Osphya lehnertae sp. nov. from Greece (Coleoptera: Melandryidae)

Osphya lehnertae sp. nov. z Řecka (Coleoptera: Melandryidae)

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Abstract. A new melandryid beetle from the Peloponnese Peninsula, Greece, Osphya lehnertae sp. nov., is described and illustrated.

INTRODUCTION

The genus Osphya Illiger, 1807 is known from Holarctic (18 species), Neotropical (3 species) and Oriental (4 species) regions (Csiki 1924; Pic 1927; Van Dyke 1928; Nikitsky & Pollock 2008, 2010). Fifteen species are reported from the Palaearctic region (Pic 1927; Nikitsky & Pollock 2008). Only three species are known so far from Europe – Osphya bipunctata (Fabricius, 1775) distributed all over Europe, O. vandalitiae (Kraatz, 1868) from the Iberian Peninsula, and O. aeneipennis Kriechbaumer, 1848 found in the Alps and recently in the Iberian Peninsula (Viñolas et al. 2014). The bionomics of the genus is very poorly known; Nikitsky (1992) stated that larvae of O. orientalis (Lewis, 1895) live in rotten wood, maybe in the soil. Below is given a description of a new species from the Peloponnese Peninsula, Greece.

MATERIAL AND METHODS

Exact label data are cited for the type material. Authors’ remarks and addenda are in square brackets, lines of text on the label are separated by a slash (/). All type material is card mounted. Abdomen and aedeagus of holotype and abdomen and ovipositor of allotype are mounted on separate card mounts pinned under the respective specimens. Ovipositor of allotype is mounted in Dimethyl-hydantoin Formaldehyde (DMHF) and this information is written on a separate label with the following text: ‘mounted in Dimethyl Hydantoin Formaldehdy (water soluble medium) by Jiří Vávra, 2013’ pinned under the specimen. Type specimens of Osphya lehnertae sp. nov. are labelled with red labels with the following text: ‘Osphya lehnertae sp. n., HOLOTYPUS, ALLOTYPUS [or] PARATYPUS, det. Ondřej Konvička 2014’.

The specimens included in this study are deposited in the following collections:

BMNH – British Natural History Museum, London, United Kingdom (Max Barclay);
DPPC – Darren Pollock, private collection, Portales, New Mexico, USA;
HBTC – Hervé Brustel, private collection, Toulouse, France;
HNMH – Hungarian Natural History Museum, Budapest, Hungary (Ottó Merkl);
IJLC – Ivo Jeniš, private collection, Lutín, Czech Republic;
JVOC – Jiří Vávra, private collection, Ostrava, Czech Republic;
**SYSTEMATIC PART**

*Osphya lehnertae* sp. nov.

**Type locality.** Greece, Peloponnese, Menalo Mts., 2.2 km south southwest of Vytina village, N 37.648554°, E 22.171074°, 990 m a.s.l.


**Description.** Male (Fig. 1). Body length 7.5–11.6 mm (10.2 mm in holotype), width 2.1–3.3 mm (3.1 mm in holotype). Body parallel-sided. Elytra black with yellow margin from base to apical constriction, and with small, more or less visible dark orange spot on suture before elytral apex. In some specimens apical elytral spot vanishing and present only as partly orange suture, rarely missing completely. Elytra densely pubescent, pubescence long, grey-white to white, darker toward elytral apex. All visible tergites and sternites bicolorous, orange-black and with long, white pubescence. Tergite V quadrangular with rounded sides and apical margin moderately emarginate (Fig. 12). Tergite V with two transverse pale spots formed by small, transversely oriented yellowish-white setae. Apex of sternite V convex and widely U-shaped (Fig. 8).

Head black. Maxillary palps yellowish-brown to reddish-brown. Antennae with 11 antennomeres, gradually darkened from base to apex. First 4–5 antennomeres paler coloured (yellow, yellowish-brown to orange-brown); antennomere IV or V sometimes almost completely brown. Remaining antennomeres black, only XI brownish-black.

Pronotum transverse, convex, and laterally rounded (Fig. 15). Whole pronotum orange with two elongate black spots on disc of variable size and sometimes merged. Pronotum shiny, finely shagreened, sparsely punctate. Interspaces on disc larger than puncture diameter (Fig. 15) and gradually narrower towards sides.

Legs black, fore and mid tibiae basally orange, metatibiae with orange colouration reaching prominent acute spine situated approximately in the middle of inner side of tibia (Fig. 2). Apex of metatibiae with one long orange spine, and two short, acute, thin spines.

Aedeagus narrow and long, approximately as long as half of the body length (Fig. 6), weakly widening from base to midlength, then conspicuously narrowed apically, narrowest...
in about 4/5 of length. Apex broad, elongate-rhomboidal and with tuft of long, curved and yellow setae on each side.

**Female.** Body length 10.5–11.8 mm (11.1 mm in allotype), width 3.2–3.8 mm (3.7 mm in allotype). Body more robust and broader than males, broadest in apical part (Fig. 3). Colouration as in males, only antennomeres I–III and apex of IV reddish-brown and sternite V
orange or orange-black (in one paratype). Metatibiae without inner spine in midlength and only with two short, acute, narrow, apical spines. Tergite V apically strongly narrowed and moderately emarginate (Fig. 13). Sternite V pointed and broadly V-shaped (Fig. 10). Ovipositor in Fig. 4.

