Two new species of *Anthaxia* from Crete (Coleoptera, Buprestidae)

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**Taxonomy, Anthaxia ariadna sp. n., A. brodskyi sp. n., key**

**Abstract.** Two new species of *Anthaxia* Eschscholtz from Crete are described: *Anthaxia* (s. str.) *ariadna* sp. n. (*A. candens*‐group) and *A.* (s. str.) *brodskyi* sp. n. (*A. manca*‐group). A key is given for the *A. manca*‐group.

During an entomological trip to Crete in May—June, 1980 I collected, together with Mr. O. Brodský, many interesting Buprestids, including several endemic species. Two of them belonging to the genus *Anthaxia* Eschscholtz, 1829 are described below.

*Anthaxia* (s. str.) *ariadna* sp. n.

(Plate I, Fig. 1)*

Large and robust species; frons and lateral pronotal margins golden orange with green lustre; vertex and two large pronotal stripes black; narrow beam between pronotal stripes and scutellum green; elytra blue‐black or violet with golden lustre on humeral swellings; epipleuras, legs and ventral side of body golden green; whole body with extremely short white pubescence, frons with rather long and rigid pubescence.

Frons very slightly depressed, almost flat, clypeus slightly incurved anteriorly; vertex very narrow, narrower than width of eye; structure of head consisting of a network of small and rounded cells without central grains; antennae rather long, equal in length to width of posterior pronotal margin; first antennal segment long, irregularly pear‐shaped, second 1.5 times longer than wide at apex, third twice longer than wide, slightly enlarged apically; segments IV—X serrate, 11th segment very slender and long; first two antennal segments golden yellow, segments III—XI black.

Pronotum 1.6—1.7 times wider than long with rather deep medial groove and with two shallow depressions at posterior angles; anterior pronotal margin slightly lobated in middle, posterior margin almost straight; lateral pronotal margins rounded in anterior part, posterior pronotal angles obtuse, the widest part of pronotum at anterior third; structure of pronotum consisting of fine and small rounded cells without central grains laterally and of a network of fine bent transversal wrinkles on disc; structure on disc very fine and indistinct; scutellum small, pentagonal and flat with extremely fine microstructure.

* Plates I and II will be found at the end of this issue.

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Elytra robust and vaulted 1.8—1.9 times longer than wide at humeral part; elytra tapering from humeral swellings to apex, very slightly serrate at apex only, with sharply divided narrow lateral groove; whole elytra with fine and irregular grainy structure and with several shallow longitudinal depressions.

Pro-, meso- and metasternum matt with very dense irregular grainy structure, abdomen lustrous with sparse and fine U-shaped punctures; legs relatively long, meso- and metatarsi same length as tibiae; anal segment with slightly serrate lateral margins.

Aedeagus short and robust (Plate II, Fig. 14) with almost parallel parameres (Plate II, Fig. 13); ovipositor very long and slender, with small styli.

Length: 7.5—13.0 mm (holotype 10.0 mm); width: 3.0—3.8 mm (holotype 3.6 mm).

Sexual dimorphism: ♂ — elytra blue black with slight green lustre, pronotal margins golden orange, all tibiae slightly bent inwards, metatibiae with slightly serrate inner margin, anal sternite slightly cut apically; ♀ — elytra violet with golden green humera and narrow sutural stripe reaching the middle part of elytra, pronotal margin purple, only protibiae bent and all tibiae simple and without serration, anal sternite rounded apically.

Variability: Elytra sometimes black with very slight green lustre (1 ♂) or black-green (1 ♀).

Host plant: Cupressus sempervirens var. horizontalis.


Allotype ♀: same collecting data as holotype. Paratypes: same collecting data as holotype and allotype (5 ♂♂); Crete, Lefka Ori Mts., Samari Gorge National Park, 5. VI. 1981 (5 ♂♂, 2 ♀♀), Sv. Bily leg. All material collected by beating Quercus cocciifera, Olea europaea and Cistus villosulus in blossom. Holotype and allotype will be deposited in the collection of the Entomological Department, National Museum, Praha; paratypes in the collection of Mr. O. Brodsky (Praha).

