

Taxonomical and biological notes on Buprestidae from Turkey (Coleoptera)

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Summary

Anthaxia (s.str.) *nigricollis* Abeille, stat. nov. is redescribed and raised to species and faunstical as well as biological notes are given for some species of Buprestidae from Turkey. The larva of *Chalcophora detrita* Klug is described and 2 species new for Turkey are recorded.

Introduction

I have had a possibility to study extensive materials of Buprestidae collected by many collectors in Turkey. Also the collecting trip of Czechoslovak entomologists to Southern part of Turkey in June-July, 1983 brought a rich material including many hitherto little known and rare species.

I would like to thank to Prof. Dr. F. Önder of Izmir-Bornova who enabled me to publish these results in this journal and to all collectors who supplied me with rich material from Turkey.

Julodis armeniaca armeniaca Marseul, 1865

Described from Armenia and distributed in eastern part of Turkey. Prov. Mersin, Silifke, 2.7.1983, Bily & Brodsky leg. (30 ex.). All specimens collected by beating of *Pistacia lentiscus*.

Chalcophora detrita detrita Klug, 1829

Development of larva in dead trunks or stumps of *Pinus nigra*, *P. halepensis*, *P. pinaster* and *P. brutia*. Larva differs from larvae of *C. mariana* and *C. intermedia* by the form of pronotal and prosternal

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granulation which is distinctly wrinkled (Fig.9). Only larvae of *C. mariana* and *C. intermedia* has been known so far. Larvae of all three species differ each other by characters given in the following key:

- 1 (4) Pronotal and prosternal granulation consisting of transversely prolonged grains and short wrinkles; pronotal V- shaped grooves straight (Figs. 10, 11)
- 2 (3) V-shaped pronotal grooves with shorter branches (Fig.11); anterior margin of labrum slightly incurved (Fig.12) *C. intermedia* Rey
- 3 (2) V-shaped pronotal grooves with longer branches (Fig.10); anterior margin of labrum slightly arched (Fig.13) *C. mariana* (L.)
- 4 (1) Pronotal and prosternal granulation consisting of long, transverse wrinkles and lines; pronotal V-shaped grooves slightly bent at middle (Fig.9) *C. detrita* Klug

***Anthaxia* (s.str.) *rutilipennis* Abeille, 1891**

Very rare species, endemic of Taurus; Taurus cilic., Bürücek, 7.7.1983, Bily leg. (35 ex.). Development of larva in *Abies cilicica*.

***Anthaxia* (s.str.) *discicollis kanaanita* Obenberger, 1912**

Rather rare subspecies described from Syria. Taurus cilic., Bürücek, 7.7.1983, Bily leg. (5 ex.); Prov. Mersin, Uzuncaburç, 1.7.1983, Bily leg. (1 ex.); Adana, Saimbeyli, 9.7.1979, Cavazutti leg. (2 ex.). Development of larva in *Juniperus* sp.

***Anthaxia* (s.str.) *muliebris* Obenberger, 1918**

Described as a variety of *A. fulgurans* (Schrank) from Armenia and raised by Richter (1949) to a valid and distinct species. Very rare and little known species. It differs from *A. fulgurans* and *A. nigricollis* by characters given in the key (see *A. nigricollis*). Prov. Konya, Sultan Dagi, 28.6.1983, Bily leg. (2 ♂♂); Cappadocia, Avanos, 10.7.1983, Bily leg. (4 ♂♂, 5 ♀♀); Prov. Mugla, Besuchet leg. (1 ♀); Antalya, 4.5.1975, Besuchet & Löbl leg. (2 ♂♂); Antalya, 25 km N. Aksu, 9.5.1978, Löbl leg. (2 ♂♂); Mugla, Gökova, 30.4.1975, Besuchet & Löbl leg. (1 ♂); Mugla, Cetibeli-Marmaris, 1.5.1975, Besuchet & Löbl leg. (1 ♂); Izmir, Agamemnon, 10.5.1975, Besuchet & Löbl leg. (1 ♂).

Anthaxia (s.str.) *nigricollis* Abeille, 1904, stat.nov.

This species was described by Abeille de Perrin (1904) as a variety of *A. fulgurans* (Schrank). *A. nigricollis* is closely related to *A. fulgurans* but it completely lacks sexual dichroism which is well developed in *A. fulgurans* and *A. muliebris*. Abeille noted in his description that all specimens studied were females. Both sexes of *A. nigricollis* really looks like females of *A. fulgurans*. After having studied rich material of both sexes I consider *A. nigricollis* to be a distinct species differing from the most related species by form of elytra, coloration, form of aedeagus and male metatibiae (see key). Abeille's description of var. *nigricollis* is very brief so I present a redescription of this species:

Medium sized, flattened and lustrous species; head golden green (frons black or black-violet in female), pronotum black or black-violet with golden green lateral margins, scutellum green or blue, elytra bright purple with blue green postscutellar stripe reaching to $\frac{2}{3}$ of elytral length; middle part of elytral margins with narrow golden stripe; ventral side, antennae and legs black with golden green (male) or blue (female) lustre; whole body hairless, antennae and legs with extremely short pubescence.

