

Two new species of the genus *Amphicoma* Latreille 1807 from Greece and China - Fujian province (Coleoptera: Scarabaeoidea: Glaphyridae)

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Abstract. Two new species *Amphicoma graeca* sp.n. from Greece and *Amphicoma marginata* sp.n. from Fujian province of China are described, figured and compared with related species.

Key words. New species, Coleoptera, Scarabaeoidea, Glaphyridae, *Amphicoma*, Palearctic region, Greece, China.

Introduction

The genus *Amphicoma* Latreille 1807 has recently been treated in detail by Nikodým (2005, 2007). Currently known species are distributed mainly in SE Asia (40 species), few additional species are recorded from Japan (2 species) and from Europe (2 species in Italy, 1 species in Spain).

Both currently described species are very interesting from the biogeographical point of view and in second case for their unique shape of elytra.

Amphicoma graeca sp. represents the first record of this genus for Greece (and for Balkan Peninsula as well). *Amphicoma marginata* sp. n. is characteristic by its markedly flattened lateral margins of elytra and by distinctly protruded posterolateral elytral angles. Both these new species belong to *A. abdominalis* group of species as defined by Nikodým (2005).

Material and methods

Acronym used in the text:

KOCF – Kamil Orszulik collection, Frýdek-Místek, Czech Republic
MNCP – Milan Nikodým collection, Roztoky u Prahy, Czech Republic
RCCP – Radek Červenka collection, Prague, Czech Republic
RSCV – Richard Sehnal collection, Velenice, Czech Republic
KRCP – Karel Rébl collection, Prague, Czech Republic

The presently described species are provided with red printed label: "HOLOTYPE or PARATYPE; *Amphicoma graeca* sp.n.; Milan Nikodým 2009" or "HOLOTYPE; *Amphicoma marginata* sp.n.; Milan Nikodým 2009". The exact label data are cited for all specimens. Remarks of author and comments are found in square brackets.

Amphicoma graeca sp. n. (Figs. 1-2)

Type material. Holotype male (MNCP) and 12 paratypes of males (KOCF 6, MNCP 5, RSCV 1) labelled: "Greece bor. occ.; Konitsa env.; 4.6.2008; lgt. Orszulik [white label, printed]"; 3 paratypes of males (MNCP 1, RCCP 1, KRCP 1) labelled: "Greece bor. occ.; Konitsa env.; 4.6.2008; lgt. K. Rébl [white label, printed]".

Description of holotype.

Head fancy pale green with golden lustre, more aureate in posterior half. Pronotum in the same green colour, with strong golden lustre and partly fully golden, especially in the middle. Scutellum pale green with golden lustre, more aureate in anterior half.

Elytra pale brown except of dark green triangular patch around scutellum, completely with strong golden green lustre.

Antennal club pale brown, stalk dark brown, antennomere 1 with golden green lustre. Maxillary palpus black-brown with pale terminal part.

Legs black except of partly brown claws, lateral protibiae dents and protarsi without tarsomere 5.

Abdomen dark brown, sternites with yellow ends.

Labrum rounded, strongly punctured, with black hairs.

Clypeus broadly rounded ahead and 1.2 times wider than long. Weakly narrowed anteriorly, regularly punctured. Clypeus with dark erected setation, separated from head by distinct line.

Head less densely but strongly punctured than clypeus, with weakly visible longitudinal line in the middle. Setation is erected, dark and longer than clypeus hairs.

Antennal club straight and markedly shorter than stalk. Antennomere 6 partially, antennomere 7 completely disc-shaped.

Terminal maxillary palpomere weakly widened in the middle and truncate apically, anterior half punctured.

Pronotum 1.3 times wider than long, widest in anterior third. Regularly narrowed, anterior angles nearly rectangular, posterior angles rounded, basal margin slightly emarginated medially. Punctuation as dense as on head, consisting of points in two sizes. Dark regular and erected setation longer than on head.

Scutellum elongate, gradually narrowed to rounded apex, with as punctation and hairs as on clypeus.

Elytra punctuate more finely and less densely than clypeus, weakly narrowed in apical third. Mixed setation consisting of dense and erected setation with the same length as on pronotum in anterior third and shortening backward. Hairs are dark except of yellow hairs in apical part of elytra near sutural and posterolateral angles. Except that there are longer, dark and strong irregular hairs. Sutural and posterolateral angles obtuse.

