

**Taxonomic notes on *Anthaxia* (subgen. *Cratomerus*)
from the Palaearctic region (Coleoptera, Buprestidae)**

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Taxonomy, key, lectotypes

Abstract. Palaearctic species of the subgenus *Cratomerus* Solier of the genus *Anthaxia* Eschsch. are reviewed and keyed. The taxonomic positions of *A. sponsa* Kiesw., *A. nupta* Kiesw. and *A. krueperi* Ganglb. are clarified, lectotypes are designated for *A. sponsa* and *A. eugeniae* Ganglb. *A. (C.) diadema shelkovnikovi* Obnb. stat. nov. is relegated to subspecies.

Cratomerus was originally erected as a genus for the single species *A. hungarica* (SCOP.). Subsequent authors treated this taxon either as a subgenus (GANGLBAUER, 1885; SCHAEFER, 1949) or a genus (KRAATZ, 1882; RICHTER, 1949). OBERBERGER (1917) in his revision of *Anthaxia* ESCHSCH., considered it to be only a species group. RICHTER (1949) divided *Cratomerus* into three subgenera and included in it many species from the subgenus *Haplanthaxia* REITTER.

In the present paper the conception of *Cratomerus* is practically the same as the conception of RICHTER's subgenus *Cratomerus* s. str. in his large genus *Cratomerus* (excluding *A. platysoma* ABEILLE which belongs to subgen. *Anthaxia* s. str. — BÍLÝ, 1977).

Species of this subgenus are distributed from central Asia through the Caucasus and Middle East, to central and southern Europe, the Arabian peninsula across the whole Afrotropical region to South Africa. Only the palaearctic species are discussed in the present paper, with special emphasis on the *A. sponsa* group. Palaearctic species of *Cratomerus* are practically without taxonomic problems, excepting *A. sponsa* KIESW., *A. nupta* KIESW. and *A. krueperi* GANGLB. These three species have often been confused (OBERBERGER, 1917, 1930, 1933; RICHTER, 1949) and earlier determinations require verification.

I have had the opportunity to study the relevant type material of these and related species and altogether have examined about 1 800 specimens of *Cratomerus*, which has enabled the taxonomic position to be clarified. The key below incorporates several recently described species not previously keyed.

Subgenus *Cratomerus* is composed of two principal groups (Table 1), as follows. Group I: central Asian species with lateral longitudinal cells and wrinkles on pronotum, and Group II- species lacking longitudinal wrinkles on pronotum (whole range of subgenus except central Asia). Group I has many features in common with the subgenus *Haplanthaxia* REITTER (namely

TABLE 1

Division of subgen. *Cratomerus* SOL. into species groups

Principal group	Species group	Species	Longitudinal wrinkles on pronotum	Frontal depression	Anal sternite notched in		Frontal pubescence	Sexual dichroism
					♂	♀		
I	<i>A. dives</i> group	<i>A. dives</i>	+	—	—	+	short	—
		<i>A. kryzhanovskii</i>	+	—	—	+	short	—
		<i>A. brunneicolor</i>	+	—	—	+	short	—
II	<i>A. hungarica</i> group IIa	<i>A. hungarica</i>	—	—	—	+	long	+
		<i>A. eugeniae</i>	—	—	—	+	long	+
		<i>A. bonvouloiri</i>	—	—	—	+	long	—
	<i>A. sponsa</i> group IIb	<i>A. sponsa</i>	—	—	—	+—	short	+—
		<i>A. krueperi</i>	—	—	+—	+—	short	—
		<i>A. pochoni</i>	—	—	—	—	short	—
		<i>A. violacea</i>	—	—	—	+	short	—
	<i>A. nupta</i> group IIc	<i>A. nupta</i>	—	—	—	?	short	?
		<i>A. mirabilis</i>	—	—	—	+	short	+
	<i>A. diadema</i> group IIId	<i>A. diadema</i>	—	+	—	+	missing	+
		<i>A. scorzonerae</i>	—	+	—	+	missing	—
		<i>A. farinigera</i>	—	+	—	+	missing	—

with the *A. iliensis* OBNB. and *A. angustipennis* KLUG species groups.) Group II may be divided to several species groups: *A. hungarica* (SCOP.) group (Group IIa), *A. sponsa* KIESW. group (Group IIb), *A. nupta* KIESW. group (Group IIc) and *A. diadema* (FISCH.) group (Group IId) according to structure of pronotum, form and pubescence of frons etc. (Table 1). The recently described *Cratomerus medvedevorum* ALEXEEV from Turcomenia (ALEXEEV, 1978) belongs to subgen. *Haplanthaxia* (*A. iliensis* OBNB. group) although it has a coloration typical of some species of *Cratomerus* (e.g. *A. dives*).

