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A new microphthalmous species of *Lathrobium* GRAVENHORST from Greece (Insecta: Coleoptera: Staphylinidae: Paederinae)

With 7 figures

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Abstract. *Lathrobium* (s. str.) *wunderlei* sp. n. is described from the Pieria Óri, Greece, and compared with related microphthalmous congeners. The primary and secondary sexual characters are figured. A catalogue of Western Palaearctic microphthalmous species of *Lathrobium* s. str. is presented.

Introduction

1

In the Western Palaearctic region, 26 microphthalmous or anophthalmous species and subspecies of *Lathrobium* s. str. are known to occur in the Alps, southeastern Europe, and Anatolia; most of them have been described from the Balkans, none of them from Greece (ASSING 1996; COIFFAIT 1982; JANÁK 1987; PACE 1983, 1984). All these species are more or less endemic to certain mountain ranges, where they usually occur at intermediate to higher altitudes. Externally, they are extremely similar and characterized by small body size, more or less uniformly yellowish to reddish brown coloration, and distinctly or completely reduced eyes. For a safe identification an examination of the primary and secondary sexual characters is essential.

During a joint excursion with Paul WUNDERLE, Mönchengladbach, to Thessalia and Makedhonía in spring 1998, we collected the first Greek microphthalmous representative of *Lathrobium* s. str. in the Pieria Óri.

***Lathrobium wunderlei* sp. n.**

Holotype ♂, Greece, Makedhonía, Pieria Óri; 1900–2000 m, above Katafigi, NW-slope, 20°15'12" N, 22°10'28" E, 9.IV.1998, leg. M. SCHÜLKE (Deutsches Entomologisches Institut Eberswalde).

Paratypes 4 ♀♀, same data as holotype, leg. WUNDERLE, SCHÜLKE, ASSING (coll. WUNDERLE, SCHÜLKE, ASSING, 1 ♀ in coll. Staatl. Museum für Tierkunde Dresden); 1 ♀, Grecia: Oros Pieria, 1160 m, Vailati e Giachino leg., 10.VI.1992 (Museo Regionale di Scienze Naturali Torino).

Description

Measurements (in mm) and ratios (HT, range; n = 6): Head length from anterior margin of clypeus to neck (HL): 0.67, 0.60–0.67; head width (HW): 0.61, 0.57–0.63; pronotal length (PL): 0.79, 0.71–0.79; pronotal width (PW): 0.59, 0.53–0.59; length of elytra from apex of scutellum

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to hind margin (EL): 0.51, 0.45–0.51; length of aedeagus from basis to apex of ventral process: 0.86; total length from mandibles to hind margin of tergum VIII: 5.1, 4.5–5.4; HL/HW: 1.02–1.10; HW/PW: 1.03–1.09; PL/PW: 1.32–1.37; EL/PL: 0.60–0.65.

In external appearance (colour, size, proportions etc.) highly similar to *L. testaceum* KRAATZ, *L. bosnicum* SCHEERPELTZ, and related species (Fig. 1), but head with very shallow isodiametric microsculpture and therefore $\pm$ shiny, and abdomen with less dense punctation than in *L. bosnicum*.

♂: Sternum IV without modifications; sternum V and VI only near hind margin with very weak impression; sternum VII with distinct, but shallow median impression, its hind margin weakly concave; pubescence of sterna V–VII sparse and directed caudad, in central sternal areas somewhat denser and directed diagonally medio-caudad; sternum VIII with deep and narrow emargination posteriorly (Fig. 5), without distinct impression. Ventral process of aedeagus in ventral view apically rounded; internal sac of median lobe with finely pubescent, $\pm$ transparent structures and with distinctly sclerotized, spine-like apical structure (Figs 2–3); dorsal sclerite of median lobe with broad basis and apically very acute (Fig. 4).

♀: Tergum VIII very distinctive, posteriorly with remarkably long and acute central process (Fig. 6); hind margin of sternum VIII distinctly pointed; segments IX and X as in Fig. 7.

Derivatio nominis We dedicate the species to our dear friend Paul WUNDERLE, together with whom we collected most of the type series.