Mesotibia with apical spur, basal metatarsomere 1,5 times longer than second metatarsomere.

Pygidium dark brown, finely and densely punctuate with long yellow hairs. Length 12 mm.

Female unknown.

Variability. The paratypes only slightly vary in length (11-12mm), antennal club of four paratypes is brown, but paler than stalk.

Etymology. New species is named according to the country of its origin.

Differential diagnosis. *Amphicoma graeca* sp. n. belongs to *A.*

abdominalis species group as defined by Nikodým (2005), near *A.*

abdominalis (Fabricius, 1781) (see key below).

***Amphicoma marginata* sp. n. (Figs. 3-4)**

Type material. Holotype male (MNCP) labelled: "CHINA, W Fujian, 1.-2. VII. / EMEI FENG, 27°01'N 117°04'E / Jaroslav Turna leg., 2007 [white label, printed]".

Description of holotype.

Head shiny golden green, more coppery in posterior half. Pronotum and scutellum dark green with golden lustre visible especially on margins. Elytra shiny golden-coppery green. Antennal club and stalk dark brown, maxillary palpus black-brown with yellow ends. Legs black except of three brown lateral protibiae denticles, protarsi and claws. Abdomen brown with yellow abdominal ends of sternites.

Labrum slightly but distinctly emarginated medially.

Clypeus 1.5 times wider than long narrowed anteriorly, irregularly and not densely punctuate.

Head more densely and strongly punctured than clypeus, with as brown strong erected setae as posterior half of clypeus.

Antennal club slightly incurved nearly as long as stalk. Antennomere 6 partly, 7 completely disc-shaped.

Terminal maxillary palpomere slightly widened and obtuse apically without punctation.

Pronotum 1.1 times wider than long, widest before posterior angles.

Narrowed anteriorly, distinctly in anterior third. Anterior angles nearly rectangular, posterior angles broadly rounded, basal margin slightly emarginated medially. Punctation strong and dense. Setation as long and strong as on head, brown, partly yellow, especially on lateral margins. Scutellum elongate, gradually tapering toward rounded apex, with as punctation and hairs as on pronotum.

Elytra punctuate more finely and less densely than pronotum, markedly narrowed in apical third. Mixed setation consisting of erected brown setae on anterior third, longer than pronotal hairs and yellow setae on the rest of surface, which is partly as long as brown hairs and partly stronger and longer. Epipleuron strongly visible and punctured. Lateral margins of elytra in posterior third flattened, brown with golden green lustre.

Sutural angles widely obtuse, posterolateral angles markedly protruded, blunt but distinct.

Mesotibia with apical spur, basal metatarsomere 1,6 times longer than second metatarsomere.

Pygidium brown, finely and densely punctuate with long yellow hairs. Length 15 mm.

Female unknown.

Etymology. New species is named according to the markedly visible lateral margin of elytra, especially in posterior third, what is unique amongst *Amphicoma* species.

Differential diagnosis. *Amphicoma marginata* sp. n. belongs to *A. abdominalis* species group as defined by Nikodým (2005), however it is clearly distinct from other species by characters mentioned in the description and key.

Key to *Amphicoma abdominalis* species group

1. Species from Europe 2
 - Species from China and Vietnam 4
2. Elytra bicolour, pale brown except of dark green triangular patch around scutellum, completely with strong golden green lustre. Greece. Length 11-12 mm *A. graeca* sp. n.
 - Elytra unicolour, brown, green or blue 3
3. Elytra finely punctured, brown. Italy, Switzerland. Length 9.5-11 mm
 - *A. abdominalis* (Fabricius, 1781)
 - Elytra coarsely punctured, brown, green or blue. Spain. Length 12-15 mm *A. iberica* (Drioli, 1980)
4. Elytra mostly bronze-green or golden-green. Rarely brown with strong green lustre 5