Head small, clypeus straight anteriorly; vertex narrow, 1.3 times as wide as width of eye, frons with deep and wide, longitudinal depression; structure of head consisting of very small, rounded cells without central grains; antennae very short, reaching to $\frac{1}{3}$ of lateral pronotal margins, serrate from the 4th segment;

Pronotum wide, 2.0-2.2 times as wide as long, with extremely deep laterobasal depressions; anterior pronotal margin with slight medial lobe, posterior margin almost straight; lateral pronotal margins regularly rounded or slightly angulated at anterior third; pronotal structure consisting of very prolonged cells at lateral margins; central part of pronotum without reticulation, smooth. Scutellum subcordiform, microsculptured.

Elytra short and wide, somewhat flattened, 1.5-1.6 times as long as wide at humeral part; elytral margins parallel in anterior $\frac{2}{3}$ and regularly arched in posterior third, without apical serration (Fig.8); elytral structure consisting of very fine rugose structure and of longitudinal rows of fine punctures; apex of elytra with deep, sublateral punctures (Fig.8).

Anal segment simply rounded apically, without lateral serration, males sometimes with very small and shallow, almost indistinct apical notch. Legs relatively short and slender, male metatibiae straight on inner margin, with fine and regular praeapical serration (Fig.2). Aedeagus Fig.5.

Anthaxia nigricollis Ab. belongs to *A. dimidiata* (Thunb.) species-group and it is closely related to *A. fulgurans* and *A. muliebris*. It differs from both these species by absence of sexual dichroism, by form of male metatibiae, aedeagus and several further characters given in the following key:

- 1 (2) Elytral apex without deep apical punctures; antennae of male bicolorous (basal segments black, segments 5(6)-11 yellow); ***A. dimidiata* complex** (*A. dimidiata*, *A. podolica*, *A. myrmidon*, *A. morgani*, *A. thalassophila*, *A. togata*, *A. bicolor*)
- 2 (1) Elytral apex with conspicuous, deep apical punctures (Figs. 7,8); antennae of male unicolorous-black; ***A. fulgurans* complex**
- 3 (4) Lateral elytral margins slightly incurved before apex (Fig.7); elytra without longitudinal rows of punctures, with very fine, rugose structure; sexual dichroism well developed: female with purple elytra with blue green postscutellar stripe, male with golden green elytra and blue green postscutellar stripe or with entirely golden green elytra; male metatibiae with shallow, inner, praeapical incurvation which bears regular serration (Fig.1); aedeagus short and robust (Fig.4); 4.0-7.0 mm; Europe (except from England and Scandinavia), Ukraine
..... ***A. fulgurans* (Schrank)**
- 4 (3) Lateral elytral margins regularly arched before apex (Fig.8); elytra with distinct rows of fine punctures; sexual dichroism less developed (both sexes with purple or orange elytra with blue

green postscutellar stripe); male metatibiae either straight with regular serration (Fig.2) or deeply incurved with irregular serration (Fig.3); aedeagus less robust (Figs.5,6)

- 5 (6) Lustrous species without silky lustre and without sexual dichroism: both sexes with purple or violet-purple elytra with blue green postscutellar stripe (like female of *A. fulgurans*); laterobasal pronotal depressions very deep; male metatibiae straight on inner margin, with regular, praeapical serration (Fig.2); aedeagus Fig.5; 4. 3-5.8 mm; south Turkey (Cilic. Taurus)
..... *A. nigricollis* Abeille
- 6 (5) Species with silky lustre and with slight sexual dichroism: female with bright orange elytra with blue green postscutellar stripe, male with orange (very rarely with golden green) elytra with blue green or golden green postscutellar stripe; laterobasal pronotal depressions shallower; male metatibiae with deep inner praeapical incurvation with rough, irregular serration (Fig.3); aedeagus Fig.6; 4.5-6.3 mm, Turkey, Transcaucasus, east Bulgaria
..... *A. muliebris* Obenberger

***Anthaxia (Melanthaxia) tenellavirgo* Bily, 1980**

This subspecies was described from Namrun (Bily, 1980). Several hundreds specimens were collected: Taurus cilic., Bürücek, 7.7.1983, Bily leg. Development of larva in *Abies cilicica*.

***Agrilus dualis* Alexeev & Bily, 1980**

Described from Caucasus and Bulgaria and reported from Yugoslavia, Greece and Crete (Bily & Brodsky, 1982). Four specimens were collected by beating of oaks: Taurus cilic., Çamalan, 3.7.1983, Bily leg. New species for Turkey.

***Agrilus vaginalis philippovi* Alexeev, 1965**

Species described from Ukraine and recorded also from Bulgaria (Bily, 1979). Cappadocia, Avanos, 10.7.1983, Brodsky leg. (1 ex.). New species for Turkey.

