

## Taxonomical, biological and faunistical notes on Buprestidae and Cleridae from East Mediterranean (Coleoptera)

S. Bily\*

O. Brodsky\*\*

### Summary

Two new species and one new subspecies are described: *Anthaxia (Melantkaxia) scurra* sp.n. from Turkey (Buprestidae), *Ptosima flavoguttata metallescens* ssp.n. from Crete (Buprestidae) and *Trichodes creticus* sp.n. from Crete (Cleridae). New synonymy is proposed: *Anthaxia (Melanthaxia) corynthia* Reiche & Saulcy = *A. nigrojubata rudipennis* Obnb., syn.n. (Buprestidae) and distributional notes as well as bionomical notes are given for some species of Buprestidae and Cleridae including their host plants.

### Introduction

We have a possibility to study extensive materials collected by many collectors in East Mediterranean during the last year. This materials included many hitherto little known and rare species and the collectors gathered also many interesting information on bionomy and faunistic of many species. Also our two collecting trips to Crete brought a rich material including new species and subspecies.

It is our pleasant duty to express our thanks to the collectors who supplied us with this interesting material and to Dr. F. Önder of Izmir-Bornova who enabled us to publish our results in this journal. We are also very indebted to Dr. A. Descarpentries of the Muséum National, Paris and to Dr. G. Scherer of the Zoologische Staatssammlung, Munich for the loan of type materials which we needed for our work.

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\* Dept. of Entomology, National Museum, Prague, Czechoslovakia.

\*\* Czechoslovak Entomological Society, Prague, Czechoslovakia.

Buprestidae

S. Bílý

*Ptosima flavoguttata metalliescens* ssp.n.

This new subspecies differs from *P. flavoguttata flavoguttata* (Illiger) from all by golden or copper metallic tinge of whole body. This metallic tinge is more developed on head and pronotum than on elytra which possess only very slight metallic lustre. Further diagnostic character there is a pronotal, praescutellar depression which is more developed and more distinct but not prolonged anteriorly in medial pronotal groove.

The typical subspecies, *P. flavoguttata flavoguttata* (Ill.) has no metallic tinge, pronotal praescutellar depression is less developed and less distinct but prolonged anteriorly in form of fine medial groove reaching almost to the middle part of pronotum.

There are no further differences between both subspecies including genitalia.

Holotype (♂): Crete, Lefka Ori, Omalos, 27.5.-1.6.1980, Bílý & Brodský leg.

Paratypes: the same collecting data (22 ex.); Crete, Lefka Ori Mts., Omalos, 3.6.1981, S. Bílý leg. (8 ex.); Crete, Ida Ori Mts., Nida, 10.6.1981, S. Bílý leg. (2 ex.); Kreta, Nomos Chanion, Omalos, 1000 m, 27.5.1981, J. Probst leg. (1 ex.).

Holotype deposited in the collection of author, paratypes deposited in the collections of O. Brodský and author.

*Ptosima flavoguttata* (Ill.) is a widespread species distributed from Spain through southern part of Europe, North Africa and Asia Minor to Iran. This species is extremely variable in pronotal and elytral pattern but it has not been possible to distinguish any local form or subspecies. I have studied about 2500 specimens from entire range of species but I failed to find metallic form with large praescutellar depression wherever except from Crete and it enabled me to describe this form as a new subspecies.

*Acmaeoderella* (s.str.) *stepaneki* (Obenberger, 1940) Crete, Lefka Ori, Omalos, 12.6.1981, M. Sláma leg. 1 ex. This rare, endemic species was described after one specimen labelled «Creta, Sfakia, 1938, Štěpánek & Mařan leg.». Unfortunately the host plant was not discovered.

*Latipalpis* (s.str.) *plana* (Olivier, 1790) Crete, Lefka Ori, Ammudarion, 10.6.1981, M. Sláma leg., 1 ex. New record for Crete. In my revision of

genus *Latipalpis* (Bily, 1930) I mentioned the following distribution: South Spain and France, Italy, Tyrolia, Sicily, Sardinia, Corsica. The occurrence of this species on Creta is very remarkable since this most eastern locality is very far of the distributional area of *L. plana*. *Anthaxia* (*Melanthaxia*) *corynthia* Reiche & Saulcy, 1856 *Anthaxia* (*Mel.*) *nigrojubata rudipennis* Obenberger, 1938, syn.n.