One of the principal diagnostic characters of subgen. *Cratomerus* is the form of the anal sternite of the female which bears a notch or an incision at the apex (Plate II, Fig. 26).^{*} Study of the extensive material mentioned above (1 800 specimens) has shown that this character is very constant in Groups I, IIa, IIc, IId but unstable and variable in Group IIb. Females of this group have the anal sternite both notched and rounded without any regularity and in some cases (*A. krueperi*) the notched anal sternite occurs also in the male.

Subgenus *Cratomerus* may be characterized as follows: body subcylindrical and rather vaulted, green, golden green or exceptionally bronze (*A. brunneicolor*) but always with metallic lustre, elytra sometimes blue-green, violet or green with purple pattern; head relatively small, always narrower than anterior pronotal margin, eyes large but not projecting beyond outline of head, vertex always narrow (0.7—1.1 times wider than diameter of one eye); antennal segments V-X rhomboid (in male); structure of head consisting of oval or polygonal cells with central grains; structure of pronotum always with central grains; pronotum marked with two more or less distinct black longitudinal stripes; some species with serrate male metatibiae (Groups IIa, IId); aedeagus long and slender without apical lateral serration; the form of female anal sternite is impossible to use for the differential diagnosis of the subgenus because of its variability (as also in the related subgenus *Haplanthaxia*).

Type material studied: *A. brunneicolor* (ALEXEEV), (Leningrad); *A. diadema shelkovnikovi* OBNB., (Prague); *A. eugeniae* GANGLB. (Vienna); *A. krueperi* GANGLB., (Vienna); *A. kryzhanovskii* (ALEXEEV), (Leningrad); *A. medvedevorum* (ALEXEEV), (Leningrad); *A. nupta* KIESW., (Munich); *A. sponsa* KIESW., (Munich); *A. pochoni* HERMAN (Bruxelles); *A. violacea* Bílý, (Prague); and *A. duo* SEMENOV (= a synonym of *A. krueperi* GANGLB. — Leningrad).

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Key to palaearctic species of subgen. *Cratomerus* SOLIER

- 1 (30) Structure of pronotum consisting laterally of a network of oval or polygonal cells with more or less distinct central grains (Plate I, Figs. 1, 3, 5); middle part of pronotum with transverse wrinkles with remnants of cells, or whole pronotum with oval cells with central grains.
- 2 (3) Whole body completely violet (both dorsal and ventral sides), two very indistinct longitudinal pronotal stripes, scutellum, tarsae, antennae and elytral suture black; frons flat with dense white pubescence; metatibiae of male slightly serrate on inner margin; 7.0—8.7 mm; Palestine *A. violacea* Bílý, 1977

