

**A new species of *Entedon* Dalman, 1820 from Uzbekistan
(Hymenoptera: Eulophidae, Entedoninae)**

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**Новый вид рода *Entedon* Dalman, 1820 из Узбекистана
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Abstract. A new species of the *sparetus*-group of the genus *Entedon* Dalman (Chalcidoidea, Eulophidae, Entedoninae), *E. tobiassi* sp. n., is described from Uzbekistan. The new species is characterized by the combination of a rather long female metasoma, apical margin of fore wing with a short fringe of setae, and flagellum of female antenna with two last segments closely attached, forming a clava. *E. tobiassi* is the most similar to *E. zerovae* Gumovsky (Tadjikistan) in having rather a long female metasoma, however, *E. zerovae* has an antennal flagellum with all segments free. *E. tobiassi* differs also from the widespread Palearctic species *E. sparetus* Walker by having a much longer female metasoma and long funicular segments.

Key words. Hymenoptera, Eulophidae, Entedoninae, *Entedon*, new species, Uzbekistan.

Резюме. Дано описание нового вида *Entedon tobiassi* sp. n. из Узбекистана, который принадлежит к группе *E. sparetus* (Chalcidoidea, Eulophidae, Entedoninae). Новый вид характеризуется сочетанием длинной метасомы самки, наличием краевой бахромки переднего крыла и слитыми двумя последними члениками жгутика усика самки (булава усика двучлениковая). Длинной метасомой самки *E. tobiassi* sp. n. напоминает *E. zerovae* Gumovsky (Таджикистан), однако у *E. zerovae* все членики жгутика самки обособленные. *E. tobiassi* sp. n. также отличается от широко распространенного в Палеарктике *E. sparetus* Walker наличием длинной метасомы самки и более длинными члениками жгутика усика.

Ключевые слова. Hymenoptera, Eulophidae, Entedoninae, *Entedon*, новый вид, Узбекистан.

Introduction

Entedon Dalman, 1820 (Eulophidae) is one of the most species-rich genera of the subfamily Entedoninae (more than 160 described and at least 250 species in World fauna). However, only a few reviews on regional faunas of the genus have been published (e.g. Erdős, 1944; Graham, 1971; Gumovsky, Boyadzhiev, 2003), and many species remain undescribed. This paper contains a description of a peculiar new species of the genus *Entedon* from Uzbekistan.

The morphological terms follow Bouček (1988) and Gibson et al. (1997). Main body measurements and abbreviations follow Gumovsky and Boyadzhiev (2003). F1–F3 are funicular segments.

Scanning electron microscopy was carried out in the Mineralogy Department of the Natural History Museum (London) using an ISI ABT-55 low-vacuum SEM which allows imaging of uncoated specimens. The types of the new species are deposited in the collection of the Zoological Institute of Russian Academy of Sciences, St. Petersburg, Russia (ZISP).

***Entedon tobiasi* sp. n.** (Figs 1–3).

Diagnosis. This species belongs to the *sparetus*-group of *Entedon*, because the frontal sulcus is absent, anterior margin of clypeus truncate or very weakly produced, fore tibia with single dorsal pale stripe, and lateral propodeal sulcus incomplete. *E. tobiasi* sp. n. is the most similar to *E. zerovae* Gumovsky (Tadjikistan) (Gumovsky, 1995) in having rather long metasoma of female (about 6.0 times as long as broad in *E. tobiasi* sp. n., and about 5.0 times as long as broad in *E. zerovae*). However, females of *E. zerovae* have antennal flagellum with all segments free, whereas in *E. tobiasi* the two last flagellar segments are closely attached and forming 2-segmented clava, as in all other known species of *Entedon*. *E. tobiasi* sp. n. differs also from the widespread Palearctic *E. sparetus* Walker by having the long metasoma of female (just 1.5–3.7 times as long as broad in *E. sparetus*), and longer funicular segments.

Description. Female. Length 7.0–8.75 mm. Body metallic green, frons with coppery tint. Whole antennae dark. Legs dark, except knees, first three tarsomeres of hind and mid legs, and frontal longitudinal stripe on fore tibia. Gaster with oval membranous areas adjacent to petiolar insertion point, pale.