A short time ago I studied the holotype of *A. corynthia* Reiche & Saulcy. Comparing it with the holotype of *A. nigrojubata rudipennis* Obenberger I did not find any differences between them and I consider *A. nigrojubata rudipennis* Obn., 1938 to be a conspecific with *A. corynthia* Reiche & Saulcy, 1856 and a junior synonym.

*A. corynthia* is distributed from the Cyclades through South Turkey to Syria, Lebanon and Cyprus and it was very often missinterpreted and mixed with several species from *A. obesa* Ab. species group.

Host plant: *Pinus nigra*, *P. halepensis*.

*Anthaxia* (*Melanthaxia*) *scurra* sp.n.

Small, dark bronze, short and very vaulted species resembling *A. obesa* Ab. As a matter of fact, there are no differences between *A. scurra* sp.n. and *A. obesa* Ab. except from male genitalia which are, of course, quite different (Figs. 1,2).

Head almost flat, slightly wider than anterior pronotal margin; pubescence of head short and white, structure of head consisting of rough microstructure and an indistinct network of polygonal cells without central grains; antennae short, serrate from the 4th segment; the 3rd antennal segment only slightly serrate, as long as the 4th segment.

Pronotum very vaulted with fine laterobasal depressions, twice as wide as long; lateral pronotal margins almost regularly rounded, maximum pronotal width behind the middle; pronotal structure consisting of longitudinally prolonged polygonal cells with flat, indistinct central grains at lateral pronotal margins; middle part of pronotum covered with irregular, rugose structure with indistinct polygonal cells and fine transverse wrinkles on praescutellar part. Scutellum small, triangular.

Elytra short, very vaulted, 1.5 times as long as wide with rough but lustrous grainy structure; humeral swellings small, lateral elytral margins parallel at anterior two thirds and regularly rounded at apical third, without apical serration and without flat discal depressions.

Male mesotibiae slightly enlarged at the very apex with several inner teeth; male metatibiae very slightly incurved on inner margin before apex, with very fine inner praeapical serration.

Aedeagus (Fig. 1) short and slender, pointed apically, parameras not enlarged apically.

Length: 4.0 mm (holotype) and 3.8 mm (paratype); width: 1.8 mm (holotype) and 1.7 mm (paratype).

Female unknown.

Holotype (♂): labelled «Hassa Beley, Asia Minor».

Paratype (♂): labelled «Syrie, Akbes, C.D. 1891». Holotype deposited in the National Museum, Prague, paratype in the collection of author.

*Anthaxia scurra* sp.n. differs from *A. obesa* Abeille by quite different male genitalia which are slender and not enlarged in *A. scurra* sp.n. (Fig. 1) and robust, conspicuously enlarged in *A. obesa* (Fig. 2) I studied Abeille's type material deposited in the Muséum National, Paris. Further but less distinct diagnostic characters there are: somewhat shorter pubescence of head and shorter 3rd antennal segment which is as long as the 4th segment (distinctly longer than the 4th segment in *A. obesa* Ab.)

*Phaenops chalcea* Abeille de Perrin, 1895

Turkey, Torbalı, Küçükagdere, 12.8.1979, 4 ex reared by Dr. F. Önder from *Pinus pinaster*.

A very rare species described from Syria (Akbes).

*Sphenoptera* (s.str.) *minos* Obenberger, 1919.

Creta, Lefka Ori, Omalos, V.1980 and VI.1981. Bílý & Brodský leg., 20 ex.

The endemic species described after one specimen labelled «Kreta», Further specimens (10 ex.) were collected by Dr. J. Mařan in Ida Ori Mts. (V.1934).

Development of larva in roots of *Cirsium* and *Carduus*.

*Agrilus dualis* Alexeev & Bílý, 1980

Crete, Lefka Ori Mts., Omalos, 12.6.1981, M. Sláma leg., 1 ex.; Crete, Ida Ori, Anegia, 11.6.1981, M. Sláma leg., 1 ex.; Greece, Pelop, Krokfae, 17.6.1981, M. Sláma leg., 1 ex. All three specimens collected by beating of oaks.

This species was described after specimens from Caucasus and South Bulgaria. Meanwhile it was collected by Mr. J. Hladil in South Yugoslavia. New record for Yugoslavia, Greece and Crete. This species is probably

distributed also in Turkey but it has not been found there yet. Host plant: various species of *Quercus*.