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

- 3 (2) Whole body green or golden green with black pronotal stripes or dorsal side bicolorous: head and pronotum green or orange, elytra green, blue or bluish violet; metatibiae of male smooth on inner margin or with rough denticulation.
- 4 (11) Frons with rather deep oval depression, hairless (Plate II, Fig. 10) or sometimes with extremely short white hairs present on postclypeal part of frons.
- 5 (6) Only lateral margins of pronotum with polygonal cells; middle part of pronotum with transverse wrinkles; pronotum without depressions in posterior angles and with very distinct black longitudinal stripes; golden orange or orange interval between these stripes wider than width of each black stripe; metafemurs of males not enlarged, metatibiae simple; slender, parallel and somewhat flattened species; ventral side without white toment; 6.1—9.0 mm; Balkan peninsula, Asia Minor, Caucasus, Lebanon, Syria, Cyprus *A. scorzonerae* (FRIWALDSKI, 1828)
- 6 (5) Whole pronotum with a network of distinct rounded cells, with depressions in posterior angles and without black stripes (or with very indistinct stripes with very narrow interval between them); metafemurs of males very enlarged, metatibiae with characteristic denticulation (Plate II, Figs. 19—21); vaulted somewhat robust species, tapering posteriorly; abdominal segments with tomentose spots at base.
- 7 (8) Pronotum always without black stripes; widest part of pronotum at first third or immediately before middle; scutellum slightly longer than wide; without sexual dichroism; metatibiae of males Plate II, Fig. 21; 7.4—10.2 mm; central Asia *A. farinifera* KRAATZ, 1882
- 8 (7) Pronotum with feeble longitudinal black stripes or spots, exceptionally without them; widest part of pronotum in first fifth or pronotum almost parallel; scutellum of same length and width; sexual dichroism developed: males green or golden green, females orange-green with orange or red pronotal margins and with orange or golden orange ventral side of body; metatibiae of males Plate II, Figs. 19, 20.
- 9 (10) Pronotum almost parallel, 1.3 times wider than long; pronotal black stripes feeble but always developed; lateral margins of elytra straight before apex; metatibiae of male Plate II, Fig. 19; 6.2—8.8 mm; eastern Mediterranean *A. diadema diadema* (FISCHER, 1823)
- 10 (9) Widest part of pronotum in first fifth; pronotum 1.4 times wider than long (Plate II, Fig. 10); black pronotal spots absent; lateral margins of elytra slightly incurved before apex; metatibiae of male Plate II, Fig. 20; 6.2—8.4 mm; Transcaucasus *A. diadema schelkownikovi* OBNENBERGER, 1940
- 11 (4) Frons flat, slightly vaulted or feebly grooved, always with long white pubescence and without oval depression (Plate II, Figs. 7, 8).
- 12 (17) Frons with very long and rigid white pubescence (length of hairs = 1/2—1/3 of width of vertex, Plate II Fig., 8); lateral margins of pronotum with long pubescence in anterior part — these hairs 2—3 times longer than diameter of cells forming lateral structure of pronotum; metafemurs of male often enlarged.
- 13 (14) Smaller and slender species; widest part of pronotum in middle or immediately behind middle, pronotum 1.4—1.5 times wider than long; metafemurs of male normal, not enlarged; metatibiae of male Plate II, Fig. 25; dorsal part of male profemurs without mirror-like effect; aedeagus Plate II, Fig. 16; sexual dichroism well developed: male green or golden green, female with blue or bluish green elytra and golden orange frons, lateral margins of pronotum and ventral side; 6.5—10.0 mm; eastern Mediterranean ... *A. eugeniae* GANGLBAUER, 1885
- 14 (13) Larger and more robust species (7.5—15.0 mm); widest part of pronotum in first third or immediately before middle, pronotum 1.5—1.6 times wider than long (Plate II, Fig. 8); metafemurs of male enlarged; metatibiae of male Plate II, Fig. 18; aedeagus Plate II, Fig. 15; profemurs of male with mirror-like effect on dorsal side; sexual dichroism either sharp or undeveloped.
- 15 (16) Sexual dichroism well developed; male green or golden green, female with golden green, blue, bluish green or violet elytra, with orange frons and lateral margins of pronotum and with orange or purple ventral side; black pronotal stripes well developed; 7.5 to 15.0 mm; Mediterranean region, Balkan peninsula, central Europe *A. hungarica hungarica* (SCOPOLI, 1772)
- 16 (15) Sexual dichroism undeveloped: both sexes green or golden green; black pronotal stripes less developed; 9.0—14.0 mm; Caucasus *A. hungarica sita* KÜSTER, 1852
- 17 (12) Frons with short but always distinct white pubescence (length of hairs 1/6—1/4 width of vertex) which is distinctly divided medially (Plate I, Figs. 1, 3, 5); lateral margins of pronotum with very short pubescence in anterior part — hairs of same length or shorter

than diameter of cells forming lateral structure of pronotum; metafemurs of male never enlarged.