A. ariadna sp. n. belongs (according to its body shape, form of aedeagus, long antennae and pronotal structure) to the A. candens-group which include the following species: A. candens (Panz.), A. lucens Küst., A. superba Ab., A. vitulla Ksw. and A. rutilipennis Ab. These species are conspicuous by their bright elytral colouration, the elytra possessing longitudinal stripes black or orange on golden green background or dark saddle-shaped sutural spot with green scutellar field on purple backround. Pronotal margins of all these species are green or golden green with rounded cells with central grains. Male metatibiae are conspicuously bent inwards apically but without inner serration (only A. lucens possesses almost straight male metatibiae). Sexual dichroism undeveloped.

A. ariadna sp. n. differs from all species of A. candens-group by its almost unicolorous elytra without distinct pattern, by orange or purple pronotal margins with small oval cells without any central grains and by very narrow almost indistinct green stripe between black pronotal stripes. A further remarkable character is the form of male metatibiae which are only indistinctly bent inwards but bear a fine distinct serration on inner margin. Sexual dichroism in A. ariadna sp. n. is well developed (see description). Apart from A. ariadna sp. n. only the common eastern Mediterranean species A. lucens occurs also in Crete.
Anthaxia (s. str.) brodskyi sp. n.

(Plate I, Fig. 2)

Body large, subparallel and somewhat flattened; frons black, clypeus and vertex orange, pronotum orange with two black longitudinal stripes, elytra brown-bronze with small and narrow orange postscutellar stripe; ventral side of body bright reddish bronze; entire body with long white pubescence; species resembling by its colouration A. manca (L.).

Anterior margin of clypeus distinctly incurved, frons and vertex almost flat; vertex very narrow (0.7 width of eye); eyes slightly projecting beyond outline of head; structure of head consisting of a network of small and very dense rounded cells without central grains; antennae long reaching middle part of pronotal margins; first antennal segment pear-shaped and orange, second almost cylindrical, black, third one black and prolonged — almost 3 times longer than wide at apex; segments IV—VI black and distinctly trapezoidal; length of pronotal pubescence equals width of vertex; inner margins of eyes S-shaped.

Pronotum rather flat, 1.55—1.60 times wider than long at middle; anterior pronotal margin twice deeply incurved, strongly lobate in middle; posterior margin very feebly lobate in middle part and lateral margins almost regularly rounded; widest part of pronotum before middle; pronotal structure consisting of small rounded cells with large and distinct central grains laterally and irregular wrinkless and transversally prolonged cells in middle part; entire pronotum (especially anterior parts of lateral margins) covered with long white pubescence. Scutellum pentagonal, bronze and slightly vaulted.

Elytra subparallel, 2.0—2.1 times longer than wide at base and same width as pronotum; tapering part of elytra (posterior third) distinctly serrate, each elytron separately rounded apically; epipleuras not reaching elytral apex; elytral structure consisting of rough almost rounded and dense punctures on lustrous background; elytral pubescence, although also very long, somewhat shorter than that of pronotum.

Legs relatively long and slender, male metatibiae serrate on inner margin (as in A. manca); pubescence of legs very long, same length as frontal pubescence. Pro-, meso- and metasternum with very dense irregular punctuation, abdomen very lustrous with sparse punctuation; ventral and elytral pubescence of the same length; anal sternite of male widely cut apically, anal sternite of female rounded with wide and shallow incision.

Aedeagus (Plate II, Fig. 8) subcylindrical, with wide apical incision, parameras (Plate II, Fig. 7) swollen in apical third.

Length: 5.6—9.0 mm (holotype 7.0 mm); width: 2.0 — 3.2 mm (holotype 2.1 mm).

Sexual dimorphism: Female usually somewhat more robust than male, with simple tibiae without serration and with widely incised anal sternite.

