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Description of a new species of *Idiolispa* FÖRSTER (Hymenoptera, Ichneumonidae, Cryptinae) from Austria

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A b s t r a c t : *Idiolispa vivarii* nov.sp. is described from Austria. The female holotype, which is the only known specimen, has exceptionally long setae on the basal 12 segments of the antenna, on the head and on the mesosoma, but not on the metasoma.

K e y w o r d s : Hymenoptera, Ichneumonidae, Cryptinae, *Idiolispa*, new species, Austria

Introduction

Idiolispa is a rather small genus with 11 known species hitherto (YU et al. 2012). Most species occur in the Holarctic region, but *I. bannapeensis* SCHWARZ was recorded from the Oriental region (SCHWARZ 2005), and *I. corderoi* PORTER from the Neotropic region (PORTER 1993). The European species were revised and keyed by SCHWARZ (1988), treating six species in his paper. SCHWARZ (2018) described the male of the European *I. striata* SCHWARZ.

In June 2022 the management of the Cumberland Wildpark Grünau invited entomologists and botanists to explore the fauna and flora of the natural habitats in the zoo. During this investigation Jonathan Schwarz collected a remarkable specimen of *Idiolispa* which proved to belong to an undescribed species. A second trip in early July to try to collect more specimens in the zoo, undertaken by the author and Jonathan Schwarz, failed. The new species is described below. The morphological terminology follows BROAD et al. (2018).

Description

Idiolispa vivarii nov.sp.

H o l o t y p e (♀): "A, Oberösterreich Grünau im Almtal, Tierpark, 8.6.2022 47°48‘29‘‘N, 13°56‘54‘‘E J. Schwarz", "Holotypus", "Holotypus ♀ *Idiolispa vivarii* SCHWARZ des. Mart. Schwarz ‘22" (Biologiezentrum Linz). The holotype was collected in natural habitats in the zoo "Cumberland Wildpark Grünau".

This species is most similar to *I. villosa* SHENG (known only from China) (SHENG & SUPING 1999) and *I. subalpina* (SCHMIEDEKNECHT) (distributed in North and Central Europe) (SCHWARZ 1988) in respect of the long setae on various parts of the body, but differs in the female sex by its antenna with 12 segments with long setae (only 3 segments

in *I. villosa* SHENG, and none in *I. subalpina* (SCHMIEDEKNECHT)) and with distinctly more than 3 long setae on an antennal segment, and by its distinctly granulate and matt face without transverse ridges. The other two species have the face with transverse ridges on a lustrous or weakly granulated background. *Idiolispa villosa* SHENG has long setae on hind tibia, which are lacking in *I. vivarii* nov.sp. and in *I. subalpina* (SCHMIEDEKNECHT). The latter has the metasoma with some long setae, the second and third tergites with scattered setae on a lustrous and smooth background. In contrast, *I. vivarii* nov.sp. has no long setae on the metasoma, and the second and third tergites with dense setae.

Female (Fig. 1). Antenna with 28 (left antenna) and 29 segments respectively, third segment (without annellus) 1.9 times as long as wide and 0.9 times as long as fourth segment; basal 12 segments with long setae up to twice as long as diameter of antenna (Fig. 2). Head including face, clypeus, mandible, temple, vertex and frons in addition to the normal setae with very long setae, which are longer than diameter of antenna. Face coriaceous and matt, with few indistinct punctures (Fig. 3). Central convexity of face moderately distinct. Clypeus strongly convex, lustrous and partly weakly coriaceous and with few distinct punctures, lower margin sharp and distinctly convex. Mandible with upper tooth distinctly longer than lower tooth. Malar space 1.2 times as long as basal width of mandible. Temple lustrous with scattered fine punctures. Frons lustrous with upper half weakly coriaceous and with scattered fine punctures. Shortest distance between hind eye and ocellus (OOL) 1.3 times diameter of distance between hind ocelli (POL). Head behind the eyes weakly narrowed (Fig. 4).

Lateral part of pronotum rugose and with some punctures above; epomia only weakly indicated. Mesoscutum with some long setae, mainly lustrous and with a smooth background, but anteriorly coriaceous and matt, mesoscutum with both fine and with coarse punctures; notaulus only weakly indicated (Fig. 5). Scutellum with a smooth background and with long setae, apically short longitudinal ridges, lateral carina extending more than half length of scutellum. Mesopleuron with transverse striation and some punctures (mainly dorsally), background lustrous and partly very weakly coriaceous; speculum lustrous and with punctures. Mesopleuron and mesosternum with few long setae. Metapleuron distinctly rugose, without exceptional long setae.

Propodeum short, lustrous and with distinct rugosity, without long setae, both transverse carinae distinct, posterior transverse carina absent medially (Fig. 6). Spiracle oval.

