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***Acmaeoderella rejzeki*, a new species of jewel-beetles from Crete  
with notes on the species-group composition  
of the subgenus *Omphalothorax* Volkovitsh, 1979  
(Coleoptera: Buprestidae: Polycestinae: Acmaeoderini)**

***Acmaeoderella rejzeki* – новый вид жуков-златок с Крита  
с заметками о составе видовых групп  
подрода *Omphalothorax* Volkovitsh, 1979  
(Coleoptera: Buprestidae: Polycestinae: Acmaeoderini)**

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**Key words:** Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Acmaeoderella*, subgenus *Omphalothorax*, species-groups, new species, Crete.

**Ключевые слова:** Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Acmaeoderella*, подрод *Omphalothorax*, видовые группы, новый вид, Крит.

**Abstract.** *Acmaeoderella* (*Omphalothorax*) *rejzeki* sp. n. from the Crete Island (Greece) is described, illustrated and compared with closely related *A. despecta* (Baudi di Selve, 1870). Species-groups *adpersula* and *despecta* are established within the subgenus *Omphalothorax* and a list of species attributed to this subgenus is presented.

**Резюме.** Представлено иллюстрированное описание *Acmaeoderella* (*Omphalothorax*) *rejzeki* sp. n. с острова Крит (Греция); приведено его сравнение с близкородственным видом *A. despecta* (Baudi di Selve, 1870). В составе подрода *Omphalothorax* выделены группы видов *adpersula* и *despecta* и составлен список видов этого подрода.

The subgenus *Omphalothorax* Volkovitsh, 1979 is one of the most widely distributed groups of the Palaearctic genus *Acmaeoderella* Cobos, 1955 – its representatives occur from Mauritania on the west (*A. marcaisi* (Descarpentries et Mateu, 1967) to Taklamakan Desert in Xinjiang, China on the east (*A. filiformis* (Reitter, 1904)). The subgenus comprises 16 species [Kubáň et al., 2016] of which 4 species occur in the Eastern Mediterranean and the Near East. No species-groups were established within this subgenus so far. Recently, R. Rejzek (Prague, Czech Republic), gave me for determination two specimens of unknown species of the subgenus *Omphalothorax* collected by him by the color traps in Crete; a description of this species is presented below.

Photographs were taken using Leica MZ-9.5 stereomicroscope with mounted Leica DFC-290 camera.

The following abbreviations for institutional and private collections are used in the text:

RRCP – Roman Rejzek collection (Prague, Czech Republic);