- 18 (19) Structure of pronotum consisting of a network of regular and rounded cells with sharp and very distinct central grains; distal antennal segments of male bicolorous (green and brown); meso- and metatibiae of male serrate on inner margin (Plate II, Fig. 24); scutellum pentagonal; black pronotal stripes very often indistinct; 7.8—12.1 mm; Algeria, Morocco *A. bonvouloiri* ABEILLE, 1863
- 19 (18) Structure of pronotum consisting of a network of polygonal cells either with flat indistinct or with distinct central grains, but the structure of middle part somewhat indistinct and rugose or appearing as transverse wrinkles; distal antennal segments of male unicolorous (green, blue or black); meso- and metatibiae of male always simple; scutellum triangular or semielliptical; black pronotal stripes always well developed
- 20 (23) Structure of middle part of pronotum consisting of fine but very distinct transverse wrinkles (Plate I, Fig. 3); parameras of aedeagus robust; green interval between pronotal spots wide, usually same width as stripes.
- 21 (22) Structure of head consisting of large polygonal cells without central grains; elytra bicolorous: green with broad lateral purple stripes; sometimes almost whole elytra purple with sutural green stripe; pronotum with wide depressions at posterior angles; aedeagus rather slender (Plate II, Fig. 14); 6.0—9.0 mm; eastern Iran, Beloudjistan *A. pochoni* HERMAN, 1969
- 22 (21) Structure of head consisting of small prolonged cells with very distinct central grains; elytra unicolorous: green golden green, bluish green or blue; pronotum with indistinct depressions; aedeagus more robust (Plate I, Fig. 4); 5.1—9.5 mm; eastern Mediterranean, including southern part of Balkan peninsula *A. sponsa* KIESENWETTER, 1857
- 23 (20) Structure of middle part of pronotum rugose, consisting of distinct polygonal cells without transverse wrinkles (Plate I, Fig. 5), or if consisting of fine transverse wrinkles then structure without central grains (Plate I, Fig. 1); aedeagus long and slender (Plate I, Figs. 2, 6); green interval between black pronotal stripes narrow, always narrower than stripes.
- 24 (25) Cells on lateral margins of pronotum with sharp and distinct central grains (Plate I, Fig. 5); pronotum 1.5—1.6 times wider than long; entire dorsal surface of body matt with fine microstructure; somewhat flattened species; frontal pubescence extremely short, hairs shorter than diameter of pronotal cells; 5.3—5.8 mm; Asia Minor, Caucasus *A. krueperi* GANGLBAUER, 1885
- 25 (24) Cells on lateral margins of pronotum with flat and indistinct central grains (Plate I, Fig. 1); pronotum either 1.66 times or 1.70—1.75 times wider than long; entire dorsal surface of body lustrous without microstructure; frontal pubescence longer than diameter of pronotal cells.
- 26 (27) Body broad and flattened; pronotum 1.70—1.75 times wider than long; male green or golden green, female with bluish green elytra, orange pronotal margins and purple ventral side; aedeagus Plate II, Fig. 17; 6.2—8.3 mm; Transcaucasus, eastern Turkey *A. mirabilis* ZICHAREV, 1918
- 27 (26) Body slender and vaulted (Plate I, Fig. 1); pronotum 1.55 times wider than long; male with blue-black elytra, golden orange pronotal margins and golden green ventral side; interval between black pronotal stripes golden green; female unknown; aedeagus Plate I, Fig. 2; 6.3—6.5 mm; western Turkey *A. nupta* KIESENWETTER, 1857
- 28 (1) Structure of pronotum consisting of fine and dense transverse cells and wrinkles in middle part and of longitudinal cells and wrinkles laterally — Plate II, Fig. 9 (exceptionally several polygonal cells situated at posterior angles); central Asia.
- 29 (30) Smaller and slender species with flattened body; matt with fine dense microstructure; antennal segments V—IX in both sexes rhomboid, 2.0 times wider than long; pronotum only slightly enlarged anteriorly; scutellum pentagonal; entire body green, pronotum with black stripes, elytra sometimes with red or purple trapezoid spot in posterior half; male metatibiae Plate II, Fig. 23; aedeagus Plate II, Fig. 12; 7.0—8.0 mm; southern Tadzhikistan *A. dives* OBENBERGER, 1914
- 30 (29) Larger, more robust and vaulted species, more or less brilliant with silky lustre; antennal segments V—IX in both sexes less rhomboid, only 1.6 times wider than long; pronotum more enlarged in anterior third (Plate II, Fig. 9); scutellum subcordiform or semielliptical; always without red spot on elytra.
- 31 (32) Entire body green or bluish green only with black pronotal stripes (♂) or ventral side golden orange, elytra bluish green and pronotum red with black stripes (♀); frons with rather long but sparsely white pubescence; aedeagus slender (Plate II, Fig. 11); pronotum less enlarged anteriorly; 7.0—8.5 mm; Tadzhikistan ... *A. kryzhanovskii* (ALEXEEV, 1978)

- 32 (31) Sexual dichroism undeveloped, entire body brown with bronze lustre; pronotal stripes indistinct; frons with short but dense pubescence (Plate II, Fig. 10); aedeagus more robust (Plate II, Fig. 13); male metatibiae apically slightly bent inwards (Plate II, Fig. 13); pronotum more enlarged anteriorly, particularly in female; 5.7–7.9 mm; Fergana *A. brunneicolor* (ALEXEEV, 1980)

TAXONOMIC NOTES

As most species of *Cratomerus* are without special taxonomic problems, only five need be discussed below.

Anthaxia (Cratomerus) sponsa KIESENWETTER, 1857

Anthaxia sponsa KIESENWETTER, 1857 : 82.

Anthaxia cyanescens MARSEUL, 1865 : 213.

Anthaxia sponsa var. *marseuli* OEBENBERGER, 1930 : 532.

Anthaxia sponsa var. *adalilae* GANGLBAUER, 1885 : 318.