Variability: Apart from length and width (see above) variation is also found in the colouration of some specimens. Of 167 specimens studied 4 ♂♂ possess golden green pronotum with black stripes and 1 ♀ green metallic lustre of entire dorsal surface; black pronotal stripes (in middle part) 1.3—2.0 times wider than orange interval between them; 47 specimens (29 ♂♂, 18 ♀♀)
possess bright bronze elytra, and remainder of material (including holotype) brown- bronze elytra.

**Holotype ♂:** Crete, Lefka Ori Mts., Omalos, 27. V.—1. VI. 1980, S. Bily and O. Brodsky leg.

**Allotype ♀:** same collecting data. **Paratypes 92 ♂♂, 73 ♀♀:** same collecting data; holotype and allotype will be deposited in the collection of the Entomological Department, National Museum, Praha; paratypes in the collection of Mr. O. Brodsky (Praha).

**Bionomy:** *A. brodskyi* sp. n. differs in its bionomy from other known species of the *A. manca* group, all of which develop in various *Ulmus* species and as adults never attack flowers. *A. brodskyi* sp. n. develop in *Pirus amygdaliformis* (at locality Omalos together with *Plosima flavoguttata*) and all material studied (167 spec.) was collected on flowers of *Crataegus* sp. which were bitten by adults.

*A. brodskyi* sp. n. belongs to the *A. manca* group (subgen. *Trichocratometerus* sensu Richter, 1949); no species of this group has previously been known from Crete. It may be distinguished according to the following characters:

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<td><strong>1 (2)</strong></td>
<td>Entire body golden green sometimes with two black and indistinct pronotal stripes; male metatibiae simple, without serration; anal sternite of male rounded apically; apical part of elytra with very slightly serrate margin, almost smooth; aedeagus sharply pointed apically (Plate II, Figs. 11, 12); central Europe, the Balkans, western Turkey</td>
<td><strong>A. hackeri</strong> (Friwaldeki, 1884)</td>
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<td><strong>2 (1)</strong></td>
<td>Brown or bronze species usually with orange pronotal margins or golden green species with purple or orange lateral elytral stripe; Male metatibiae always serrate on inner margin; anal sternite of male transversally cut at apex; apical part of elytra always with serrate margin; aedeagus obtuse or transversally cut apically.</td>
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<td><strong>3 (6)</strong></td>
<td>Elytra brown or bronze, pronotum orange, gold or golden green with two large black longitudinal stripes; elytra robust and parallel, sometimes, especially in females, slightly enlarged in posterior third.</td>
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<td><strong>4 (5)</strong></td>
<td>Somewhat slender and less robust species; elytra 2.0—2.1 times longer than wide at base, lustrous with small bronze postscutellar stripe along the suture; pronotum arcuated laterally, widest before middle (Plate I, Fig. 2); black pronotal stripes (in middle part) 1.3—2.0 times wider than interval between them; elytra same width (♂) or slightly wider (♀) than pronotum; aedeagus parallel and transversally cut and slightly incurved at apex (Plate II, Figs. 7, 8); ovipositor prolonged between styli (Plate II, Fig. 15); Crete</td>
<td><em>A. brodskyi</em> sp. n.</td>
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<td><strong>5 (4)</strong></td>
<td>Less slender and more robust species; elytra 1.8—1.9 times longer than wide at base; matt without bronze postscutellar stripe; pronotal margins almost parallel with small fold in middle (Plate II, Fig. 17); black pronotal stripes 3—4 times wider than interval between them; elytra distinctly wider than pronotum in both sexes; aedeagus enlarged in posterior part and rounded apically (Plate II, Figs. 9, 19); ovipositor not prolonged between styli (Plate II, Fig. 16); central and southern Europe, Algeria, Asia Minor, Caucasus, Ukraine, northern Iran</td>
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<td><strong>6 (3)</strong></td>
<td>Body golden green with purple or orange lateral elytral stripe or whole body bronze always without orange pronotal margins and without sharp black pronotal stripes, elytra slender cuneiform.</td>
<td><em>A. manca</em> (Linne, 1767)</td>
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<td><strong>7 (8)</strong></td>
<td>Body brown, pronotum somewhat bronze with two very indistinct dark stripes; aedeagus very slightly cut apically, parameres short and swollen in middle (Plate II, Figs. 3, 4); Transcaucasus, Central Asia, northern Iran</td>
<td><em>A. intermedia</em> Obenberger, 1913</td>
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<td><strong>8 (7)</strong></td>
<td>Body golden green with purple or orange lateral elytral stripes or elytra bronze with narrow reddish metallic basal and lateral stripes; pronotum greenish bronze; aedeagus widely cut at apex, parameres long and not swollen in middle (Plate II, Figs. 5, 6).</td>
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<td><strong>9 (10)</strong></td>
<td>Entire body golden green with purple or orange lateral elytral stripes (exceptionally elytra blue green with narrow purple lateral stripes); central and southern Europe, Morocco, Algeria, Tunisia, Ukraine</td>
<td><em>A. deaurata deaurata</em> (Gmelin, 1788)</td>
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<td><strong>10 (9)</strong></td>
<td>Elytra bronze with narrow reddish metallic basal and lateral stripes; pronotum greenish bronze sometimes with darker central part; Balkans, Asia Minor, Caucasus</td>
<td><em>A. deaurata senicula</em> (Schrank, 1789)</td>
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Два новых вида рода Anthaxia из острова Крит (Coleoptera, Buprestidae)