#### Cleridae

O. Brodský

*Tilus holtzi* Hintz, 1902

Crete, Lefka Ori Mts., Omalos, 27.5-1.6.1980, S. Bílý & O. Brodský leg., 1 ♀, sweeping of steppe vegetation; Crete, Dikti Mts., Pefkos, V.1981, J. Kratochvíl leg., 1 ♂, beating of *Quercus coccifera*.

This very rare species has been known only from the type locality: Gülek, Cilic. Taurus (Hintz, 1902; Corporaal, 1950). New record for Crete and Europe. Further specimens studied deposited in the collection of author are labelled: Anatolien, 30 km östl. von Bingöl, 1200m, 20.6.1972, C. Holzschuh leg., 1 ex.; Anatolien, türkisch Armenien, Prov. Artvin, Şavşat, 3.-11.6.1972, C. Holzschuh leg., 4 ex.

*Korynetes coxalis* Reitter, 1893

Crete, Lefka Ori, Omalos, 27.5-1.6.1980, S. Bílý & O. Brodský leg., 3 ex. (beating of *Quercus coccifera*). A very rare species distributed sporadically in Syria and Crete.

*Trichodes creticus* sp.n.

Head dark green with metallic tinge, of the same width (incl. eyes) as pronotum; puncturation of head very dense, especially near eyes and mouth parts; frons lustrous, slightly depressed, with slight medial, longitudinal ridge; pubescence of head consisting of long and dense yellowish-brown hairs; clypeus brown, lustrous, labrum black, semicordial margined with short and grey hairs; maxillar palpi dark yellow, labial palpi black, their apical segment yellow-margined; eyes with very fine structure and with sparse pubescence, projecting beyond outline of head; ocular incision with very dense puncturation and with grey pubescence; antennae dark, segments 1-5 pale ventrally, basal segment swollen, clubshaped with long pale pubescence; the second segment almost spherical, the third one prolonged; segment 4-8 shortening gradually; segments 9-11 forming large club.

Pronotum distinctly longer than wide, dark green; pronotal pubescence consisting of long yellow-grey hairs; pronotal puncturation fine and sparse at anterior margin and denser and deeper at posterior and lateral margins where punctures are far wider than intervals between them; basal part of pronothum with lustrous medial groove. Scutellum small, semielliptical with fine puncturation.

Pro-meso-and metasternum dark green with metallic lustre, with fine wrinkles and punctures and with long, grey pubescence. Metasternum with well developed sutura sternalis, without any structures in male.

Legs dark green with grey pubescence; femora of both sexes equal, not swollen; tibiae with sharp longitudinal keel, metatibiae of male with long and slender, almost straight, apical spine (Fig. 10); tarsi dark blue green with pale ventral tufts, apical segment paler.

Elytra of male subparallel, those of female slightly widened in posterior half; elytral pattern consisting of brick-red background, two transverse and metallic dark green stripes and an apical spot of the same colouration; anterior transverse stripe usually anchor-shaped, not reaching lateral elytral margins; posterior elytral stripe narrowed at middle of each elytron, not reaching lateral elytral margins; apical spot large, reaching lateral margins; entire elytral suture dark; variability of the elytral pattern as shown in Fig. 3; apical elytral angle rounded in both sexes; punctuation of red parts of elytra small, shallow and sparse (namely at humeral parts) forming shallow, irregular rows; structure of dark parts of elytra more rough, punctures are deep and intervals between them very small, almost wrinkled; elytral pubescence consisting of short, dense, silver-grey hairs, which are darker on green parts of elytra.

Abdominal sternites metallic green with grey pubescence, all sternites red-margined laterally; two apical sternites of male with very wide red margination, those of female completely red only penultimate segment with darkened medial and basal parts (Figs. 12,13).

Aedeagus (Figs. 6,7) comparatively short and wide; parameras with one-sided hooks, without longitudinal keel.

Length: 8.5-14.0 mm (holotype 10.5 mm); width: 2.3-4.0 mm (holotype 2.6 mm).

Holotype (♂): Crete, Kisamos env., 3.-5.6.1980, S. Bílý & O. Brodský leg.

Allotype (♀): the same collecting data.