Comparative notes and phylogenetics

From all the similar species (see catalogue below) *Lathrobium wunderlei* sp. n. is distinguished by the primary and secondary sexual characters, from *L. dilutum*, *L. bodemeyeri*, *L. brignolii* and *L. besucheti* in addition by strongly reduced eyes. The following species differ in more pronounced median impressions of the ♂ sterna V–VIII, more deeply concave hind margin of the ♂ sternum VII, or a broader posterior emargination of the ♂ sternum VIII: *L. weiratheri*, *L. matchai*, *L. bosnicum*, *L. jakupicense*, *L. jeanneli*, *L. leonhardi*, *L. testaceum*, *L. carinthiacum*, and *L. exsul*. In the ♂ of *L. wingelmuelleri*, the pubescence pattern on sternum VIII is distinctive. In *L. coecum*, *L. anophthalmum*, and *L. kaszabi* the ventral process is more separated from the median lobe of the aedeagus; in *L. caprai*, *L. knirschi*, and *L. bosnicum* the dorsal sclerite of the median lobe is very narrow; in *L. kapaonikanum*, *L. jacupicense*, *L. knirschi*, *L. anophthalmum*, *L. coecum*, *L. jeanneli*, and *L. moraveci* the dorsal sclerite is broad and apically less or not acute; in *L. nonvelleri*, *L. matchai*, *L. knirschi*, *L. coecum*, and *L. kaszabi* the internal sac contains numerous distinct setae. In none of these species is the ventral process of the median lobe apically rounded. *L. wunderlei* is distinguished from all the similar species by the apically rounded ventral process (in ventral aspect) of the median lobe and by the long and acute posterior process of the ♂ tergum VIII.

The phylogenetic affiliations of *L. wunderlei* are difficult to assess. The ♂ abdominal sterna are only weakly modified. Regarding the shape and internal structures of the aedeagus, the species is similar to the geographically nearest microphthalmous congeners: *L. matchai* [Macedonia: Peli-ster] and *L. jakupicense* [Macedonia: Jakupica planina]. In the morphology of the ♂ abdominal sterna, however, *L. wunderlei* is more similar to more northern species, e. g. *L. bosnicum*. Among the microphthalmous congeners, a similar, though much less pronounced, posterior process of the ♂ tergum VIII is present only in *L. wingelmuelleri* from northern Italy.

Similar species of *Lathrobium*, of which only ♀♀ are known, occur in the mountainous regions in Macedonia near the Greek (Kaïmakchalán and Galičica) and near the Albanian border (Jablanica), but they have not been described (RAMBOUŠEK 1928).

Distribution and ecology The species is known only from the Pieria Óri in northern Greece, where it was sifted on the northwestern slope near one of the mountain peaks above Katafigi from litter of *Juniperus*, *Pinus*, from grass vegetation and from moss between big rocks, near and under snow.