Таксономия, Anthaxia ariadna sp. n., A. brodskyi sp. n., определительная таблица

Резюме. Описание двух новых видов Anthaxia из острова Крит: Anthaxia (s. str.) ariadna sp. n. (группа A. cadens) и A. (s. str.) brodskyi sp. n. (группа A. manca). Дана таблица для определения видов группы A. manca.

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REVIEW


Die Artenübersicht im Bd. 6 beginnt mit der Unterfamilie Piestinae und fährt mit Phloeocharinae, Olisthaerinae, Phlocobiinae, Proteininae, Omalinae, Oxytelinae, Oxyporinae, Steninae, Euesthetinae u. Paederinae fort. Die Gattung Micropeplus, welche meistens am Anfang des Staphylinidensystems steht, ist im Rahmen der selbständigen Familie Micropeplidae im Bd. 5 behandelt.


Die ausgezeichneten Publikationen werden nicht nur den Entomologen, sondern auch den Agronomen, Forstwissenschaftlern, den Mitarbeitern im Naturschutz, den Zoogeographen und manchen anderen Interessenten nicht nur im mittel- und südeuropäischen Bereich gute Dienste leisten.

Der Catalogus Faunae Poloniae, seit 1971 erscheinend und z.Z. weitere Bände im Druck befindlich, stellt eine Stufe der polnischen Entomologie zum Weltruf dar.

J. Zahradnik
Bílý S., 1982: Two new species of Anthaxia from Crete (Coleoptera, Buprestidae)

Plate I, Figs. 1—2: 1 — Anthaxia (s. str.) aridina sp. n., holotype, 10.0 mm; 2 — Anthaxia (s. str.) brodskyi sp. n., holotype, 7.0 mm.
BILY S., 1982: Two new species of *Anthaxia* from Crete (Coleoptera, Buprestidae)

**Plate II, Figs. 3—17:**
- 3 — *Anthaxia* (s. str.) *intermedia*, parameres; 4 — the same, aedeagus; 5 — *A. deaurata deaurata*, parameres; 6 — the same, aedeagus; 7 — *A. brodskyi* sp. n., parameres; 8 — the same, aedeagus; 9 — *A. manca*, parameres; 10 — the same, aedeagus; 11 — *A. hackeri*, parameres; 12 — the same, aedeagus; 13 — *A. ariadna* sp. n., parameres; 14 — the same aedeagus; 15 — *A. brodskyi* sp. n., ovipositor; 16 — *A. manca*, ovipositor; 17 — *A. manca*, outline of pronotum.