

РОССИЙСКАЯ АКАДЕМИЯ НАУК
Южный Научный Центр

RUSSIAN ACADEMY OF SCIENCES
Southern Scientific Centre



Кавказский Энтомологический Бюллетень

CAUCASIAN ENTOMOLOGICAL BULLETIN

Том 7. Вып. 1

Vol. 7. No. 1



Ростов-на-Дону
2011

***Xantheremia* (s. str.) *niehuisi* sp. n. – the first species of the buprestid genus *Xantheremia* Volkovitsh, 1979 from Turkey (Coleoptera: Buprestidae: Polycestinae: Acmaeoderini)**

***Xantheremia* (s. str.) *niehuisi* sp. n. – первый вид жуков-златок рода *Xantheremia* Volkovitsh, 1979 из Турции (Coleoptera: Buprestidae: Polycestinae: Acmaeoderini)**

**M.G. Volkovitsh
М.Г. Волкович**

Zoological Institute of Russian Academy of Sciences, Universitetskaya nab., 1, Saint-Petersburg 199034 Russia. E-mail: polyces@zin.ru
Зоологический институт РАН, Университетская наб., 1, Санкт-Петербург 199034 Россия

Key words: Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Xantheremia*, *Xantheremia* (s. str.), first record, new species, Turkey.

Ключевые слова: Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Xantheremia*, *Xantheremia* (s. str.), первое указание, новый вид, Турция.

Abstract. *Xantheremia* (s. str.) *niehuisi* sp. n. from Turkey (Hakkari province) is described and illustrated, and differential diagnosis is provided. It is a first species of the genus *Xantheremia* Volkovitsh, 1979 from Turkey.

Резюме. Представлены описание, иллюстрации и дифференциальный диагноз нового вида *Xantheremia* (s.str.) *niehuisi* sp. n. из Турции (провинция Хаккари). Новый вид – первый представитель рода *Xantheremia* Volkovitsh, 1979 в фауне Турции.

The genus *Xantheremia* Volkovitsh, 1979 (type species *Acmaeodera koenigi* Ganglbauer, 1888) comprises 17 species belonging to the two subgenera: *Paratethya* Bílý, 1983 (3 species) and *Xantheremia* s. str. (14 species) [Volkovitsh, 2006; Bellamy, 2008; with additions]. In turn, the subgenus *Xantheremia* includes 3 species groups: *koenigi* Volkovitsh, 1978 (5 species), *kaplini* Volkovitsh, 1984 (1 species), and *flavipennis* Volkovitsh, 1979 (8 species). The species of the first two groups are distributed in the Middle Asia (Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan), Kazakhstan, Iran, and Afghanistan. Species of the most speciose *flavipennis* group are distributed in the North and North-East African deserts, Arabian Peninsula, Near East, Iraq, Iran, and Pakistan. Up to date no *Xantheremia* species has been reported from Turkey. By this reason the first record of the representative of this mainly desert genus in South-East Turkey is of interest. The large series of enigmatic species from Turkey was given to the author by Dr. Manfred Niehuis and Mr. Hans Mühle many years ago. It was originally intended to describe a new species in the long planned revision of the genus *Xantheremia* which is still “in preparation”, so I decided to describe it separately.

The following codens of institutional and private collections are used throughout the text:

HMCM – H. Mühle collection, München, Germany;

LMAD – Löbbecke Museum und Aquazoo (collection of H. Baumann), Düsseldorf, Germany;

MKCY – M. Kalashian collection, Yerevan, Armenia;

MNCA – M. Niehuis collection, Albersweiler,

Germany;

NMPC – National Museum, Prague, Czech Republic;

VKCB – V. Kubáň collection, Brno, Czech Republic;

ZIN – Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

Xantheremia (s. str.) *niehuisi* sp. n.

(Color plate 3: fig. 1–9)

Material. Holotype, ♂ (ZIN): “[Turkey, Hakkari Prov.] Ciglisuyu-Tal, Asagi Derehi süd. Hakkari [approx. 37.46 N, 43.51 E], TR, 1.8.1988, leg. Dr. M. Niehuis”. Paratypes (HMCM, LMAD, MKCY, MNCA, NMPC, VKCB, ZIN): 34 ex. (sex unknown), same label; 6 ex., “Suvarihalif-Geb., Hak[kari] westl., TR, 1.8.1988, leg. Dr. M. Niehuis”; 1 ex., “Turkey, Hakkari, vic. Üzümeli, 1300 m, 4–8.8.[19]78, leg. Eckweiler”; 87 ex. “Kleinasien, Prov. Hakkari, Dez-Tal, 1500–1800 m, 10.7.–12.7.[19]80, leg. de Freina”.

