Redescription and re-evaluation of Chrysobothris leonhardi
ÖBENBERGER, 1916
(Col. Buprestidae)

By
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With 13 figures in the text

Abstract

The species *Chrysobothris leonhardi* ÖBEN. is redescribed and compared with *Chrysobothris affinis* (FABRICIUS, 1794). Differential diagnosis of both the species is given, distinguishing characters are figured.

Introduction

The species *C. leonhardi* ÖBEN. is poorly known and often confused with *C. affinis* (F.); its taxonomic status is not clear at the present time and the original description is insufficient. That is why I decided to publish differential diagnoses of the both species and a redescription of *Chrysobothris leonhardi* ÖBEN.

Acknowledgements

I am obliged to Mr V. KUBÁŇ and K. MAJER (Agricultural University, Brno) for their valuable advices and comments on this paper.

Differential diagnosis

<table>
<thead>
<tr>
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<th><em>C. leonhardi</em> ÖBEN.</th>
<th><em>C. affinis</em> (F.)</th>
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</thead>
<tbody>
<tr>
<td>body outline</td>
<td>shorter, broader</td>
<td>longer, more slender</td>
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<tr>
<td>coloration of:</td>
<td>metallic green blue, side margins igneous-red</td>
<td>bronze</td>
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<tr>
<td>ventral side</td>
<td>cupreous to red-purple</td>
<td>bronze</td>
</tr>
<tr>
<td>head and pronotum</td>
<td>bluish</td>
<td>brown to black</td>
</tr>
<tr>
<td>elytra</td>
<td>(body bicolorous)</td>
<td>(body unicolorous)</td>
</tr>
<tr>
<td>elytral impressions</td>
<td>yellowish</td>
<td>bronze</td>
</tr>
</tbody>
</table>

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**Chrysobothris leonhardi** **Obenberger, 1916**


The species is resembling *C. affinis* (F.) but the former is smaller and evidently bicolorous. Head densely punctate, cupreous to red-purple with green edges around eyes; frons has transverse convexity beset with white hairs; vertex bears impunctate, broad, V-shaped plate; scape as coloured as head, other antennal joints green-blue.

Pronotum transverse, side margins nearly parallelsided, surface as coloured as head, with green margin; sculpture composed of coarse transverse wrinkles. Scutellum has outline of an equilateral triangle; surface finely punctate and deeply coloured. Elytra deep-blue to blackish, relatively short (if compared with *C. affinis*), densely punctate, broadest in middle; each with 3 golden shallow impressions; side margins serrate at two posterior thirds. Posterior basitarsus nearly as long as tarsomeres 2, 3 and 4 together. Sternites bicolorous (metallic green-blue with igneous-red side margins).

♀: Sternum VII has deep semicircular emargination; two apical spines are unexpressive (rather obtuse) and clearly converging. Tegmen as figured (Fig. 13). Phallos with 9 marginal denticles; blunt at apex (Fig. 12).

♂: Sternum VII as in male but apical spines parallelsided or scarcely diverging (Fig. 11). Tergum VIII and sternum VIII are figured (Figs. 9, 10). Ovipositor relatively short and broad, strongly ciliate (Figs. 7, 8).

Measurements: total length of all antennal segments = 11—13 mm; maximal width of elytra = 4 mm; maximal length of elytra = 6—7 mm; maximal length of pronotum =
Figs. 1–13
1–6 — *C. affinis* (F.); 7–13 — *C. leonhardi* Ons. I — ovipositor, ventral view; 2 — ovipositor, dorsal view; 3 — female tergum VIII; 4 — female sternum VIII; 5 — female sternum VII; 6 — phallus, ventral view; 7 — ovipositor, dorsal view; 8 — ovipositor, ventral view; 9 — female tergum VIII; 10 — female sternum VIII; 11 — female sternum VII; 12 — phallus, ventral view; 13 — tegmen, dorsal view. (Abbreviations: cx = coxite, cxs = coxital stylus, ejd = ejaculatory duct, mgd = marginal denticles, ob = oblique bacculus, par = parameras, pb = proctigeral bacculus, pp = pigmented plate; vb = ventral bacculus). Scale = 1 mm.
1.7 mm; maximal width of pronotum = 3.0 mm; minimal distance between inner edges of eyes = 0.5 mm; maximal width of head = 2.0 mm; distance from edge of clypeus to apex of elytra = 9—11 mm.

Structural variability: has not been observed.

Chromatic variability: head and pronotum may be deep-red to red-purple.


The specimens have been compared with the OBENBERGER’s unique holotype (National Museum, Praha) which bears locality date “Bulgarien 1912, VII—VIII, Maglige, leg. HILF”.

**Discussion**

Raison d’être of *C. leonhardi* OBENB. as species propria is confirmed by partly overlapping distributions of the both species. *C. affinis* has been collected in the Bulgarian coastal area (Michurin) and probably seen also in the Bulgarian Macedonia. *C. leonhardi* undoubtedly occurs also at the same habitats. The latter species is best known just from Bulgaria, probably penetrates (through the Struma valley) into Greece and, eastwards (perhaps along shore) into Asia Minor. One specimen (male) was also caught in Hungary at Balaton lake (Kőttsé-Balaton, A. SOBOTA leg., 27. 6. 1951, det. et Coll. S. BíLY). Thus a finding of the species in Czechoslovakia should not be excluded.

**References**


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