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A NEW SPECIES OF THE GENUS *COLLYRIA* (HYMENOPTERA, ICHNEUMONIDAE, COLLYRIINAE) FROM ARMENIA

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A New Species of the Genus *Collyria* (Hymenoptera, Ichneumonidae, Collyriinae) from Armenia.

Varga, O. — *Collyria montana* sp. n., from Armenia is described and illustrated. It is the first record of the genus *Collyria* from the country and eighth known Western Palaearctic species.

Key words: Darwin wasps, Pimpliformes, parasitoids, taxonomy, Western Palaearctic.

Introduction

The subfamily Collyriinae Cushman, 1924 is a small group of pimpliform Darwin wasps (Hymenoptera, Ichneumonidae: Pimpliformes) comprising only 12 species with a predominantly Palaearctic distribution. Most of the species belong to the genus *Collyria* Schiödte, 1839, while the other two known genera, *Bicurta* Sheng, Broad & Sun, 2012 and *Aubertiella* Kuslitzky & Kasparyan, 2011, are monotypic (Yu et al., 2016). Among the seven Western Palaearctic species only two, *Collyria coxator* (Villers, 1789) and *C. trichophthalma* (Thomson, 1877), are common and widely distributed, while the others have mainly Mediterranean distributions (Izquierdo & Rey del Castillo, 1985; Gürbüz & Kolarov, 2006; Yurtcan & Kolarov, 2015).

Collyriines are a rare example of egg-larval endoparasitism among ichneumoids (Salt, 1931; Broad et al., 2018). Detailed biology is known for two *Collyria* species, *C. coxator* and *C. catoptron* Wahl, 2007, which parasitising the cephine sawflies (Cephidae), *Cephus pygmeus* (Linnaeus, 1767) and *C. fumipennis* Eversmann, 1847 respectively, whose larvae bore in the stems of grasses (Salt, 1931; Wahl et al., 2007).

Material and methods

The specimens used in this study are deposited in the collection of the I. I. Schmalhausen Institute of Zoology, NAS of Ukraine, Kyiv (SIZK). Images were taken using a Leica Z16 APO microscope equipped with Leica DFC 450 camera and processed using LAS Core software at SIZK. Morphological terminology follows Broad et al. (2018).

Collyria montana Varga, sp. n. (figs 1–7)