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

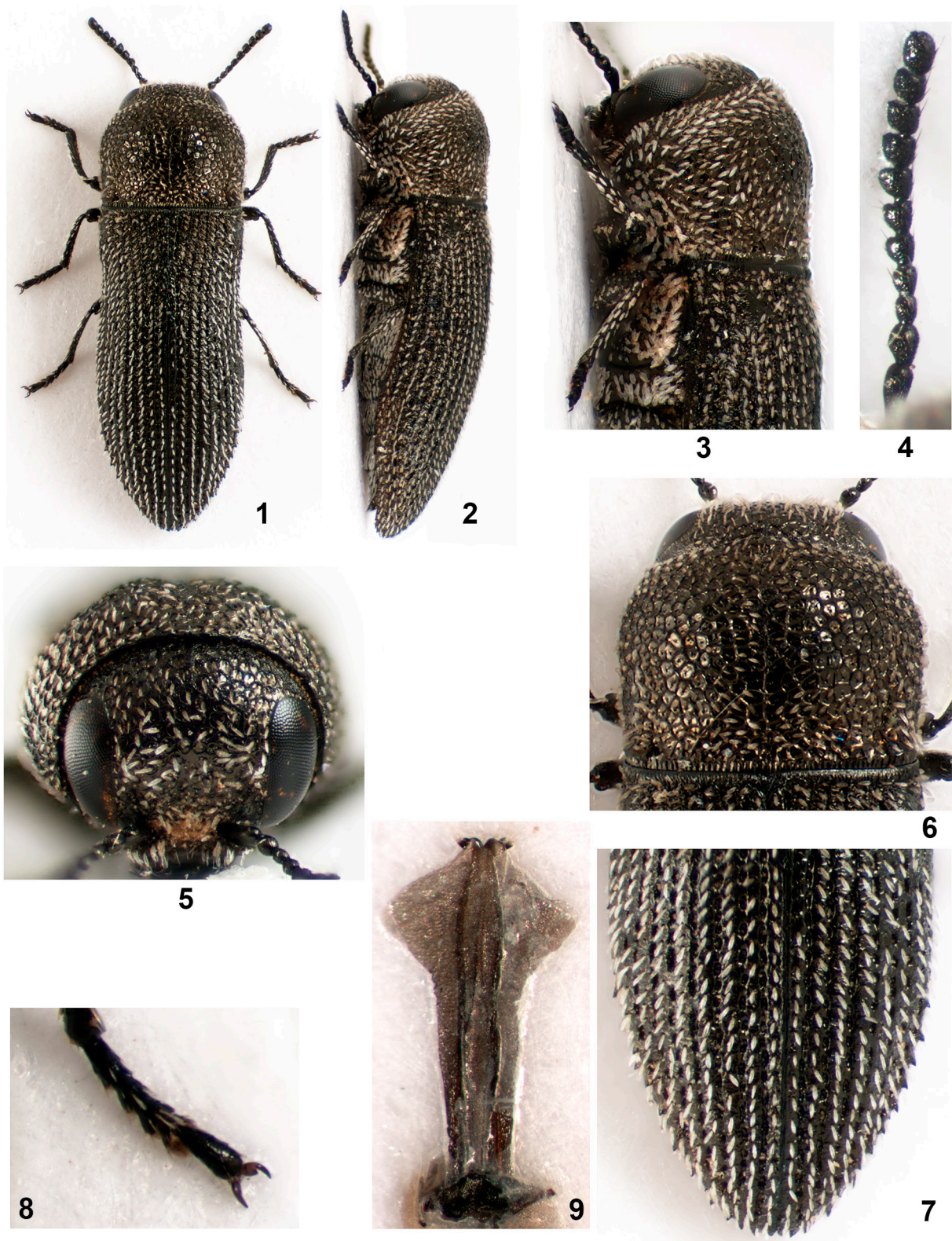
Data from locality labels are cited verbatim.

*Acmaeoderella* (*Omphalothorax*) *rejzeki* sp. n.  
(Figs 1–9)

**Material.** Holotype, ♀ (ZIN): “Greece, Crete island Chania province 3 km S Alikampo, 650 m 35°19'1"N 24°12'41"E 14–15.5.2017, lgt. R. Rejzek” (printed). Paratype: 1♀ (RRCP), same label.

**Description.** Body (Figs 1, 2) small, elongate, 3.21–3.38 times as long as pronotum at base, cylindrical, with poorly defined dorsal inflection; blackish-bronze, occasionally with slight metallic sheen, elytra unicolor, black with feeble bronze sheen; body regularly covered with lanceolate white scales not concealing background. Body length 4.4–4.5 mm, width at pronotal base 1.3–1.4 mm.

Head (Figs 3, 5, 6) broad, flattened when seen from above; vertex weakly convex, with fine medial line; frons slightly convex or flattened, without medial depression or line, with nearly straight, moderately diverging sides. Vertex 2–2.07 times as wide as transverse diameter of eye and 1.13–1.16 times as wide as frons above antennal sockets, bearing alveolate sculpture. Clypeus narrow, with anterior margin shallowly emarginate. Frons covered with reticulate sculpture at low part, medially changing to ocellate sculpture, consisting of large, round or honeycomb-like, superficial umbilicate punctures with well-defined central granules and eccentric micropunctures; intervals equal about 1/4 diameter of punctures; covered with elongate, lanceolate, white scales not concealing background. Antennae of female (Fig. 4) relatively short, 1.48–1.58 times as long as height of eye, expanded from antennomere 5; antennomere 2 irregularly oval, swollen; antennomeres 3 and 4 subequal, 4 slightly expanded toward apex; antennomere 5 triangular, slightly wider than long; antennomeres 6–10 trapezoid, slightly wider than



Figs 1-9. *Acmaeoderella (Omphalothorax) rejzeki* sp. n., holotype, female (body length 4.5 mm).  
 1 - habitus, dorsal view; 2 - same, lateral view; 3 - body, anterior part, lateral view; 4 - right antenna; 5 - head, frontal view; 6 - head and pronotum, dorsal view; 7 - elytra, posterior third, dorsal view; 8 - right hind tarsus; 9 - ovipositor.