**Differential diagnosis.** Males of *O. lehnertae* sp. nov. differ from all other species in metatibia with a prominent inner spine. Regarding colouration, body shape, and sexual dimorphism the new species is most similar to *O. bipunctata*. The two species can be separated by characters given in the Table 1.

<table>
<thead>
<tr>
<th>Character</th>
<th><em>O. lehnertae</em> sp. nov.</th>
<th><em>O. bipunctata</em> (Fabricius, 1775)</th>
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</thead>
<tbody>
<tr>
<td>aedeagus</td>
<td>apex broad, elongate-rhomboidal (Fig. 6)</td>
<td>apex only slightly broad (Fig. 7)</td>
</tr>
<tr>
<td>metatibiae in males</td>
<td>with prominent inner spine (Fig. 2)</td>
<td>without inner spine</td>
</tr>
<tr>
<td>apex of sternite V in males</td>
<td>broadly rounded (Fig. 8)</td>
<td>bluntly pointed (Fig. 9)</td>
</tr>
<tr>
<td>apex of tergite V in females</td>
<td>emarginate (Fig. 13)</td>
<td>rounded (Fig. 14)</td>
</tr>
<tr>
<td>apex of sternite V in females</td>
<td>pointed (Fig. 10)</td>
<td>rounded (Fig. 11)</td>
</tr>
<tr>
<td>pronotum</td>
<td>more shiny with sparser punctuation less shiny with denser punctuation (Fig. 15); interspaces much wider than 16; interspaces narrower than puncture diameter</td>
<td></td>
</tr>
</tbody>
</table>

**Distribution.** Greece (Peloponnes Peninsula): Vytina, Karyes, Kalavryta.

**Bionomy.** Unknown.

**Collecting circumstances.** The adults were beaten from flowering bushes of hawthorn (*Crataegus* sp.) on a grazed meadow at the mouth of a mountain valley near the village of Vytina (Fig. 5) and from flowering bushes of hawthorn (*Crataegus* sp.) on a pasture meadow with small fields and dispersed vegetation. The collection methods of the specimens from Karyes and Kalavryta are unknown.

**Etymology.** The species is dedicated to my girlfriend Jana Lehnertová.

ACKNOWLEDGEMENTS. I would like to thank Jiří Vávra (Ostrava, Czech Republic) for help with description and mounting of specimens, and for comments on and corrections to the manuscript. My thanks go also to Lukáš Sekerka (Praga, Czech Republic) for English translation and comments on the manuscript; Darren Pollock (Portales, New Mexico, USA), Jan Batelka and Jan Růžička (both Praha, Czech Republic) for valuable comments on and corrections to the manuscript; Roman Macík (Fryšták, Czech Republic) for help with preparation of figures; Walter Grosser (Opava, Czech Republic) and Ivo Jeníš (Náko, Czech Republic) for providing material for study; Josef Jelinek (Praha, Czech Republic) for information on the locality and Vlastimil Mihal (Přerov, Czech Republic) for taking photographs used in this paper.

REFERENCES


Figs. 6–16. 6, 8, 12, 15. holotype male of Osphya lehnertae sp. nov.; 10, 13. allotype female of O. lehnertae sp. nov.; 7, 9, 16. male of Osphya bipunctata (Fabricius, 1775); 11, 14. female of O. bipunctata; 6, 7 – aedeagus, dorsal view; 8, 9, 10, 11 – the sternite V; 12, 13, 14 – the tergite V; 15, 16 – punctuation of pronotum. (Figs. 6–16 – photo Vlastimil Mihal).

Obr. 6–16. 6, 8, 12, 15. – samec, holotypus Osphya lehnertae sp. nov.; 10, 13. samice, allotypus O. lehnertae sp. nov.; 7, 9, 16. samec Osphya bipunctata (Fabricius, 1775); 11, 14. samice O. bipunctata; 6, 7 – aedeagus, dorsální pohled; 8, 9, 10, 11 – sternit V; 12, 13, 14 – tergit V; 15, 16 – tečkování štítu. (Obr. 6–16 – foto Vlastimil Mihal).

SOUHRN

V článku je popsán nový druh Osphya lehnertae sp. nov. z čeledi Melandryidae, podčeledi Osphyinae z Řecka. Nalezen byl na Peloponéském poloostrově na třech lokalitách u obcí Karyes, Kalavryta a Vytina. U obce Vytina byla imaga sklepána z kvetoucích hlohů na přepásané louce u ústí horského údolí (obr. 5) a z kvetoucích hlohů na pastvině s malými poličky a rozptýlenou zelení. Samci O. lehnertae sp. nov. se liší od všech ostatních druhů rodu trnem na vnitřní straně zadních holení (obr. 2). Druh je zbarvením, tvarem těla a pohlavním dimorfizmem nejvíce podobný druhu O. bipunctata, od něhož se samci liší zejména tvarem aedeagu (obr. 6, 7) a tvarem pátého sternitu (obr. 8, 9). Samice obou druhů se liší tvarem pátého tergitu (obr. 13, 14). Štít u O. lehnertae sp. nov. je lesklejší, tečkování je zřetelně řidší (obr. 15) než u O. bipunctata (obr. 16). Vzdálenost teček na disku u O. lehnertae sp. nov. je větší než je průměr teček, kdežto u O. bipunctata jsou mezery mezi tečkami menší než jejich průměr.