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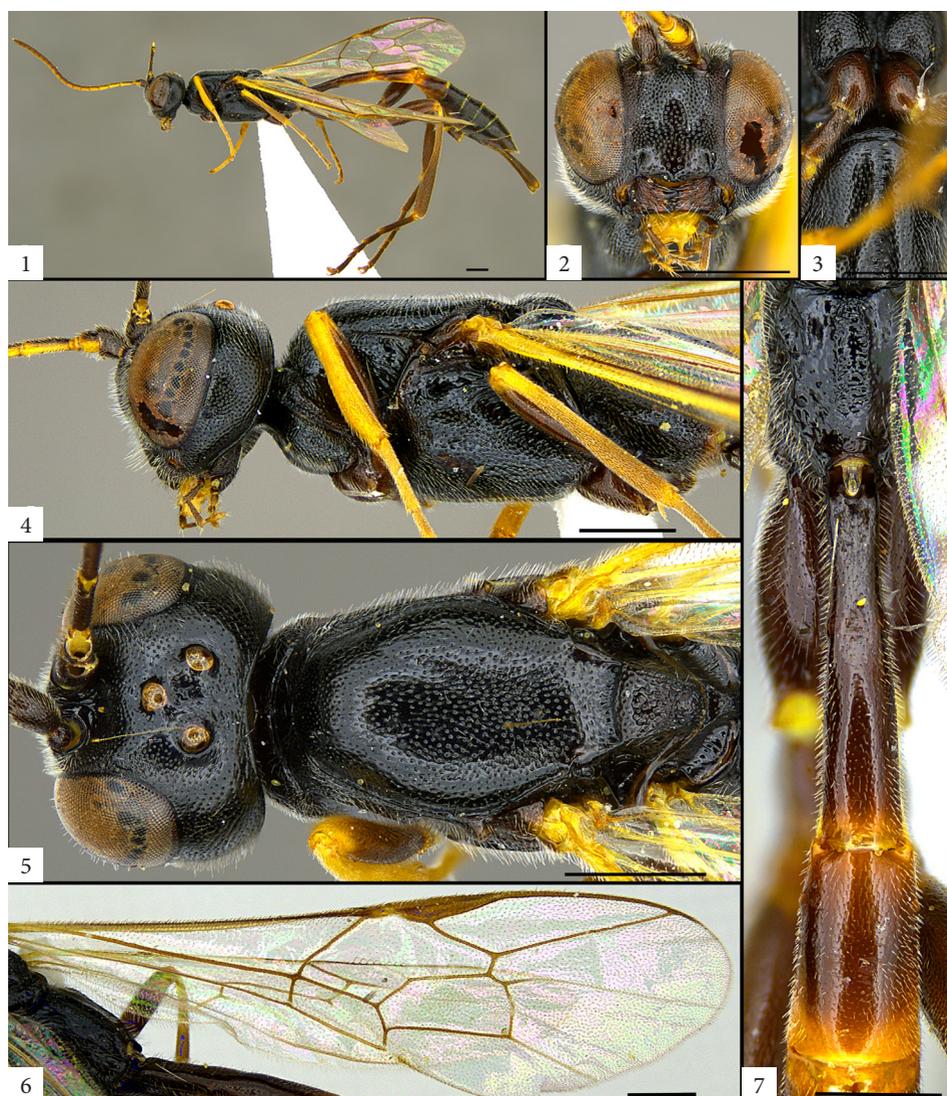
Material examined. Type. Holotype ♀: **Armenia**: «Армения, Хосровский заповедник, Ведийский участок, 1400 м, кошение» [Khosrov State Forest Reserve, Vedi area, 1400 m, sweeping], 06.06.1982 (M. Nesterov) (SIZK). Paratypes: 2 ♀, same locality and date as the holotype (SIZK). Other material: idem, 1500 m, 03.06.1982, 1 ♀ (M. Nesterov) (SIZK).

Diagnosis. The new species is characterized by the following combination of characters: face and temple densely punctate; antenna bicolor, with 18–19 flagellomeres; genal carina joining hypostomal carina before the mandibular base at an acute angle; epicnemial carina unmodified (not prominent between fore coxae); scutellum densely punctate, rugulose apically, without apical tubercle; metapleuron densely punctate; propodeum smooth and shiny, rugulose between lateromedian longitudinal carinae; fore wing with vein 1cu-a strongly basad to M&RS; first metasomal tergite 4.2× longer than its apical width, minutely punctate, shiny; ovipositor downcurved, the length from tip of hypopygium about 0.8 × the length of hind tibia.

Collyria montana sp. n. is similar to *C. iberica* Schmiedeknecht, 1908 and *C. isparta* Gürbüz & Kolarov, 2006 in having an unmodified epicnemial carina (not prominent between fore coxae). The new species differs from *C. iberica* by the shorter antenna with 18–19 flagellomeres, which are yellow ventrally (in *C. iberica*, antenna entirely black, with 21–23 flagellomeres); more abundant yellow coloration of legs. From *C. isparta* it differs by the unmodified (without apical tubercle) densely punctate scutellum; fore wing with vein 1cu-a strongly basad to M&RS (opposite in *C. isparta*). From both species *C. montana* sp. n. differs by the punctate metapleuron and smooth propodeum (reticulate-punctate in *C. iberica* and *C. isparta*). The original description of *C. sagitta* Kuzin, 1950 is scarce and nothing is said about the shape of the epicnemial carina and the number of antennal flagellomeres in this species. Nevertheless, it seems that *C. sagitta* has a more sculptured body: temple and vertex rugulo-punctate and wrinkled (densely punctate in *C. montana* sp. n.); metapleuron rugulose (densely punctate in *C. montana* sp. n.); first metasomal tergite weakly rugulo-punctate (minutely punctate in *C. montana* sp. n.) and colouration of legs and metasoma more abundant orange.