Рис. 1-9. *Acmaeoderella (Omphalothorax) rejzeki* sp. n., голотип, самец (длина тела 4.5 мм).  
 1 - габитус, вид сверху; 2 - габитус, вид сбоку; 3 - тело, передняя часть вид сбоку; 4 - правая антенна; 5 - голова, вид спереди; 6 - голова и переднеспинка, вид сверху; 7 - надкрылья, задняя треть, вид сверху; 8 - правая задняя лапка; 9 - яйцеклад.

long; antennomere 11 rhomboid, distinctly longer than wide; dimorphism unknown.

Pronotum (Figs 3, 6) weakly transverse, 1.27–1.29 times as wide at base as long, widest at anterior 1/4; sides nearly rectilinearly diverging toward widest point then abruptly converging anteriorly. Anterior margin weakly arcuately projecting forward, nearly straight, basal margin straight, bearing two delicate, poorly marked lateral keels opposite humeral swellings. Lateral carina absent. Pronotum moderately convex, with shallow, short medial depression, far not reaching anterior and posterior margins; prescutellar fossa missing, lateral fossae punctiform, poorly marked; anterior margin very shallowly depressed in frontal view (Fig. 5); in lateral view dorsal surface regularly arcuate in anterior half and flattened behind mid-length (Fig. 3). Entire pronotal surface covered with alveolate sculpture of superficial polygonal alveolae without central grains and with distinct micropunctures (Fig. 6) and recumbent white, lanceolate scales not concealing background, discal scales more narrow, short, and semi-erect. Thorax ventrally covered with reticulate sculpture of superficial umbilicate punctures with distinct micropunctures and nearly oval scales not concealing background.

Elytra (Figs 1–3, 7) elongate, 2.43–2.44 times as long as wide at base, cylindrical; sides slightly converging posteriorly of humeral swellings to anterior third, weakly diverging toward posterior third, then arcuately converging to narrowly rounded apices. Subhumeral excision relatively shallow, arcuate (Fig. 3); epipleural serration formed by rather large, sharp, claw-like denticles at posterior fourth. Strial punctures large, elongate, deep, partly merging in sutural stria and posterior parts of other striae. Intervals flat, narrow, 1.5–2 times as wide as striae; 9<sup>th</sup> interval distinctly elevated and bearing large claw-like denticles in posterior 1/4 (Fig. 7); intervals covered with inconspicuous, superficial micropunctures on coarsely shagreened background bearing uniceriate, lanceolate, white scales as long as interval width. Elytra dull, unicolor, black with feeble bronze sheen.

Legs (Figs 1, 2, 8) black with bronze sheen; metacoxal plates subparallel with nearly straight posterior margin; covered with dense, widely lanceolate scales. Tibiae slender, slightly expanded toward apices, each with paired spurs, metatibiae with poorly marked comb of white and brownish setae externally. Tarsi nearly as long as tibiae, slender, tarsomeres subequal, tarsomere 5 relatively short, weakly expanded toward apex; tarsal pads poorly developed. Tarsal claws with large, sharp internal tooth near mid-length (Fig. 8).

Abdomen (Fig. 2) dark bronze, covered with reticulate sculpture of superficial umbilicate punctures and widely lanceolate to oval white scales not concealing background.

Ovipositor (Fig. 9) of tubular type, relatively short, approximately 2.3 times as long as expanded apical part, with angularly emarginate apex.

Male unknown.

