2.35-2.45 times longer than breadth at base. Sides shortly convergent behind humeral tubercles, then lengthwise almost in straight line, divergent in posterior third, then slightly arcuately convergent towards rounded apices. Humeral tubercles projecting, subhumeral incision very deep. Dentes of

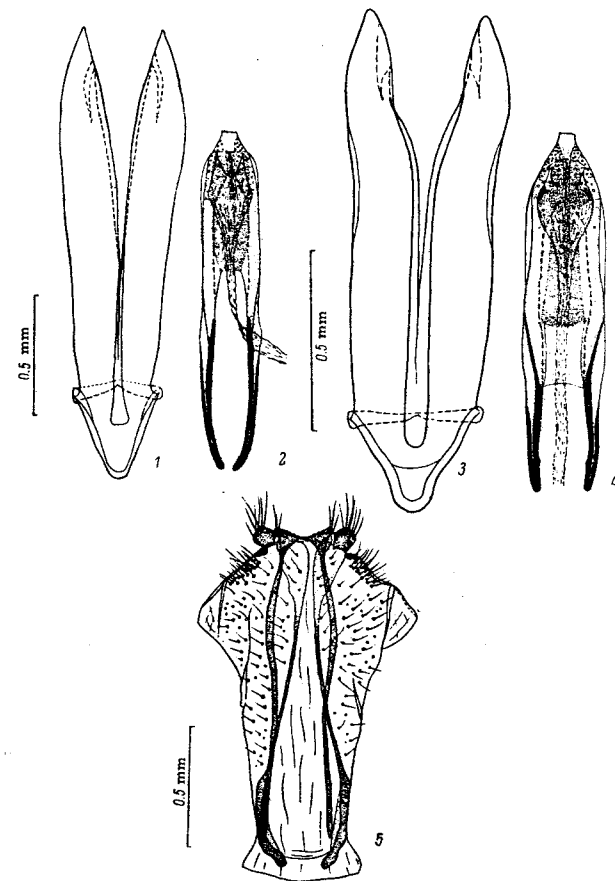


Fig. 1-5. *Acmaeoderella (Euacmaeoderella)*, genitalia.

1,2,5 - *A. safavii* sp.n.: 1 - tegmen; 2 - penis; 5 - ovipositor; 3-4 - *A. brandli* sp.n.: 3 - tegmen; 4 - penis.

the posterolateral margin smallish, not distinct. Punctate rows formed by round punctations, coalescent in posterior half, slightly sulcate, traceable almost to actual base. Interstices flattened or slightly convex, 2-3 times as wide as breadth of rows. Sculpture formed by many-rowed tangled punctations on slightly rugose shiny background. 9th interstice raised, convex. Vestiture formed by thin setaceous or narrowly lanceolate scales, arranged in tangled rows.

Anterior margin of prothorax very slightly emarginate, narrowly margined. Prosternum with small umbilicate punctations, coalescent in posterior appendage in longitudinal rows; appendage margined with thick ridge. Hypomeron with larger superficial umbilicate punctations. Sides of prothorax, metathorax, and trochanteral covers with abundant superficial umbilicate punctations, sparse towards median line. Abdomen, except for sides and appendage of 1st sternite, with very small slightly raduliform punctations. Anal sternite regularly rounded at apex,

