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## First record of the genus *Dolichomitus* SMITH, 1877 from the Afrotropical region with description of a new species

(Hymenoptera: Ichneumonidae: Pimplinae)

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### Abstract

*Dolichomitus becki* sp.n. is described as a new species from Ethiopia. It belongs to the *Dolichomitus* species group in which the lower mandible tooth is larger than the upper tooth and is especially characterized by the completely black middle- and hind legs.

### Introduction

*Dolichomitus* species are slender ichneumonid parasitoids with long ovipositors. Especially the larger females are quite impressive insects that can be up to 8 cm long, including the ovipositor. As far as is known they parasitize xylophagous Coleoptera larvae, usually Cerambycidae, sometimes Buprestidae (AUBERT 1965, BOLU 2008) and in one case Curculionidae: *Acalles cinereus* WOLLASTON in *Euphorbia mellifera* on the island of Madeira (HORSTMANN 2003).

*Dolichomitus* species are known from four geographic regions: from the Oriental region 17 species are known (PHAM et al. 2012, YU et al. 2012), from the Neotropical 13 species, from the Nearctic 20 species and from the Palaearctic 40 species (YU et al 2012, ZWAKHALS 2010). So until now no *Dolichomitus* species have been described from the Afrotropical or Australasian regions (YU et al. 2012).

A new *Dolichomitus* species from Ethiopia is reported, based on a single female collected in a forest in the Bale Mountains, about 400 km SE of Addis Ababa. At the collecting site the dominant trees are *Juniperus* sp. and *Hagenia abyssinica*, with undergrowth of *Hypericum revolutum*.

### *Dolichomitus becki* sp. n.

Holotype female, SE Ethiopia 19-23-V-[20]08. Bale, Bale Mt. 3100-3300m ca 12 km SW Goba. [leg.] R.BECK, M.DIETL, G.RIEDEL. In the collection of the Zoologische Staatssammlung, Munich. Fig. 1.

Body length 11.6 mm, ovipositor sheath 13 mm, fore wing 9 mm.

Head: flagellum with 27 segments, as long as mesosoma + tergite 1+2 + half of tergite 3. First flagellomere 1.3x as long as second. Clypeus about 3x as wide as long, centrally strongly emarginate. Malar space about 0.3x basal width of mandible. Face 1.5x as wide as long, closely and rather coarsely punctate with distance between punctures equal to their diameter. Mandibles polished and almost impunctate with lower tooth longer than upper tooth. Frons rather coarsely punctate and transverse rugulose-striate above antennal sockets. Vertex rather coarsely punctate and somewhat rugose-punctate behind ocelli (Fig. 2). Temples roundly narrowed, 2/3 as long as eye (Fig. 2), their lateral part finely punctate and polished with distance between punctures about twice their diameter. Diameter of hind ocellus equal to ocellar-ocular distance. Distance between hind ocellus and occipital carina 3x diameter of hind ocellus.

Mesosoma: notauli strongly developed, reaching to centre of mesoscutum. Mesoscutum and scutellum closely punctate and shiny, together 1.5x as long as wide. Mesopleuron closely and rather coarsely rugulo-

punctate, speculum highly polished. Epicnemial carina very weak, faintly visible until midheight of mesopleuron, apex far removed from front edge of mesopleuron. Dorsal part of propodeum without carinae, coarsely punctate basally and transversely rugulose in apical half. Combined area basalis and area superomedia discernible as a shallow furrow that is transversely rugulose in its apical half. Lateral areas of propodeum distinctly rugulose. Pterostigma of fore wing 4x as long as wide, areolet with equal transverse veins. Nervellus of hind wing broken at middle.

Metasoma: first tergite 1.2x as long as wide apically. Dorsal surface slightly evenly convex without median longitudinal carinae and without a differentiated median area, closely punctate over its entire surface (Fig. 3). Second tergite about as long as first and about 1.2x as wide as long, with a pair of oblique grooves at basal half of tergite. Tergites 2-5 closely punctate, with a pair of rather weak central swellings which are equally punctate as their surroundings. Tergites 6-8 superficially punctate with last tergite impunctate.

Lower ovipositor valve with usual dorsal lobe partly enclosing upper ovipositor valve (characteristic for the genus). Central part of lobe has a sharp reclivous front edge, followed by two reclivous grooves and one slightly inclivous groove (Fig. 4). Apical part after incision which delimits central part of lobe with about four vertical grooves. Legs slender, hind femur 5x as long as wide. Hind tarsus as long as tibia. Last segment of hind tarsus 2.5x fourth tarsomere and about 0.8x length of first flagellomere.

Colour: head, including clypeus and mandibles black, palpi fuscous. Mesosoma and metasoma black. Tegula and base of fore- and hind wing white. Legs completely black with only fore femur and tibia yellowish orange. Mid- and hind femora in basal 0.1 brownish red dorsally. Pterostigma black, wings hyaline.

Etymology: the species is named after its collector, Robert BECK from Munich.

Notes: in the key to Oriental *Dolichomitus* species (GUPTA et al. 1976) it runs to couplet 3 but then there is no agreement with either choice. In the key to the Western Palaearctic species (ZWAKHALS 2010), *D. becki* runs to couplet 16 and then more or less to 17 and to *D. agnoscendus*. *Dolichomitus agnoscendus* is a slenderer species with an impunctate mesopleuron and a different colour pattern.