- Elytra brown, sometimes with purple lustre 9
- 5. Apex of elytra divided with obtuse sutural angles and markedly protruded posterolateral angles. Lateral margins of elytra in posterior third markedly flattened and brown. Antennomere 6 partly, antennomere 7 completely disc-shaped. China (Fujian). Length 15 mm *A. marginata* sp. n.
- Sutural angles of elytra almost rectangular or obtuse, posterolateral angles broadly rounded. Lateral margins of elytra not flattened and green. Antennomeres 5-7 (or at least 6-7) disc-shaped 6
- 6. Bronze-green. Pronotum wider than longer. Tibiae dark brown. Elytra jointed at the apex, sutural angles almost rectangular. Antennomeres 5, 6 and 7 disc-shaped. China (Jiangxi, Guizhou). Length 12 – 13 mm *A. tesari* (Endrődi, 1952)
- Pale green or bronze-green with golden lustre. Rarely elytra brown with green lustre. Pronotum as long as wide or 1.2 wider. Tibiae black or partly brown in case of brown elytra with strong green lustre. Sutural angles divided and rounded. Antennomeres 6-7 disc-shaped. Length 12-15 mm 7
- 7. Body length 14-15 mm. Ultimate maxillary palpomere markedly widened and cut off apically. Elytra strikingly narrowed apically. China (Sichuan) *A. emeia* Nikodým 2005
- Body length 12-14 mm. Ultimate maxillary palpomere slightly widened. Elytra regularly narrowed apically. China (Hubei, Henan) 8
- 8. Dorsum pale green with golden lustre. Pronotum as wide as long. Elytra completely covered with short and long erected setae. China (Hubei)
..... *A. businskyi* Nikodým 2005
- Dorsum dark green with golden lustre or elytra brown with green lustre. Pronotum 1.2 wider than long. Elytra covered with short and irregular long erected setae. China (Henan) *A. magdalenae* Nikodým 2007
- 9. Elytra pale brown, without any lustre. Antennomeres yellow-red. Northern Vietnam *A. tonkinea* (Petrovitz, 1972)
- Elytra reddish-brown with purple lustre or base slightly purple. Antennomeres different in colour 10
- 10. Head and pronotum bronze. Elytra reddish-brown, base slightly purple. Antennae red, basal antennomeres bronze. China (Yunnan)
..... *A. davidis* (Fairmaire, 1891)
- Head and pronotum black with blue lustre, setation orange-yellow. Elytra reddish-brown with strong purple lustre and short orange-yellow setation. Vietnam *A. endroedii* (Petrovitz, 1965)

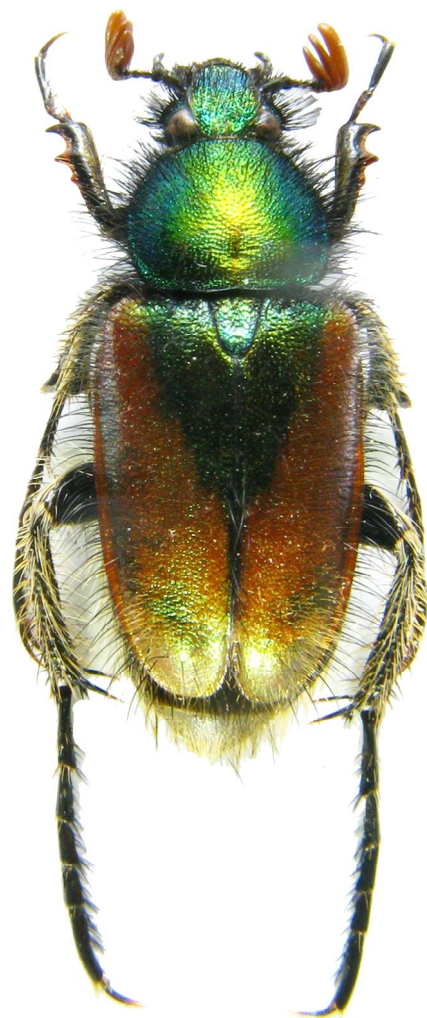
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References

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Amphiloma graeca sp. n., HOLOTYPE male

Fig. 1. Dorsal habitus. Fig. 2. Right and left parameres, lateral view.



Amphiloma marginata sp. n., HOLOTYPE male

Fig. 3. Dorsal habitus. Fig. 4. Right and left parameres, lateral view.