This species was described by KIESENWETTER (1857) from four specimens (2 ♂♂ and 2 ♀♀). The first male labelled "Attica, Kiesenwetter, Sammlung Cl. Müller" is hereby designated as lectotype, since a holotype was not indicated. The second one labelled "Kiesenwetter, Sammlung Cl. Müller" and both females labelled "Kiesenwetter, Sammlung Cl. Müller" and "sponsa ♀, Asia. min., Kiesenwetter" are now designated as paralectotypes. All material is deposited in the Zoologische Staatssammlung, Munich. On studying the second male, I found its genitalia missing.

This relatively common species is closely related to *A. violacea* BÍLÝ and to *A. krueperi* GANGLB. When describing *A. violacea* BÍLÝ, 1977 I did not know the types of *A. sponsa*, *A. nupta* or *A. krueperi* and I compared it only with *A. nupta*. *A. sponsa* differs from *A. violacea* not only by its quite different coloration but by its rougher pronotal structure, and in the male by form of the aedeagus and in having the metatibiae simple on the inner margin. *A. krueperi* differs from *A. sponsa* by its more slender and flattened body, finer structure of elytra without transverse wrinkles, by structure and form of the pronotum, shorter frontal pubescence and in the structure of the aedeagus (see key and Plate I, Figs. 3, 5).

The variability of *A. sponsa* in coloration is very interesting and has no analogy in *Cratomerus*: males are very uniform, simply green or golden green with two black pronotal spots; females have usually bluish green elytra, golden orange pronotum with two black stripes and brightly orange ventral side (typical female coloration — as in both female paralectotypes); but females are very often of the same coloration as males (var. *adalilae* GANGLB.); another combination of colours of females are as follows: green elytra and golden orange pronotum with green, gold or orange ventral side or almost blue elytra with green, bluish green, gold or orange ventral side (the last combination was described as var. *marseuli* OBNB.). All these forms of the female occur throughout the range of the species.

A further very interesting feature of this species is the form of anal sternite of the female. As mentioned above the typical feature of females of *Cratomerus* (and also *Haplanthaxia*) is their notched anal sternite (Plate II, Fig. 26). Among 85 females studied, 12 lacked an apical notch and in 11 it was very indistinct. The absence or presence of an apical notch does not depend either on coloration or on locality. On the other hand, all males

studied (73 specimens) had a rounded anal sternite without any notch or incision.

Distribution: Greece, Turkey, Lebanon, Israel, northern and western Iran, Armenia, Georgia and Azerbaidjan.

Bionomy: larva described by SOLDATOVA (1970); development in *Prunus malus*, *P. armeniaca* and *Quercus* sp.

Material studied: the type specimens and 158 specimens (85 ♀♀ and 73 ♂♂) covering the whole range of the species.

Anthaxia (Cratomerus) krueperi GANGLBAUER, 1885

Anthaxia krüperi GANGLBAUER, 1885 : 319.

Anthaxia duo SEMENOV, 1898 : 599.

Buprestis scorzonerae FRIWALDSKI, 1828 : 21 (partim).

This species was originally described by GANGLBAUER (1885) from one female from Smyrna (Turkey) and for the second time (as *A. duo*) by SEMENOV (1898) from Tbilisi (eastern Georgia). Holotype deposited in the Naturhistorisches Museum, Vienna; type specimens of *A. duo* SEM. in the Zoological Institute, Leningrad.

A well defined species closely related to *A. sponsa* but differing in many principal characters (see above and key). The problem of the anal sternite is even more complicated in this species than in *A. sponsa*: type specimen (♀) has a typically notched anal sternite while a further five females studied lacked any notch or incision and one female had a shallow and indistinct apical notch; of 12 males studied two had a typically developed apical notch, two had an indistinct notch and eight had a simple rounded anal sternite. The presence of a notched anal sternite in the male is exceptional in the subgenus *Cratomerus*.

Colour variability of this species is insignificant: from green to golden green in both sexes. Frons of male always green, frons of female often golden green. Black pronotal stripes very distinct, green interval between them usually narrower than each of these stripes.

Distribution: Asia Minor and Transcaucasus (Georgia, Armenia).

Bionomy: unknown.

Material studied: type specimens of *A. krueperi* GANGLB. and *A. duo* SEM., 4 ♀♀ (3 from Georgia — Tbilisi and Armenia — Megri, 1 from western Turkey — Uşak) and 12 ♂♂ (3 from western Turkey — Uşak and Ödemiş, 9 from Georgia — Tbilisi and Armenia — Megri).

Anthaxia (Cratomerus) nupta KIESENWETTER, 1857

Anthaxia nupta KIESENWETTER, 1857 : 82.

Anthaxia nupta var. *aglaia* GANGLBAUER, 1885 : 319.