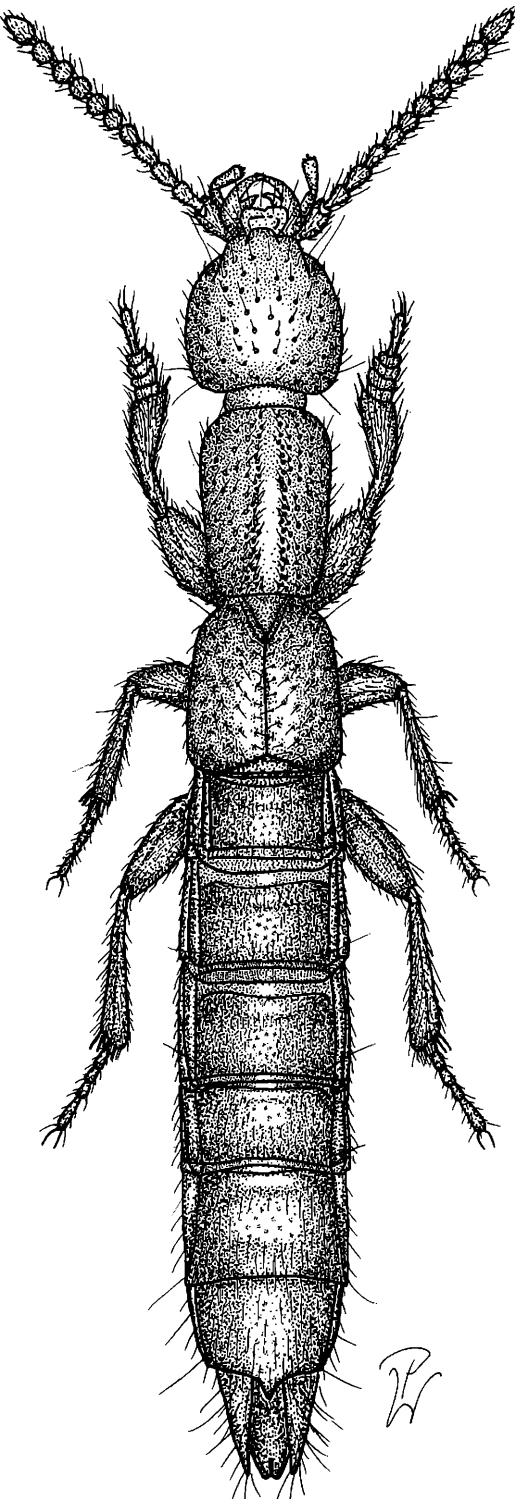
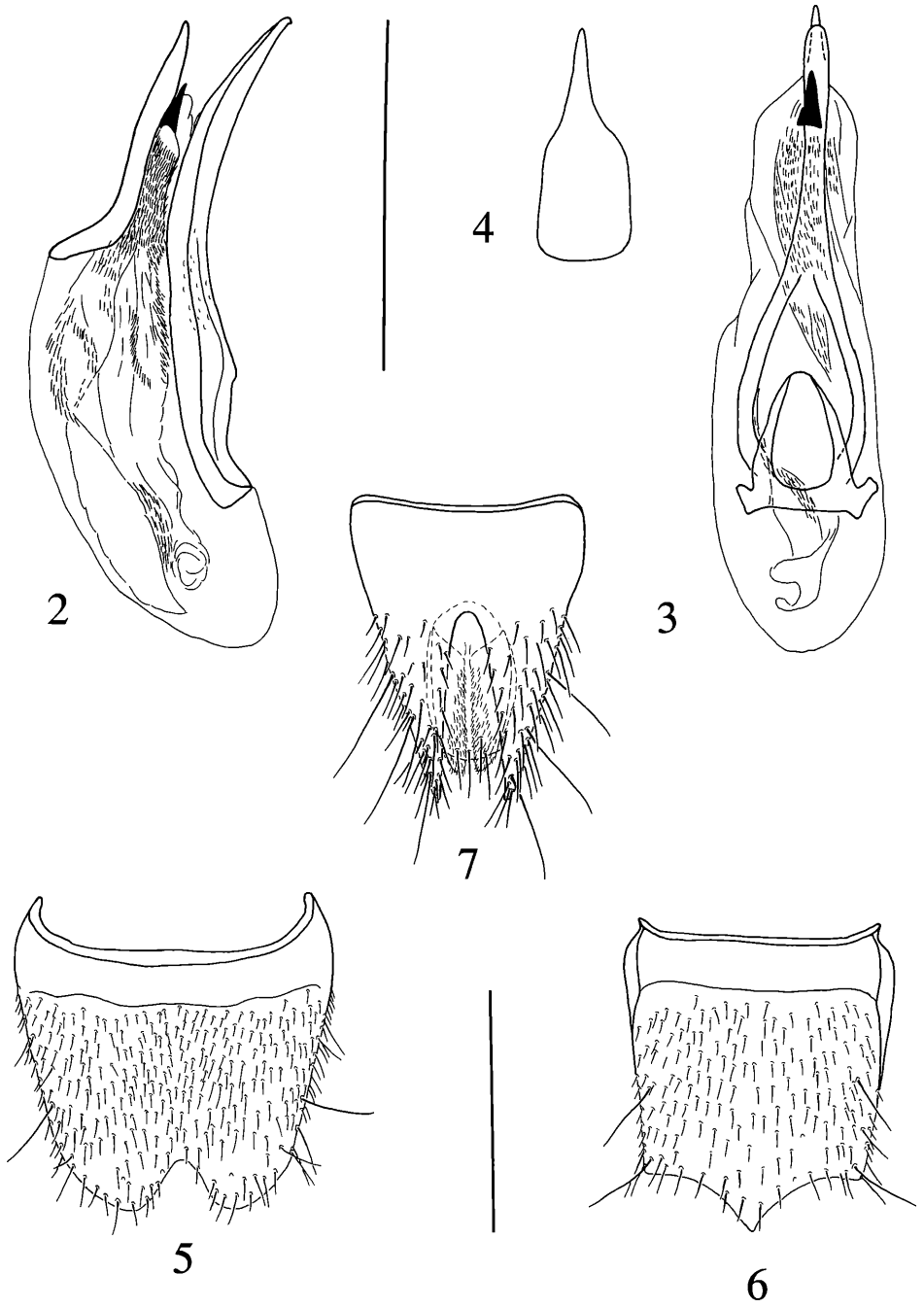