Description. Holotype. Female (fig. 1). Body length approximately 9 mm, fore wing 5.5 mm.

Head (figs 2, 4–5) generally shiny, densely punctate and pubescent. Antenna with 18 flagellomeres (one antenna broken apically), first flagellomere 4.0× as long as wide. Face about 0.75× as long as wide, convex below antennal sockets, shiny, densely punctate, more densely punctate along orbits. Clypeus weakly convex, about 0.45× as long as wide, weakly separated from face and with the same sculpture, its apical margin with tubercle; tentorial pits indistinct. Malar space short, about 0.4× as long as the basal width of mandible; subocular sulcus indistinct. Mandibular teeth more-or-less equal. Frons densely punctate



Figs 1–7. *Collyria montana* sp. n., holotype female; 1 — habitus, lateral view; 2 — head, frontal view; 3 — epicnemial carina, ventral view; 4 — head and mesosoma, lateral view; 5 — head and mesosoma, dorsal view; 6 — wings; 7 — propodeum and metasomal tergites 1–2, dorsal view. Scale bar = 0.5 mm.

with few wrinkles near the antennal sockets. Vertex densely punctate; maximum diameter of lateral ocellus $0.75\times$ as long as ocellar-ocular distance. Occipital carina distinct, genal carina joining hypostomal carina before the mandibular base at an acute angle, this area weakly concave. Temple weakly narrowed behind eye.

Mesosoma (figs 3–5, 7). Propleuron densely punctate. Pronotum shiny, densely punctate anteriorly (before epomia) and along upper margin, crenulate along posterior margin; epomia present, but not reaching the upper margin of the pronotum. Mesoscutum densely punctate; notauli present, but weak, reaching the middle of mesoscutum. Scutellum weakly convex, anteriorly densely punctate, posteriorly rugulo-punctate, without apical tubercle. Mesopleuron densely punctate except rugulose in upper posterior half and smooth speculum; epicnemial carina present, not modified ventrally (not prominent between fore coxae), reaching the anterior margin of mesopleuron. Metapleuron densely punctate on weakly

granulate background; submetapleural carina present on anterior 0.5 of the metapleuron; pleural carina present. Propodeum smooth and shiny, with only lateromedian longitudinal carinae present on basal 0.8 of the propodeum, rugulo-punctate between them.

Legs with coxae and tibia slender compared to stout femora; hind femur 3.2× longer than wide, fifth tarsomere about 1.5× as long as third tarsomere.

Wings (fig. 6). Fore wing with areolet opened (vein 3rs-m absent); vein 2rs-m about as long as the distance between 2rs-m and 2m-cu; vein 1cu-a weakly basad to M&RS. Hind wing with distance between distal abscissa of Cu and M about 0.4× the length of vein cu-a.

Metasoma (fig. 7) generally weakly sculptured. First tergite about 4.2× as long as apical width, minutely punctate; dorsolateral and lateromedian carina absent. Second tergite about 1.6× as long as apical width, weakly granulate posteriorly. Remaining tergites weakly granulate. Ovipositor downcurved, the length from tip of hypopygium c. 0.8× the length of hind tibia.

Colouration. Body generally black with partly yellow legs and some tergites orange. Head and mesosoma black; antenna ventrally, fore femur partly, fore tibia and tarsus entirely yellow; coxae, trochanters, middle and hind femora, hind tibia except base and hind tarsus dark brown. Metasomal tergites 1–3 dark brown except orange apices of tergites 1–2 and base of third tergite; the remaining tergites black; all tergites apically narrowly banded with yellow. Pterostigma and veins brown. Ovipositor sheaths black.

Male. Unknown.

Variability. Antenna with 18–19 flagellomeres; metasomal tergites 2–3 may be almost entirely orange; yellow colouration of hind tibial base may extend ventrally up to the middle. One female (not included in the type series) has comparatively smaller size, stout first tergite and completely smooth propodeum with no carinae, otherwise is the same.

Distribution. Armenia.

Etymology. This species is named after the type locality, the mountains of Armenia, where it was collected.

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