This species was originally described from one male labelled "*nupta* Ksw., Asia min.". Holotype deposited in the Zoologische Staatssammlung, Munich. Type specimen of var. *aglaia* GANGLB. deposited in the Naturhistorisches Museum, Vienna is labelled "Smyrna, *A. nupta* var. *Aglaia* GANGLB., ♀". The latter is a male and its genitalia are identical with those of the holotype of *A. nupta*.

This species is very closely related to *A. mirabilis* ZICHAREV from which it differs only in coloration, form of pronotum and slightly in form of aedeagus (see key), but it was misinterpreted by various authors (RICHTER, 1949) or synonymized with *A. krueperi* (OBENBERGER, 1917, 1930, 1933).

During this study I have examined numerous specimens of *A. sponsa* erroneously determined as *A. nupta* or *A. krueperi* taken from many European Institutions and private collections, but I have not found any specimen of *A. nupta* other than the two type specimens mentioned above. Since the type of var. *aglaia* has proved to be a male, the female of this species is unknown. The type of var. *aglaia* corresponds in all details, including coloration, with that of *A. nupta*. Both specimens have blue-black elytra with a green lustre, and the frons, ventral side and interval between black pronotal stripes golden and the lateral margins of pronotum golden orange; antennae and legs bluish green. Anal sternite of both specimens rounded apically, without any notch or incision.

Distribution: western Turkey.

Bionomy: unknown.

Material studied: holotype and type specimen of *A. nupta* var. *aglaia* GANGLBAUER.

Anthaxia (Cratomerus) eugeniae GANGLBAUER, 1885

Anthaxia eugeniae GANGLBAUER, 1885 : 317.

Anthaxia eugeniae var. *thalia* GANGLBAUER, 1885 : 317.

Anthaxia hungarica ab. *juvenilis* ABELLE DE PERRIN, 1895 : 116.

Species without taxonomic problems closely related to *A. hungarica* (SCOP.). I utilize the occasion of studying the syntypes to select a lectotype, a holotype not having been indicated. GANGLBAUER described the species from two specimens from Turkey — a male from Amasia and a female from Külek. I hereby designate as lectotype the male labelled "Mann 1860" Amasia" and the female labelled "Külek" as paralectotype; both specimens deposited in the Naturhistorisches Museum, Vienna.

Anthaxia (Cratomerus) diadema shelkovnikovi OBENBERGER, 1940

stat. nov.

Anthaxia diadema var. *shelkovnikovi* OBENBERGER, 1940 : 166.

Anthaxia diadema var. *araxigena* OBENBERGER, 1946 : 30 syn. nov.

RICHTER (1949) considered this subspecies as a distinct species, but differences between the typical form and ssp. *shelkovnikovi* are extremely fine and not of specific level (see key). Variability of this subspecies is far less than that in *A. diadema* (FISCH.): from green to golden green, lateral pronotal margins and frons of female golden orange; black pronotal stripes very indistinct or absent.

Bionomy: on *Salix* and *Populus* spp.

Distribution: *A. diadema diadema* — Balkan Peninsula, Asia Minor, southern Ukraine, Krym, Lebanon, Syria, western Iraq; *A. diadema shelkovnikovi* — Armenia, Georgia, southern Azerbaidjan, northern Iran.

OBENBERGER (1913) described *A. scorzonerae* var. *juno* OBENB. but later (OBENBERGER, 1946) recognized it as form of *A. diadema*. RICHTER (1949)

considered it to be a subspecies of *A. diadema* with distribution in Syria and southern Turkey, but this is unacceptable since the form was described from western Turkey (Ak-Chehir) and in fact found throughout the range of the species and also because there are no differences between it and the typical form except for its blue coloration. *A. diadema* var. *juno* OBNB., 1913 is in this situation a synonym of *A. diadema diadema* (FISCH.).

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Примечания к таксономии видов рода Anthaxia (подрод Cratomerus) из палеарктической области

Таксономия, определитель, лектотипы

Резюме. Дан обзор и определитель видов подрода *Cratomerus* Solier рода *Anthaxia* Eschsch. Выяснено систематическое положение видов *A. sponsa* Kiesw., *A. nupta* Kiesw. и *A. krueperi* Ganglb., обозначены лектотипы *A. sponsa* и *A. eugeniae* Ganglb. *A. (C.) diadema shelkovnikovi* Obnb. stat. nov. переведена в ранг подвида.