**Differential diagnosis.** In having elytral interval 9 bearing distinct denticulation (Fig. 7) *Acmaeoderella rejzeki* sp. n. belongs to the *despecta* species-group (see below) of the subgenus *Omphalothorax* Volkovitsh, 1979; it comes close to *A. despecta* (Baudi di Selve, 1870), a single species of this group in the Eastern Mediterranean. The new species differs from *A. despecta* in having unicolorous elytra (Fig. 1), dentate tarsal claws (Fig. 8), and short (2.3 times as long as expanded apical part) ovipositor (fig. 9) in the first place (in *A. despecta* elytra with variable yellow to orange elytral markings, tarsal claws simple, without internal tooth, and ovipositor long, 3.1–3.4 times as long as expanded apical part). Additionally, in *A. rejzeki* sp. n. vertex without distinct medial carina, frons with reticulate to ocellate sculpture, pronotum more transverse (1.27–1.29 times as wide at base as long), and elytral intervals

more narrow, 1.5–2 times as wide as striae (in *A. despecta* vertex bears distinct medial carina, well visible on lateral view, frons entirely with alveolate sculpture, pronotum less transverse, 1.08–1.24 times as wide at base as long, and elytral intervals wider, 2–4 times as wide as striae).

**Host plant.** Unknown.

**Distribution.** Greece: Crete Island: Chania Province.

**Note.** Both specimens of the new species were collected by color traps. No data on their adult/larval host plants or life cycle are known.

**Etymology.** This species is named after its collector, Roman Rejzek.

## Species-group composition of the subgenus *Omphalothorax* Volkovitsh, 1979

The subgenus *Omphalothorax* of the genus *Acmaeoderella* Cobos, 1955 was established for the species having elongated pronotum with basal carinae located opposite the humeral swellings of elytra [Volkovitsh, 1979]. Originally it included 6 species: *A. adspersula* (Illiger, 1803) (type species), *A. despecta* (Baudi di Selve, 1870), *A. filiformis* (Reitter, 1904), *A. longissima* (Abeille de Perrin, 1904), *A. pharao* (Obenberger, 1923), and *A. polygonalis* (Obenberger, 1916) (currently a junior synonym of *A. despecta*); no species-groups were separated so far. Together with *A. rejzeki* sp. n. the subgenus comprises 17 species and 2 subspecies [Kubáň et al., 2016] and a number of new species is waiting to be described.

Our study has shown that at least two species-groups can be separated within the subgenus *Omphalothorax* which differ in absence or presence of distinct (frequently claw-like) denticulation on the elevated in posterior third 9<sup>th</sup> interval of elytra: *adspersula* species-group (without or with inconspicuous denticulation) and *despecta* species-group (with distinct denticulation). Additionally, the species belonging to *adspersula* species-group differ in more elongate body and longer pronotum (frequently almost as long as wide at base, sometimes even longer than wide). Both groups comprise species with simple and dentate tarsal claws.

### Species list of the subgenus *Omphalothorax* Volkovitsh, 1979

Type species *Buprestis adspersula* Illiger, 1803.  
For synonymy and distribution see Kubáň et al. [2016].

#### *adspersula* species-group

*adspersula adspersula* (Illiger, 1803)  
*adspersula squamiplumis* (Peyerimhoff, 1931)  
*arabica* Cobos, 1963  
*argentea* Volkovitsh, 2011  
*densisquamis* (Abeille de Perrin, 1904)  
*domenicoi* Volkovitsh, 2013  
*longissima cypraea* Krajčák, 2012  
*longissima longissima* (Abeille de Perrin, 1904)  
*nannorrhopsicola* Volkovitsh et Bílý, 1979  
*prosopiphaga* Volkovitsh, 2013  
*samai* Magnani, 1995  
*zygophylli* Curletti et Magnani, 1988

***despecta* species-group***despecta* (Baudi di Selve, 1870)*filiformis* (Reitter, 1904)*gianassoi* Curletti et Magnani, 1988*marcaisi* (Descarpentries et Mateu, 1967)*pharao* (Obenberger, 1923)*rejzeki* **sp. n.***vayssieresi* Cobos, 1984**Acknowledgements**

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