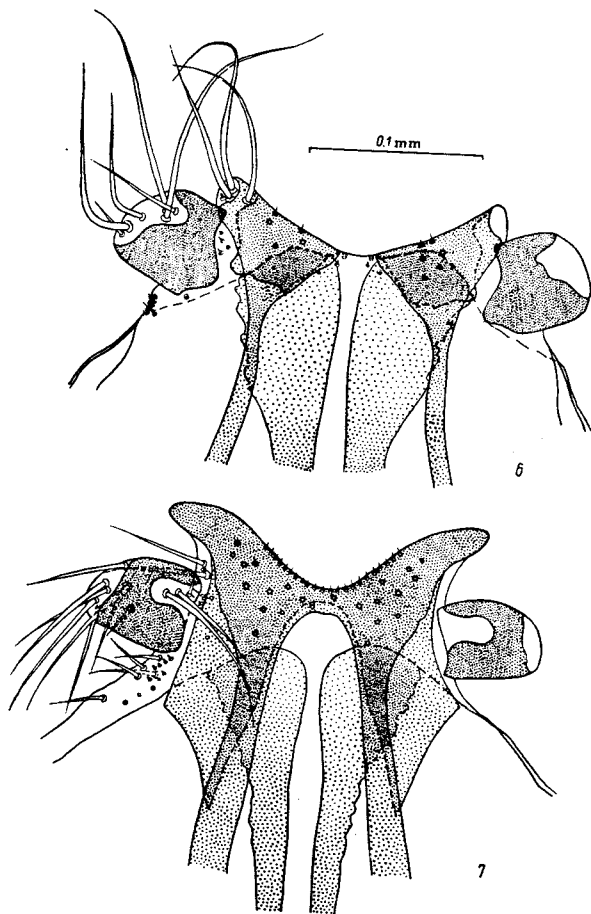


Fig. 6-7. *Acmaeoderella* (*Eucmaeoderella*), apices of the ovipositors.

6 - *A. safavii* sp.n., 7 - *A. brandli* sp.n.

with pronounced oblique lateral impressions. Below with very fine white hairs and scales forming small narrow accumulations on sides of thorax and abdomen.

Aedeagus as in Fig. 1,2. Parameres markedly tapering at apex; penis with long apophyses.

Ovipositor (Fig. 5) relatively short, strongly sclerotized at apex (Fig. 6).

Legs with whitish hairs and narrow scales. Tarsal scopae increase in size from base to apex. Claws with sharp basal tooth.

Body length 6.6-8.3 mm, breadth 2.1-2.8 mm.

Holotype: ♂, "Shiraz, 17.V.1966, Broumand", NHNP. Paratypes: 1 ♀, loc. cit., NHNP; 1 ♂, "Iran, Luristan, Bisheh, 1200-1700 m, 1-7.VI.1978, leg. Eckweiler" (P. Brandl's collection); 1 ♂, "Bodemeyer, Persia, Luristan", "*Acmaeodera* sp.", Coll. Reitter", TMB: 2 ♀, "S Iran, 28 km N of Maisiri, 12.VI.1973; Loc. no. 236, Exp. Nat. Mus. Prague", NMP; 1 ♀, "Persia, Ghazin, IV.1949, Sarkissian", NMP.

The holotype and paratype from Shiraz were collected on *Althaea* sp.

In the sculpture of the pronotum and the elytra, the characteristics of the pubescence, and the structure of the antennae, it belongs to the *gibbulosa* group. In the form of the frons, antennae, color, and structure of the genitalia, it is close to *A. gibbulosa* (Mén.), *A. vaulogeri* (Ab.), and *A. brandli* sp.n. while the ranges of *A. gibbulosa*, *A. safavii*, and *A. brandli* partly overlap, i.e. these species are sympatric. The specimens of all the enumerated species were collected by Eckweiler in Bisheh (Iran: Luristan).

The new species differs from *A. gibbulosa* in its larger size, the more elongated and flattened body form (in *A. gibbulosa* the correlation between the length of the elytra to the breadth is 2.02-2.33); the more flattened and elongated pronotum (in *A. gibbulosa* the correlation of the breadth to length is 1.44-1.73); slightly rounded sides and an indistinctly defined simple punctate sculpture; markedly tapering apices of the parameres; and a shortened ovipositor with dorsal hemisternites angularly broadened at the apex. From *A. brandli* it differs in the larger size; the more elongated and flattened body form (see the description of *A. brandli*); the flattened and elongated pronotum with a smooth sculpture without distinct navel-shaped punctations on the sides; the narrow squamae; the form of the aedeagus; and the less highly sclerotized apex of the ovipositor (Fig. 6,7). From *A. vaulogeri* it differs in the larger size; slightly rounded sides of the pronotum (in *A. vaulogeri* the pronotum is spheroidal, evenly covered with pseudo-cellular sculpture); the narrow squamae of the abdomen and thorax, virtually not concealing the sculpture even on the sides; and the structure of the genitalia.

Acmaeoderella (*Eucmaeoderella*) *brandli* Volkovitsh, sp.n.

Broad, stocky; bronze, more rarely black bronze, mat; covered by abundant broad lanceolate white scales, almost completely concealing bottom of thorax and sides of abdomen.

Frons narrow, broadly longitudinally impressed or only slightly flattened, vertex with slight longitudinal carina. Sides slightly, almost arcuately convergent towards apex, divergent only towards upper margin of eyes. Vertex 0.92-1.14 times as broad as diameter of eye and 0.96-1.16 as broad as frons above antennal fossae. Depth of impression of frons and degree of convexity of eyes vary; sometimes surface of frons broadly impressed, while eyes project markedly. Head with round umbilicate punctations with large central granules, and very large dots, arranged usually in center of granules. Punctations sparse in middle and upper part of frons, interstices shiny. Head bearing relatively long lanceolate scales.