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Bílý S., 1980: Taxonomic notes on *Anthaxia* (subgen. *Cratomerus*) from the Palaearctic region (Coleoptera, Buprestidae)

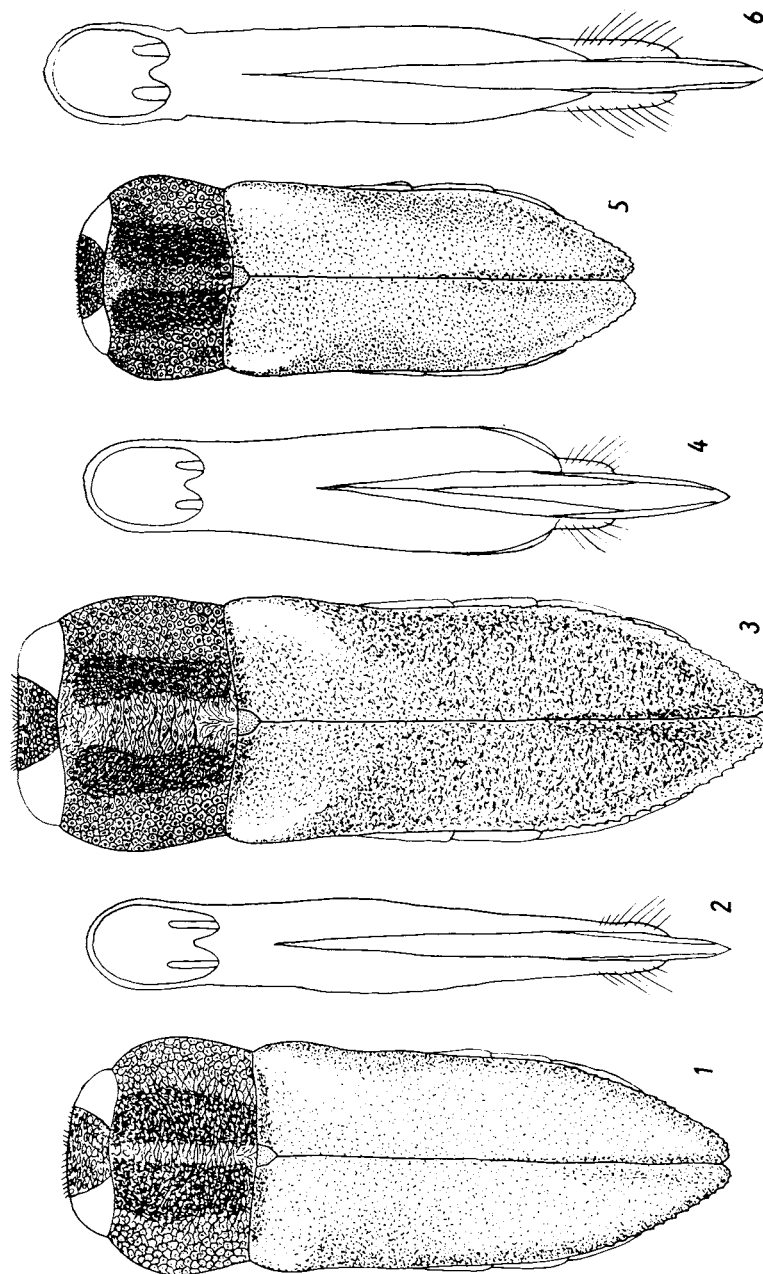


PLATE I, Figs. 1--6: 1 — *Anthaxia (Cratomerus) nupta* KIESW., holotype, ♂, 6.9 mm; 2 — the same, aedeagus; 3 — *A. (Crat.) sponsa* KIESW., lectotype, ♂, 7.9 mm; 4 — the same, aedeagus; 5 — *A. (Crat.) krueperi* GANGLB., holotype, ♀, 5.6 mm; 6 — *A. (Crat.) krueperi* GANGLB., aedeagus, specimen from W. Turkey (Uşak).

BILÝ S., 1980: Taxonomic notes on *Anthaxia* (subgen. *Cratomerus*) from the Palaearctic region (Coleoptera, Buprestidae)