Description. Body (fig. 1, 2) small, robust, 3.02 (2.86–3.27; n = 20) times as long as pronotum at base, slightly convex, with markedly defined dorsal curvature; black with coal or feeble bronzy sheen; elytra ochre-brown, elytral pattern yellow, variable, more or less symmetric, consisting of longitudinally confluent subbasal and medial fasciae and 2 big triangular subapical maculae (modified „ottomana“ type); sometimes subapical maculae strongly or entirely reduced or additional small subbasal maculae present; dorsally covered with narrow white and yellowish setiform scales, ventrally with thin lanceolate and setiform scales not concealing background; length 4.7 (3.7–6) mm, width 1.6 (1.2–2) mm.

Head (fig. 5) relatively narrow, flattened when seen from above; frons flat or weakly convex, occasionally with poorly marked medial depression, with straight feebly curved, subparallel sides. Vertex flattened or slightly convex, with distinct sharp medial carina, 1.49 (1.25–1.69) times as wide as transverse diameter of eye and 1.05 (1.00–1.11) times as wide as frons above antennal sockets. Clypeus wide, with moderately deep arcuate anterior emargination. Frons with punctate-striate sculpture of partly obliterated umbilicate punctures with excentric micropunctures, laterally coalescent and forming poorly marked striae; intervals subequal to diameter of punctures, finely shagreened. Head covered with fine, short, semierect, setiform scales not concealing background. Eyes not protruding the head contour. Antennae (fig. 3) short, expanded from antennomere 5, not dimorphic; 1.28 (1.16–1.39) times as long as height of eye; antennomere 2 swollen, irregularly oval; antennomere 3 short, slightly expanded medially; antennomere