Coxae, trochanters, trochantelli and femora with long setae below, but hind femur with only few and less conspicuous long setae. Mid and hind coxae distinctly coriaceous dorso-laterally. Hind femur 5.0 times as long as wide. Fore wing with areolet weakly narrowed anteriorly; nervulus interstitial.

Metasoma with weak granulation and lustrous and without long setae. Postpetiolus with some very fine and scattered punctures. Second metasomal tergite evenly and densely setaceous (Fig. 7). Ovipositor sheath about 0.5 times as long as hind tibia. Ovipositor without a distinct nodus, its tip without teeth ventrally (Fig. 8).

Coloration: black. White are antennal segments 7-12 above, metasomal tergites 5-6 dorso-apically. Hind leg with tarsal segments 2-4 dorsally partly whitish. Orange are mandible before teeth narrowly, metasomal tergites 1-2 entirely and third tergite except wide hind margin, trochanters, femora narrowly basally, fore femur apically, tibiae and tarsi partly. Tarsi partly brownish. Pterostigma dark brown.

Body length: 6.8 mm.

Male unknown.

E t y m o l o g y : The species name "vivarii" is Latin and means "from the zoo", where the holotype was collected.

B i o l o g y : unknown. Several *Idiolispa* species have been reared from the egg sacs of spiders (e.g. SCHWARZ & SHAW 1998, YU et al. 2012).

Acknowledgment

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Zusammenfassung

Es wird eine neue *Idiolispa*-Art aus Österreich beschrieben: *Idiolispa vivarii* nov.sp. Diese Art zeichnet sich im weiblichen Geschlecht durch verlängerte Haare am Kopf einschließlich der basalen 12 Fühlerglieder und des Mesosomas einschließlich der basalen Beinteile aus. Am Metasoma sind dagegen keine verlängerten Haare vorhanden. Das Gesicht ist gekörnelt und matt und ohne Querrunzeln oder Querstreifen. Das 2. Segment des Metasomas ist dicht behaart. Der Holotypus, das einzige bekannte Individuum, wurde im Cumberland Wildpark Grünau gefunden.

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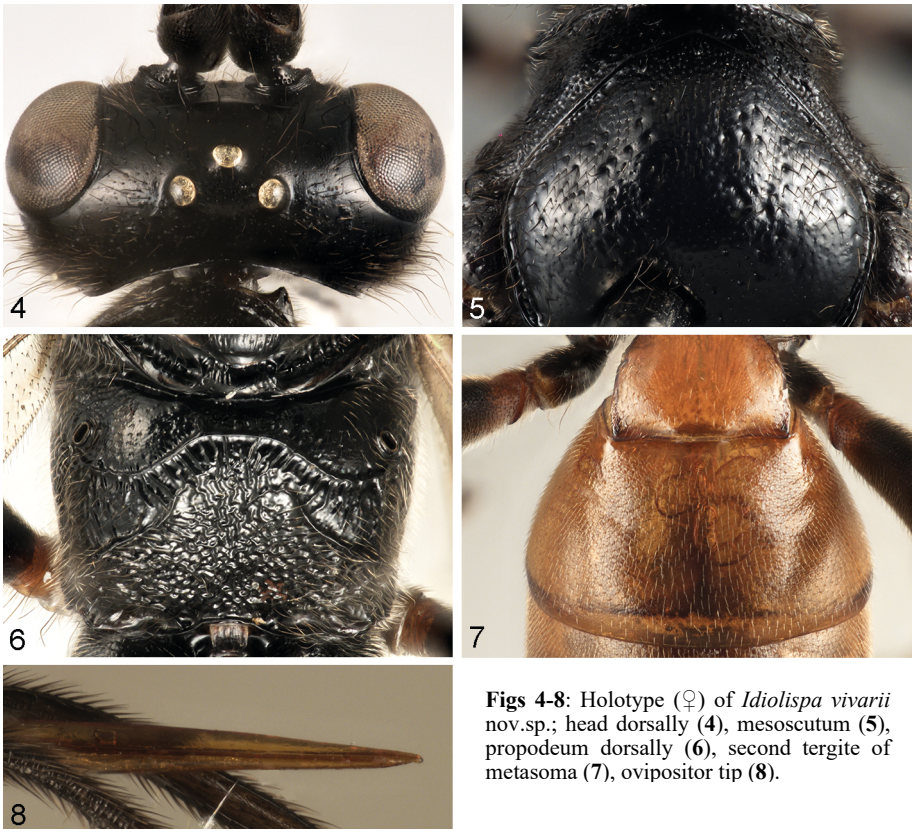
Figs 1-3: Holotype (♀) of *Idiolispa vivarii* nov.sp.; habitus laterally (**1**), base of antenna dorsally (**2**), head in facial view (**3**).



Figs 4-8: Holotype (♀) of *Idiolispa vivarii* nov.sp.; head dorsally (**4**), mesoscutum (**5**), propodeum dorsally (**6**), second tergite of metasoma (**7**), ovipositor tip (**8**).

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