Fig. 1: *Lathrobium wunderlei* sp. n.:
facies of ♀ paratype.
Length of original specimen: 0.53 mm.



Figs 2–7: *Lathrobium wunderlei* sp. n. (2–5: holotype; 6, 7: paratype): aedeagus in lateral (2) and in ventral view (3); dorsal sclerite of aedeagus (4); ♂ sternum VIII (5); ♀ tergum VIII (6) and ♀ segments IX–X (7). Scales (above, for Figs 2–4; below, for Figs 5–7): 0.5 mm.

Catalogue of the Western Palaearctic microphthalous species of *Lathrobium* s. str.

L. dilutum is here included, as several in-litteris names by SCHEERPELTZ are synonyms of this species.

<i>albanicum</i> KOCH, 1937	Albania
<i>anophthalmum anophthalmum</i> FAUVEL, 1885	Serbia
<i>anophthalmum stolense</i> PACE, 1984	Serbia
<i>besucheti</i> BORDONI, 1980	Northern Anatolia: Bolu
<i>bodemeieri</i> BERNHAUER, 1903	Anatolia: Sakarya
<i>bosnicum bosnicum</i> REITTER, 1884	Bosnia-Herzegovina
<i>bosnicum trescavicense</i> APFELBECK	Bosnia-Herzegovina
<i>bosnicum obenbergeri</i> RAMBOUŠEK, 1928	Montenegro
<i>brignoli</i> BORDONI, 1980	Northern Anatolia: Ordu
<i>caprai</i> KOCH, 1936	Nord-Italien
<i>carinthiacum</i> SCHEERPELTZ, 1926	Austria, Slovenia
(= <i>styriacum</i> SCHEERPELTZ, 1957)	
<i>coecum</i> FRIVALDSKY, 1883	Romania: Banat
<i>dilutum</i> ERICHSON, 1839	Western, Central, and Northern Europe
(= <i>kofleri</i> SCHEERPELTZ i. l.)	northern Italy, northern Balkans
(= <i>franzi</i> SCHEERPELTZ i. l.)	
(= <i>microps</i> L. BENICK, 1942)	
<i>exsul</i> ASSING, 1996	Austria
(= <i>strupianum</i> SCHEERPELTZ i. l.)	
<i>jacupicense jacupicense</i> RAMBOUŠEK, 1928	Macedonia
<i>jacupicense graniticole</i> RAMBOUŠEK, 1928	border Kosovo/Macedonia
<i>jeanneli</i> KOCH, 1939	Romania: Bihor
<i>kapaonianum</i> RAMBOUŠEK, 1928	Serbia
<i>kaszabi</i> PACE, 1983	Romania: southern Carpathians
<i>knirschi</i> RAMBOUŠEK, 1928	Serbia
<i>leonhardi</i> BREIT, 1912	Bulgaria
<i>matchai</i> RAMBOUŠEK, 1928	Macedonia
<i>moraveci</i> JANÁK, 1987	Romania: Bihor
<i>nonveilleri</i> PACE, 1984	Montenegro
<i>testaceum</i> KRAATZ, 1857	Austria, Slovenia
(= <i>strupii</i> SCHEERPELTZ i. l.)	
(= <i>microphthalmum</i> SCHEERPELTZ i. l.)	
<i>weiratheri</i> SCHEERPELTZ, 1928	Bosnia-Herzegovina
<i>wingelmuelleri</i> BREIT, 1904	Northern Italy
<i>wunderlei</i> sp. n.	Greece: Pieria Óri

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