Head in dorsal view 2.34–2.5 times as broad as long; POL : OOL : MDO : OCL = 18 : 10 : 6 : 1 or 25 : 10 : 7 : 2. Occipital margin traced by distinct elevation being the most sharp in its mid part. Eye with sparse pilosity, eye height 1.4–1.76 times as large as malar space. Head in frontal view 1.4 times as broad as long. Interocular distance 1.5 times as long as eye breadth. Malar space with a narrow row of meshes. Mouth cavity 1.7 times as broad as length of malar space. Clypeus reticulate, its anterior margin weakly produced. Antennae inserted almost at the level of ventral eye margins. Antennal scape 5.0–6.2 times as long as broad; combined length of pedicel and flagellum 0.9 times as long as breadth of head; pedicel about as long as broad. F1 = 4.4–5.0, F2 = 2.5–2.6, F3 = 1.8–1.9 times as long as broad; clava 2-segmented, with short terminal spine, 2.6–2.75 times as long as broad.

Mesosoma about twice as long as broad, its dorsum evenly reticulate. Pronotal collar very weakly marked off, postero-lateral corners of pronotum evenly rounded. Mesoscutum 1.4–1.5 times as broad as long, notaular depressions shortly channeled posteriorly. Scutellum 1.2 times as long as broad, somewhat longer than mesoscutum. Axillula flat. Propodeal surface weakly reticulate, median carina complete, with rather shallow depressions along; lateral sulcus incomplete; supra-



Fig. 1. Habitus of *Entedon tobiasi* sp. n. (♀, holotype).

coxal flange narrow; spiracular elevation with elongate blunt projection below, propodeal callus with 1 long and 10 short setae. Metapleuron with comparatively acute protrusion. Hind coxa smooth dorsally. Fore femur 5.7 times as long as broad, fore tibia 8.5–9.0 times as long as broad; mid femur 6.5 times as long as broad; mid tibia 13.0 times as long as broad, spur of mid tibia 1.2–1.3 times as long as breadth of tibia; hind femur about 5.0 times as long as broad; hind tibia about 20.0 times as long as broad, spur of hind tibia 0.7 times as long as breadth of tibia, 4.3 times as long as dorsal margin of hind basitarsus. Hind tarsus slightly shorter or slightly longer than hind tibia; fore and mid tarsi generally only slightly shorter than their tibiae. Ratio of tibiae and tarsi in holotype: fore tibia : tarsus — 70 : 65; fore tarsomeres — 12 : 16 : 14 : 18; mid tibia: tarsus — 105 : 100; mid tarsomeres — 25/30 (dorsal/ventral margins) : 30–35 : 17 : 20; hind tibia — 202 : 135; hind tarsomeres — 30/40 : 45 : 23 : 25.

Fore wing 2.4–2.5 times as long as broad; costal cell bare, comparatively wide, 4.0 times as long as broad, slightly shorter than marginal vein; submarginal vein with 2 dorsal setae, stigmal vein short; postmarginal vein rather short, about twice as long as stigmal vein; speculum open; fringe of apical margin short.

Metasoma. Petiole reduced, strongly transverse. Gaster 2.1–2.2 times as long as head and mesosoma combined, about 6.0 times as long as broad.

Male unknown.

Material. Holotype: ♀, Uzbekistan, Zhamansay Range, Kyzylkum Desert, 22 IV 1976 (Falkovich). Paratypes. 1 ♀, with label as holotype; 1 ♀, Kyzylkum Desert, Ayakgudiumdy, sweeping, 7 IV 1966 (Falkovich).

Distribution. Uzbekistan.

Biology. Host unknown.

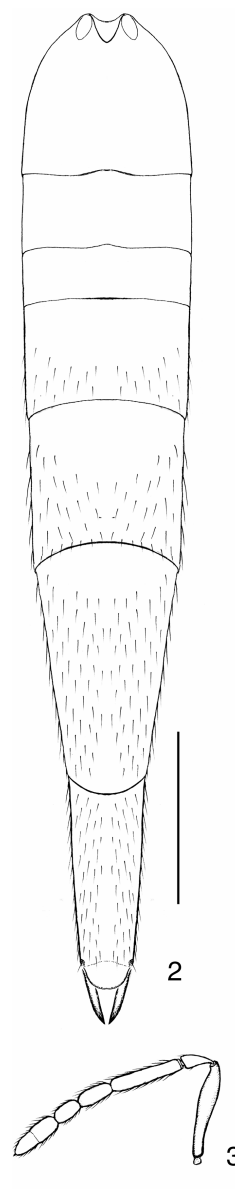
Etymology. This new species is named for Prof. V.I. Tobias, in recognition of his contribution to the knowledge of parasitic Hymenoptera.

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Figs 2, 3. *Entedon tobiasi* sp. n. (♀, holotype). 2 — metasoma, dorsal view; 3 — antenna, lateral view. Scale 1.0 mm.