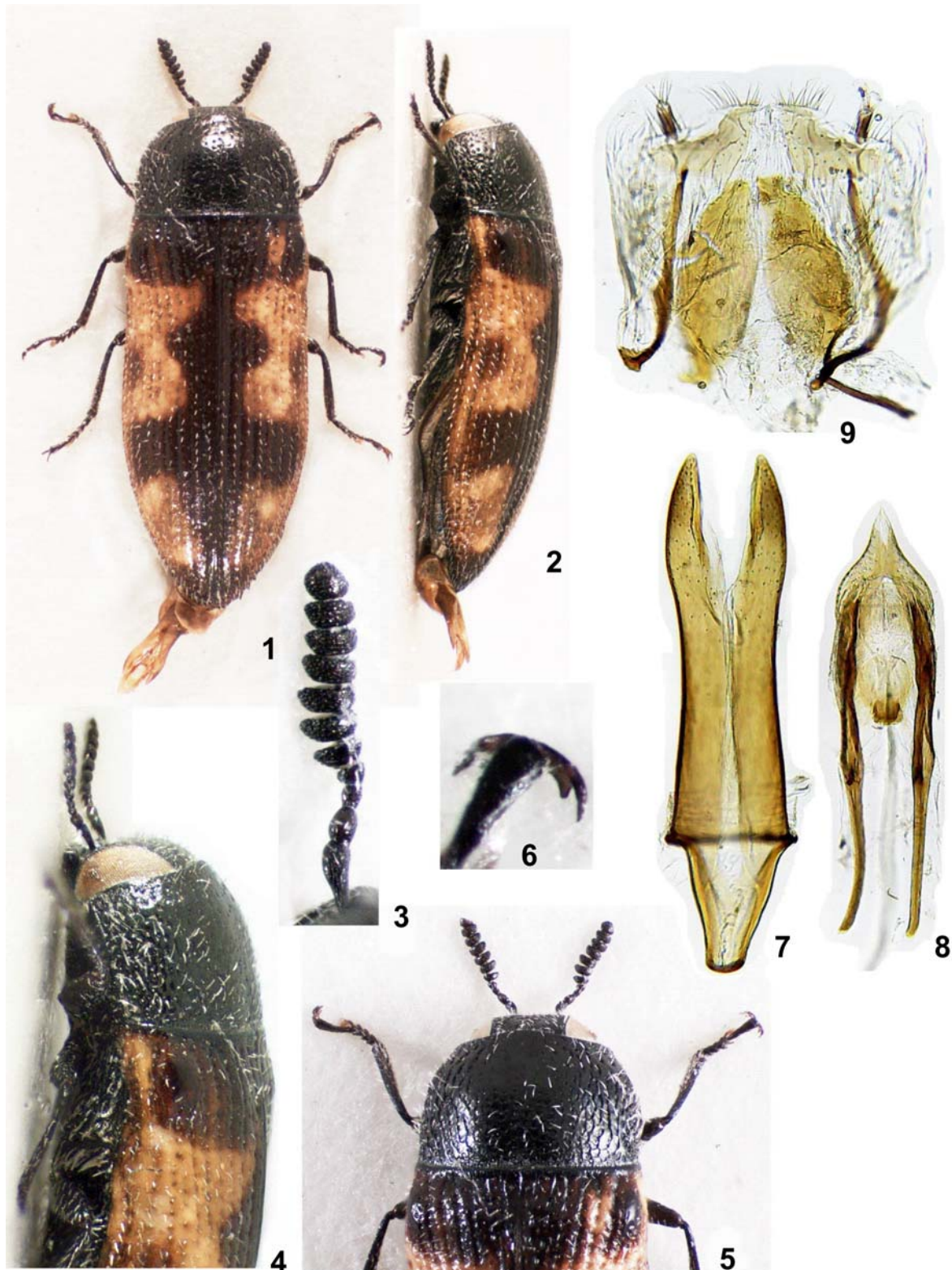


Fig. 1–9. *Xantheremia* (s.str.) *niehuisi* sp. n.
 1–6 – holotype (ZIN), male (body length 4.8 mm); 7, 8 – paratype (ZIN), male; 8 – paratype (ZIN), female; 1, 2, 4, 5 – habitus, 1, 5 – dorsal view, 2, 4 – lateral view; 3 – antenna (left); 6 – tarsomere 1, claws; 7, 8 – aedeagus: 7 – tegmen, 8 – penis; 9 – ovipositor.

Fig. 1–9. *Xantheremia* (s.str.) *niehuisi* sp. n.
 1–6 – голотип (ZIN), самец (длина тела 4.8 мм); 7, 8 – паратип (ZIN), самец; 8 – паратип (ZIN), самка; 1, 2, 4, 5 – габитус, 1, 5 – вид сверху, 2, 4 – вид сбоку; 3 – антенна (левая); 6 – передняя лапка, коготки; 7, 8 – эдеагус: 7 – тегмен, 8 – пенис; 9 – яйцеклад.

4 transverse triangular, wider than long, much narrower than 5th; antennomere 5 strongly transverse triangular, more than 2 times wider than long; antennomeres 6–10 transversely trapezoid, more than 2 times wider than long; antennomere 11 irregular, nearly as long as wide.

Pronotum (fig. 5) bell-shaped, weakly transverse, narrower than elytra at humeri, 1.54 (1.47–1.63) times as wide at base as long, widest at base; sides subparallel or slightly converging at basal half, arcuately converging at anterior half. Anterior margin distinctly arcuately projecting, bisinuate, basal margin straight. Lateral carina well marked, entire, reaching anterior angles, slightly curved. Pronotal surface convex, without medial groove or line, basal fossae inconspicuous; sides with ocellate sculpture of deep umbilicate punctures, intervals equal to 1/2–1 diameter of puncture; changing to punctate-striate sculpture toward disc; disc with sparse micropunctures on slightly shagreened background. Entire surface covered with sparse, short, white or yellowish, narrow lanceolate or setiform scales not concealing background. Anterior prosternal margin shallowly emarginated, bordered with fine sulcus; prosternum convex, prosternal process with umbilicate punctures; hypomeron with reticulate sculpture of large superficial punctures with scabrous bottom; meso- and metaventrites with ocellate sculpture; thoracic segments covered with narrow lanceolate scales not concealing background.

Elytra (fig. 1, 2, 4) weakly elongate, 2.39 (2.29–2.5) times as long as wide at base, moderately convex, wide; sides slightly diverging toward posterior 1/3, occasionally subparallel, arcuately converging toward narrowly rounded apices. Subhumeral incisure arcuate, distinct; epipleural serration formed by small, saw-like subapical denticles. Strial punctures small, shallow, oval, superficial and separated at anterior half, merging, finely sulcate posteriorly. Intervals subequal, flat, at disc 2–4 times as wide as striae; 9th interval weakly elevated, smooth; intervals bearing small, uniseriate punctures on nearly smooth background, lateral intervals sparsely rugulose. Elytra ochre-brown, elytral pattern of modified „*ottomana*“ type, yellow, variable, more or less symmetric, consisting of longitudinally confluent subbasal and medial fasciae and 2 large triangular subapical maculae (fig. 1); sometimes subapical maculae strongly or entirely reduced or additional subbasal maculae present. Elytra covered with thin, setiform, uniseriate, white and yellowish scales.

Legs (fig. 1, 5, 6) blackish-brown; metacoxal plates with emarginate posterior margin. Tibiae slender, metatibiae bearing comb of yellowish setae externally. Tarsomeres subequal; tarsal pads small, developed on all tarsomeres, larger on tarsomere 4. Tarsal claws (fig. 6) long, curved, with long obtuse internal tooth, shorter in female.