## Discussion

In the key by Townes 1969, the African genus *Xanthepialtes* CAMERON, 1906 is treated as being closely related to *Dolichomitus*, so one might wonder if *D. becki* could belong to one of the two known *Xanthepialtes* species. *Xanthepialtes* differs from *Dolichomitus* a.o. in the absence of notauli (CAMERON 1906). The descriptions of the various *Xanthepialtes* species present no information about the structure of the ovipositor. Thus a detailed study of all *Xanthepialtes* species seems to be needed for the clarification of their status. This is, however, beyond the scope of this paper. Although the *Xanthepialtes* species could not be studied, it is obvious from their descriptions that *D. becki* is not one of them. The most striking characters which distinguish the *Xanthepialtes* species from *D. becki* can be summarized as follows:

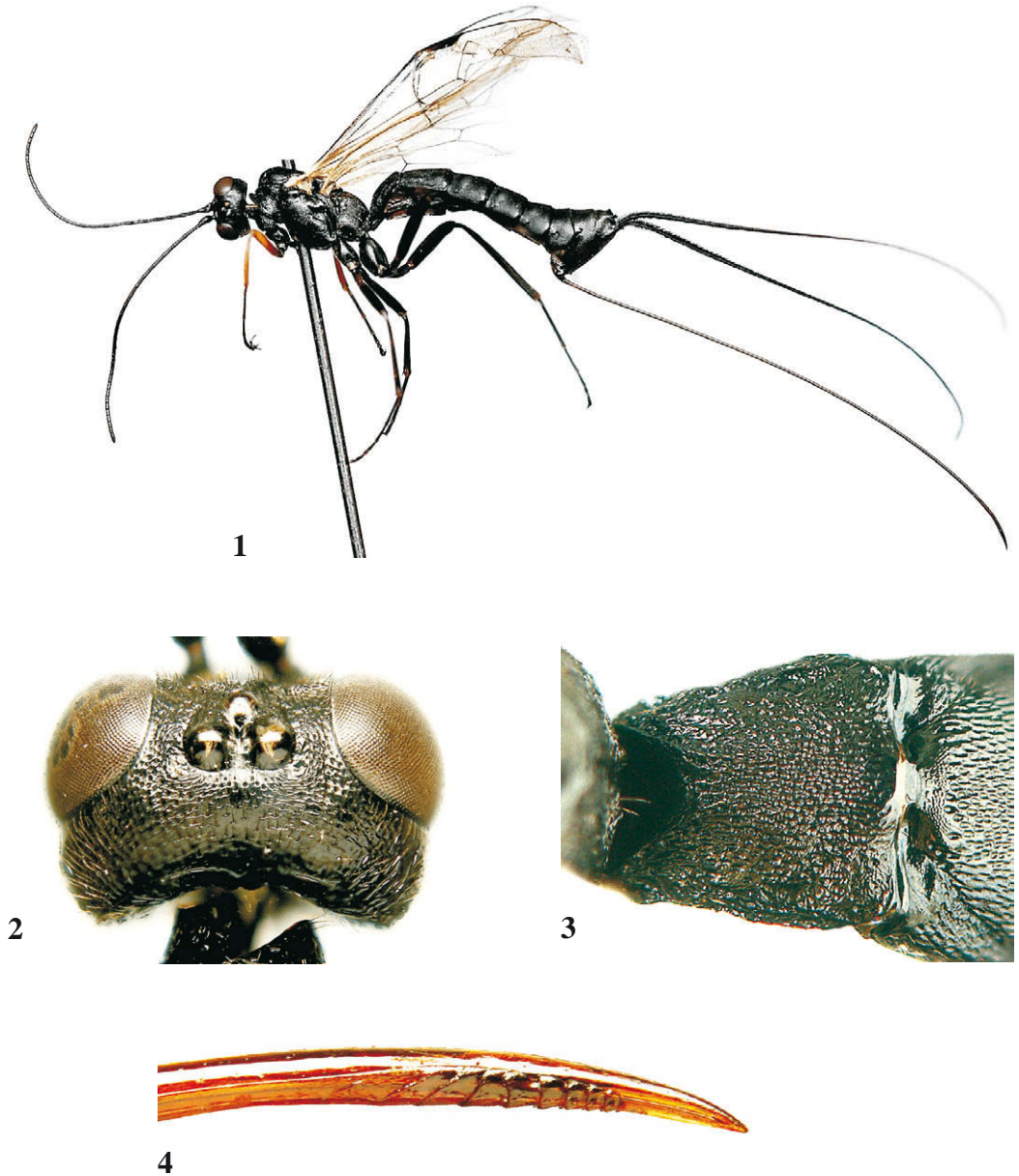
- *X. oculatus* BRULLÉ, 1846: mesosoma yellow. Metasoma except for the apex largely yellow, wings yellow, fuscous in distal half.
- *X. schoutedeni* BENOIT, 1954: wings yellowish with two transverse fuscous bands.

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**Figs 1-4: *Dolichomitus becki* sp. n., Holotype; 1: Female habitus, 2: Head, 3: Petiolus, 4: Ovipositor.**

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