***Janthe felix* Marseul, 1865**

Extremely rare species recorded from Arabia, Syria, Israel, Lebanon,

Cyprus and Turkey. Prov. Mersin, Silifke, 2.7.1983, Bily leg. (23 ex.).
All specimens collected by beating of *Phillyrea media*.

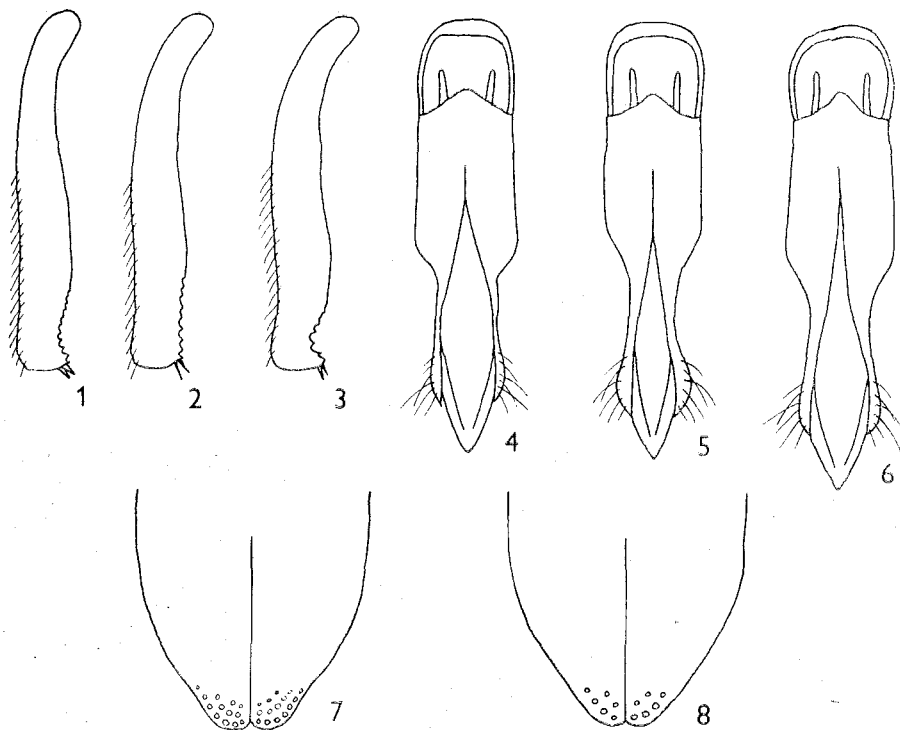
Ö z e t

Türkiye'nin bazı Buprestidae (Coleoptera) türleri üzerinde taksonomik ve biyolojik notlar

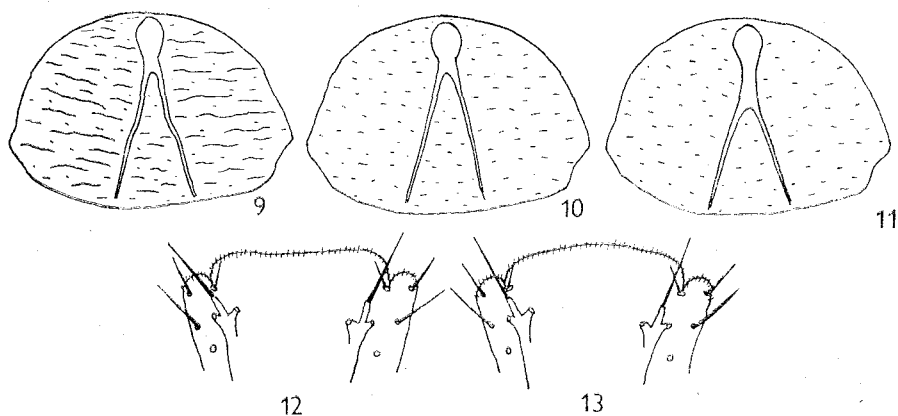
Bu çalışmada *Anthaxia* (s.str.) *nigricollis* stat. nov.'in yeniden deskripsiyonu yapılmış ve tür düzeyine yükseltilmiştir. Bundan ayrı olarak yine bu çalışmada Türkiye'den toplanan bazı Buprestidae türleriyle ilgili faunistik ve biyolojik bilgiler de verilmiştir. Türkiye faunası için yeni kayıt niteliğinde olan 2 türün yer aldığı bu çalışmada ayrıca *Chalcophora detrita* isimli türün larvasının tanımı da verilmiştir.

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Figs. 1-8. 1— male metatibia of *Anthaxia fulgurans*; 2— the same, *A. nigricollis*; 3— the same, *A. muliebris*; 4— aedeagus of *A. fulgurans*; 5— the same, *A. nigricollis*; 6— the same, *A. muliebris*; 7— elytral apex of *A. fulgurans*; 8— the same, *A. nigricollis*.



Figs. 9-13. 9— larval pronotal plate of *Chalcophora detrita*; 10— the same, *C. mariana*; 11— the same, *C. intermedia*; 12— labrum of larva of *C. intermedia*; 13— the same, *C. mariana*.