Paratypes: the same collecting data (8 ♂♂, 15 ♀♀); Crete, Lefka Ori, Samaria, 27.5.-1.6.1980, S. Bílý & O. Brodský leg. (2 ♂, 1 ♀); Crete Lefka Ori Mts., Samari Gorge Nat. Park, 5.6.1981, S. Bílý leg., (2 ♂, 1 ♀); Graecia, Kreta, Ydramia Kavalos, 1.6.1981, J. Probst leg. (6 ♂♂, 3 ♀♀); Graecia, Kreta, Lefka Ori, 600-1000 m, Samaria, 2.6.1981, J. Probst leg. (2 ♂, 1 ♀); Kreta, Paganetti (1 ♂).

Holotype and allotype deposited in the collection of author, paratypes deposited in the collections of S. Bílý, A. Olexa and author.

Variability: manifested by differences in length and by shape of elytral pattern (like in the most species of *Trichodes*) - Fig.3. The anterior transverse stripe is rather invariable, only in one case it is reduced into two small spots. Posterior elytral stripe is narrowed in the middle of each elytron in five cases and it reaches to lateral elytral margins in four cases.

*Trichodes creticus* sp.n. is related with *Trichodes punctatus viridifasciatus* Chevrolat. Both species differ in the following characteristics:

*Trichodes creticus* sp.n.

*Trichodes punctatus viridifasciatus*

Length 8.5.-14.0 mm (44 spec.).

Length 9.0-17.0 mm (112 spec.)

Last two abdominal sternites of male with wide red margination (Fig.12), those of female red, only penultimate sternite with darkened basal and medial parts (Fig. 13).

Penultimate sternite of both sexes with narrow red margination, last sternite completely dark.

Last tergites of female red, anal tergite of male darkened apically.

Last tergites of both sexes dark.

Apical spine of hind tibiae of male slender, almost straight (Fig. 10).

Apical spine of hind tibiae of male robust, hook-shaped (Fig. 11).

Elytra lustrous; puncturation on red parts of elytra shallow and sparse.

Elytra matt; puncturation on red parts of elytra deeper and denser.

Aedeagus short (Figs. 6,7); hooks of parameras simple without lateral carina (Fig. 5).

Aedeagus longer (Figs. 8,9); hooks of parameras with lateral carina (Fig. 4).

### Özet

Doğu Akdeniz'in Buprestidae ve Cleridae (Coleoptera) familyaları üzerinde bazı taksonomik, biyolojik ve faunistik notlar

Bu çalışmada Buprestidae familyasından *Anthaxia (Melanthaxia) scurra* n.sp. (Türkiye) ve *Ptosima flavoguttata metallescens* n. ssp. (Girit) ile Cleridae familyasından *Trichodes creticus* n.sp. (Girit)'un orijinal deskripsiyonları verilmekte, Buprestidae familyasından *Anthaxia nigrojubata rudipennis* Obnb.'in *A. (Melanthaxia) corynthia* Reiche and Saulcy'nin yeni sinonimi olduğu da ortaya konulmaktadır. Ayrıca bu çalışmada her iki familyaya bağlı bazı türlerin yayılışları, konukçuları ve biyolojileri ile ilgili kısa bilgiler de verilmiştir.

## References

- Bílý S., 1930. A revision of the genus *Latipalpis* (Coleoptera, Buprestidae). *Acta ent. bohemoslov.*, 77: 46-54.
- Corporaal, J. B., 1950. Cleridae. In: *Coleopterorum Catalogus*, Suppl. ed. a W. D. Hincks, Pars 23, ed. secunda, W. Junk, Haag: 375 pp.
- Hintz, E., 1902. Beitrag zur Kenntnis der paläarktischen Cleriden. *Deutsch. ent. Zeitschr.*, 1: 227.

Text to figures.

1 - *Anthaxia* (*Melanthaxia*) *scurra* sp.n., aedeagus, holotype; 2 - *Anthaxia* (*Melanthaxia*) *obesa* Ab., aedeagus. 3 - *Trichodes creticus* sp.n., variability of elytral pattern; 4 - *Trichodes punctatus viridifasciatus* Chev., hooks of paramera; 5 - the same, *Trichodes creticus* sp.n.; 6 - parameras of *Trichodes creticus* sp.n.; 7 - aedeagus of *Trichodes creticus* sp.n.; 8 - parameras of *Trichodes punctatus viridifasciatus*; 9 - aedeagus of *Trichodes punctatus viridifasciatus*; 10 - hind tibia of male of *Trichodes creticus* sp.n. (ventral view); 11 - the same, *Trichodes punctatus viridifasciatus*; 12 - last abdominal sternites of male of *Trichodes creticus* sp.n.; 13 - the same, female.