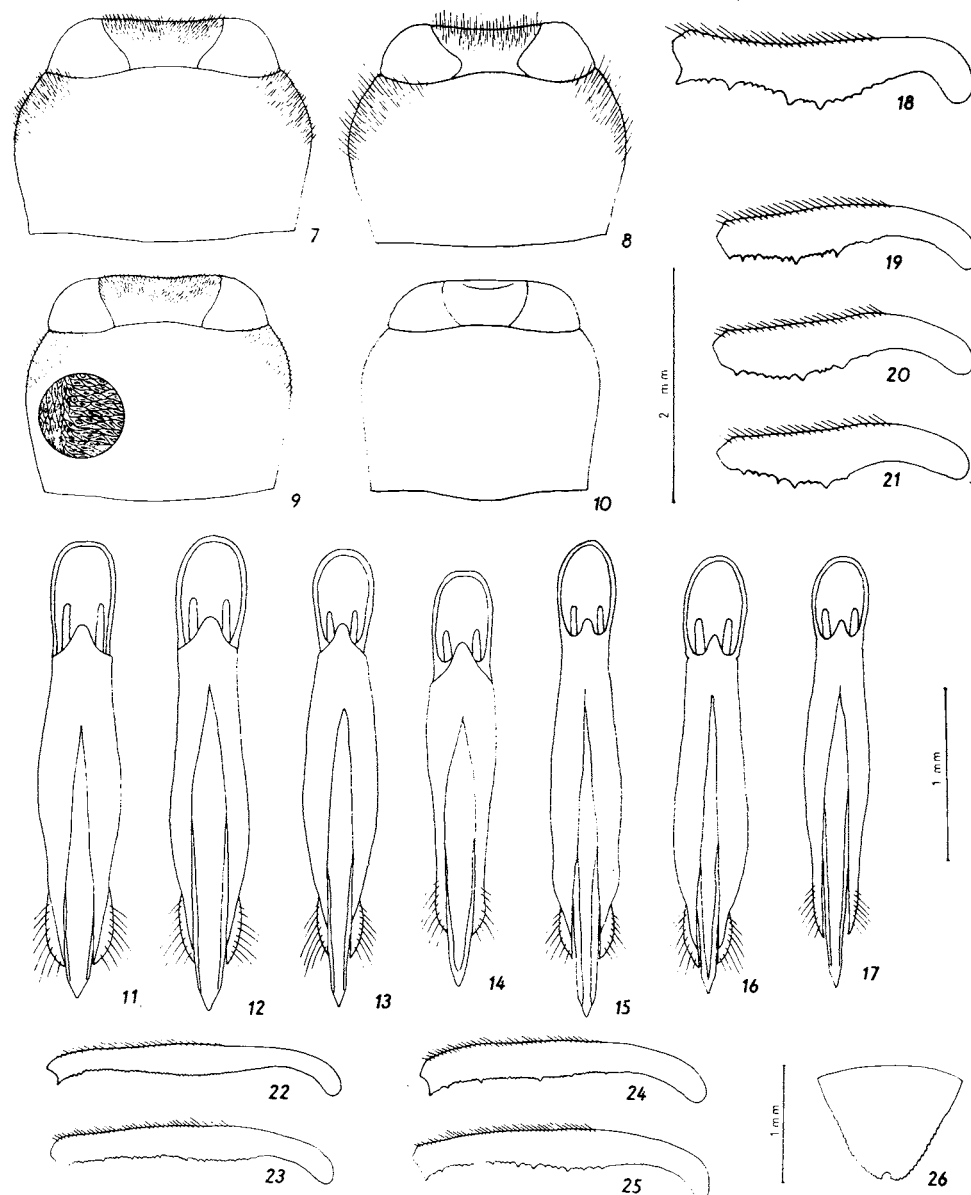


PLATE II, Figs. 7-26: 7 — head and pronotum of *Anthaxia* (*Cratomerus*) *mirabilis* ZICH.; 8 — the same of *A. (Crat.) hungarica hungarica* (SCOP.); 9 — the same of *A. (Crat.) brunneicolor* (ALEX.); 10 — the same of *A. (Crat.) diadema shelkovnikovi* OBNB.; 11-17 — aedeagus: 11 — *A. (Crat.) kryzhanovskii* (ALEX.); 12 — *A. (Crat.) dives* OBNB.; 13 — *A. (Crat.) brunneicolor* (ALEX.); 14 — *A. (Crat.) pochoni* HERM.; 15 — *A. (Crat.) hungarica hungarica* (SCOP.); 16 — *A. (Crat.) eugeniae* GANGLB.; 17 — *A. (Crat.) mirabilis* ZICH.; 18-25 — male metatibiae: 18 — *A. (Crat.) hungarica hungarica* (SCOP.); 19 — *A. (Crat.) diadema diadema* (FISCH.); 20 — *A. (Crat.) diadema shelkovnikovi* OBNB.; 21 — *A. (Crat.) farinigera* KRAATZ; 22 — *A. (Crat.) brunneicolor* (ALEX.); 23 — *A. (Crat.) dives* OBNB.; 24 — *A. (Crat.) bonvouloiri* AB.; 25 — *A. (Crat.) eugeniae* GANGLB.; 26 — anal sternite of female of *A. (Crat.) sponsa* KIESW.