Antennae short, 0.93-1.15 times as long as height of eye; 2nd and 3rd segments oval, 4th segment noticeably dilated towards apex, but without tooth; 5th-10th segments noticeably broader than 4th, transverse.

Pronotum markedly convex; 1.52-1.74 times as wide as long. Sides almost regularly rounded, maximal breadth at middle or behind middle, more rarely in posterior third. Anterior margin slightly arcuately projecting forwards, basal margin straight. Basal pits small, inconspicuous; distinct median line or groove

arising from prescutal pits. Lateral carina visible in posterior half, sometimes extending to anterior angles. Sides of pronotum in posterior half with coarse alveolate sculpture with well defined central granules and speckles; in the anterior half, the cells pass into distinct umbilicate punctations separated by smooth interstices. Coarse alveolar sculpture retained between lateral and prescutal pits; walls of cells sharp, not smooth. Towards apex cells passing into umbilicate punctations, often eroded and passing into raduliform punctations on disc; latter in anterior part of disc turning into minute simple punctations. Disc with erect lanceolate scales; sides and base of pronotum with broad lanceolate appressed scales almost completely concealing surface.

Elytra broad; 2.20-2.33 times as long as basal width; sides almost parallel up to posterior third, only slightly convergent behind humeral tubercles; from posterior third convergent towards apices. Humeral tubercles large, markedly prominent; subhumeral incision deep. Teeth of posterolateral margin inconspicuous. Punctate rows formed by oval punctations, sometimes coalescent in presutural rows; virtually never sulcate; traceable to actual base. Interstices completely flat, 2.5-5 times as wide as row, 9th interstice raised. Interstices mat, with very abundant, many-rowed tangled punctations, sometimes forming coriaceous sculpture on slightly shagreened, more rarely shiny, background. Vestiture formed of abundant lanceolate or narrow lanceolate scales.

Anterior margin of prothorax slightly arcuately emarginate and with narrow margin. Prosternum with very small umbilicate punctations on slightly shagreened background; sides of posterior appendage margined by a thick ridge. Hypomeron with larger superficial umbilicate punctations. Sides of mesothorax, metathorax, abdomen, and trochanteral covers with very coarse umbilicate punctations; middle of abdomen with abundant simple punctations. Anal sternites with shallow oblique lateral depressions, broadly rounded at apex. Scales on sides of thorax, trochanteral covers, and abdomen large, broadly lanceolate, almost concealing sculpture; middle of abdomen with lanceolate, sparse scales.

Aedeagus (Fig. 3,4). Parameres slightly blunted at apex, penis with relatively short apophyses.

Ovipositor (Fig. 7) relatively short, with highly sclerotized apex.

Legs with whitish hairs and scales. Tarsal scopae increasing in size from base to apex. Claws with sharp basal tooth.

Body length 4.7-7.6 mm, breadth 1.7-2.9 mm.

Holotype: ♂. "*Acmaeodera lugens*, Syria", "coll. Semenov-Tian-Shansky", "Micr. No. 418", ZIN. Paratypes: 8 ind., "W. Iran, Luristan, Bisheh, 1200-1700 m, 1-7.VI.1978, leg. Eckweiler", ZIN, collection of R. Brandl and H. Mühle; 7 spms., "Iran, Kurdistan, east of Saqqes, Sannateh, 1450 m, 22.VI.1977, leg. Holzschuh and Ressler", ZIN, collection of H. Mühle; 1 ♀, "Iran, Fars, Pass E Neyris, 2060 m, 18.V. 1978, leg. Klaus Warncke", collection of P. Brandl; 1 ♂, "Akbes", "*Acmaeodera lugens* Lap., collection of Reitter", TMB; 1 ♂, Teheran, Keredj, Brandt", collection of S. Bilý.

A. brandli belongs to the *gibbulosa* group and is close to *A. gibbulosa* (Mén.), *A. vaulogeri* (Ab.), and *S. safavii* sp.n. From these species it differs in the

broad body; broad scales; sculpture of the pronotum, consisting on the sides of large umbilicate punctations; flat broad interstices; and especially the structure of the genitalia.

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