Abdomen black, occasionally with light bronzy or coal sheen; sides of 1st ventrite with ocellate sculpture, remaining surface with punctate sculpture, discs with sparse fine micropunctures; covered with fine lanceolate scales not concealing background laterally; medially with very thin setiform scales. Anal ventrite regularly rounded and bordered with thin sulcus apically in both sexes.

Male: Aedeagus as in fig. 7, 8.

Female: Ovipositor as in fig. 9.

Diagnosis. *Xanthermia niehuisi* sp. n. belongs to the *X. (Xanthermia) flavipennis* (Klug, 1829) species-group [Volkovitsh, 1979]. It comes close to *X. philistina* (Marseul,

1865) from Israel, Syria and Egypt, and *X. pantherina* (Bílý, 1979) from Egypt (Sinai), Iraq, Israel and Saudi Arabia in having antennae short and expanded from antennomere 5 with distal antennomeres strongly transverse (fig. 3); in genital structures it is closest to *X. philistina*. *X. niehuisi* sp. n. differs from the last species by shorter and more robust body (in *X. philistina* body 3.19 (3.05–3.38) times as long as pronotum at base; elytra 2.46 (2.37–2.55) times as long as wide at base); darker coloration (bronzy in *X. philistina*); marked dorsal curvature; well developed elytral marking with dark element dominating (in *X. philistina* elytra yellowish, dark elements almost completely reduced); sides of pronotum and body ventrally covered with widely lanceolate or oval scales, completely concealing background; frons parallel-sided (in *X. philistina* frons with sides slightly diverging, vertex, 1.12 (1.08–1.16) times as wide as frons above antennal sockets); pronotum more transverse with maximal width at base (in *X. philistina* pronotum 1.41 (1.38–1.48) times as wide at base as long, maximal width anteriorly the base or at basal 1/3); head and pronotum with distinct punctures and poorly developed concentric striae (in *X. philistina* head and pronotum finely striate with only a few punctures above the clypeus and on medial stripe of pronotum); genital structures in spite of similarity are quite different. It differs from *X. pantherina* mainly by the same characters and, additionally, by the smaller size.

Host plant. Unknown.

Distribution. Turkey, Hakkari province.

Etymology. This species is dedicated to Dr. Manfred Niehuis (Albersweiler, Germany), an outstanding expert in European, Turkish and Near East Buprestidae.

Acknowledgements

I would like to thank Dr. M. Niehuis and Mr. Hans Mühle for the loan of specimens of new species for description and kind permission to keep a holotype and a number of paratypes in ZIN collection. This study was partly supported by Grant project No. 10-04-00539-a from the Russian Foundation for Basic Research.

References

- Bellamy C. L. 2008. A World Catalogue and Bibliography of the Jewel Beetles (Coleoptera: Buprestoidea), Volume 1: Introduction; Fossil Taxa; Schizopodidae; Buprestidae; Julodinae Chrysochroinae; Poecilnotini. Sofia–Moscow: Pensoft Publishers: 625 p.
- Volkovitsh M. G. 1979. Review of the Palaearctic groups of Jewel Beetles of the tribe Acmaeoderini (Coleoptera, Buprestidae) // Entomologicheskoe Obozrenie. 58(2): 333–354 (in Russian).
- Volkovitsh M.G. 2006. Buprestidae: Polycetinae. P. 56–58. [New Acts, + Buprestinae, part.], 330–342 // Catalogue of Palaearctic Coleoptera (Löbl I., Smetana A. eds.). Vol. 3. Scarabaeoidea – Scirtoidea – Dascilloidea – Buprestoidea – Byrrroidea. Stenstrup: Apollo Books. 690 p.

References

- Bellamy C. L. 2008. A World Catalogue and Bibliography of the Jewel Beetles (Coleoptera: Buprestoidea), Volume 1: Introduction; Fossil Taxa; Schizopodidae; Buprestidae: Julodinae Chrysochroinae: Poecilonotini. Sofia – Moscow: Pensoft Publishers. 625 p.
- Volkovitsh M. G. 1979. Review of the Palaearctic groups of Jewel Beetles of the tribe Acmaeoderini (Coleoptera, Buprestidae). *Entomologicheskoe Obozrenie*. 58(2): 333–354 (in Russian).
- Volkovitsh M.G. 2006. Buprestidae: Polycestinae. *In*: Catalogue of Palaearctic Coleoptera. Vol. 3. Scarabaeoidea – Scirtoidea – Dascilloidea – Buprestoidea – Byrroidea. (I. Löbl, A. Smetana eds). Stenstrup: Apollo Books: 56–58, 330–342.