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A NEW SPECIES OF THE GENUS *SYMPLECIS* (HYMENOPTERA, ICHNEUMONIDAE, ORTHOCENTRINAE) FROM KENYA

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A New Species of the Genus *Symplecis* (Hymenoptera, Ichneumonidae, Orthocentrinae) from Kenya. Varga, O. — In this paper, the genus *Symplecis* Förster, 1869 is recorded from Kenya for the first time. The newly described species, *S. antennalis* **sp. n.**, differs from congeners by the distinctly banded with yellow antenna. An updated identification key to known Afrotropical species of *Symplecis* is provided.

Key words: Darwin wasp, Pimpliformes, parasitoids, taxonomy, Afrotropical Region.

Introduction

The genus *Symplecis* Förster, 1869 is a relatively small genus of the subfamily Orthocentrinae (Hymenoptera, Ichneumonidae) comprising 22 species (Yu et al., 2016; Ranjith et al., 2022; Varga, 2023, 2025). Four species of the genus are reported from Afrotropical region: *Symplecis matilei* Delobel, 1975 from Central African Republic and three species, *S. aperta* Varga, 2023, *S. glabroscutum* Varga, 2023, and *S. kibiraensis* Varga, 2023 from Burundi (Delobel & Matile, 1976; Varga, 2023).

Symplecis belongs to *Helictes* group and is characterised by the large and strongly divergent eyes in females; short to almost absent malar space; long first metasomal sternite reaching beyond the middle of the tergite; laterotergites 2–3 separated from the respective tergites; and relatively short ovipositor.

The most reliable host records of the genus belong to fungus gnat species from families Diadocidiidae and Mycetophilidae (Roman, 1923; Delobel & Matile, 1976).

Material and Methods

The holotype of the newly described species used in this study is deposited in the collection of the International Centre of Insect Physiology and Ecology, Nairobi, Kenya (ICIPE). Images were taken using a Leica Z16 APO microscope equipped with Leica DFC FLEXACAM C1 camera and processed by LAS Core software at the I.I. Schmalhausen Institute of Zoology, NAS of Ukraine, Kyiv. Morphological terminology follows mainly Broad et al. (2018).

Taxonomy

An updated key to known Afrotropical species of *Symplecis* (females only)

1. Fore wing with vein 3rs-m absent. Propodeum with area superomedia clearly delimited by carinae, wide; costula present. Mesoscutum uniformly pubescent. *S. aperta* Varga, 2023
- Fore wing with vein 3rs-m present. Propodeum with area superomedia at least partly opened; costula absent. Mesoscutum at least partly glabrous. 2
2. Mesosoma largely orange. Third metasomal tergite narrowly whitish anteriorly and posteriorly. *S. matilei* Delobel, 1975
- Mesosoma at most with propleuron and pronotum orange. Third metasomal tergite entirely yellow. 3
3. Antenna banded with yellow. Propodeum with area superomedia delimited by carina anteriorly. *S. antennalis* **sp. n.**
- Antenna uniformly brown. Propodeum with area superomedia not delimited by carina anteriorly. 4
4. Mesoscutum glabrous except of anterior margin. Clypeus dark brown. Hind wing with nervellus intercepted. *S. glabroscutum* Varga, 2023
- Mesoscutum sparsely pubescent in anterior half. Clypeus yellow. Hind wing with nervellus not intercepted. *S. kibiraensis* Varga, 2023

Symplecis antennalis Varga, **sp. n.** (Figs 1, *a–d*, 2, *a–e*)

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Material examined. **Type.** Holotype ♀: **Kenya**, Western Prov., Kakamega Forest, nr. KFS HD-QTRs, 1620 m, 0.23742 N, 34.86607 E, Malaise trap in indigenous forest, 12–26.06.2017 (R. Copeland) (ICIPE).

Diagnosis. Face and clypeus dark brown. Malar space very short, eye almost touching mandible. Mandible not twisted (Fig. 1, *b*). Antenna with 18 flagellomeres, banded with yellow subapically; first flagellomere $4.6 \times$ as long as its



Fig. 1. *Symplecis antennalis* sp. n., holotype female: *a* — lateral view of habitus; *b* — frontal view of head; *c* — lateral view of basal part of antenna; *d* — lateral view of head, meososoma and first tergite. Scale bars 0.5 mm (*a*) and 0.1 mm (*b*–*d*)

apical width (Fig. 1, *a*, *c*). Pronotum orange (Fig. 1, *d*). Mesoscutum largely glabrous except of anterior 0.2 (Figs 1, *d*, 2, *a*). Propodeum with area superomedia opened laterally (Fig. 2, *b*). Metapleuron smooth (Fig. 1, *d*). Fore wing with areolet closed, petiolate (vein 3rs-m present); hind wing with nervellus intercepted below the middle (Fig. 2, *e*). First metasomal tergite $2.7 \times$ as long as its maximum width, longitudinally wrinkled posteriorly, with latero-median carina present. Second tergite $1.2 \times$ as long as its maximum width, longitudinally wrinkled on anterior 0.8 (Fig. 2, *d*). Ovipositor about $0.5 \times$ the length of first tarsomere of hind tarsus (Figs 1, *a*, 2, *c*).

Symplecis antennalis sp. n. differs from all known species of the genus by the banded with yellow antenna. Among the Afrotropical representatives, the new species is similar to *S. glabroscutum* Varga, 2023 in having the dark face and clypeus, largely glabrous mesoscutum, fore wing with areolet closed, hind wing with nervellus intercepted, and tergites 1–2 longitudinally wrinkled, but differs by the propodeum with anteriorly enclosed area superomedia (opened in *S. glabroscutum*) and the colouration of antenna.

Description. Holotype. Female (Figs 1, *a*–*d*, 2, *a*–*e*). Body length 3.5 mm, fore wing 1.9 mm.

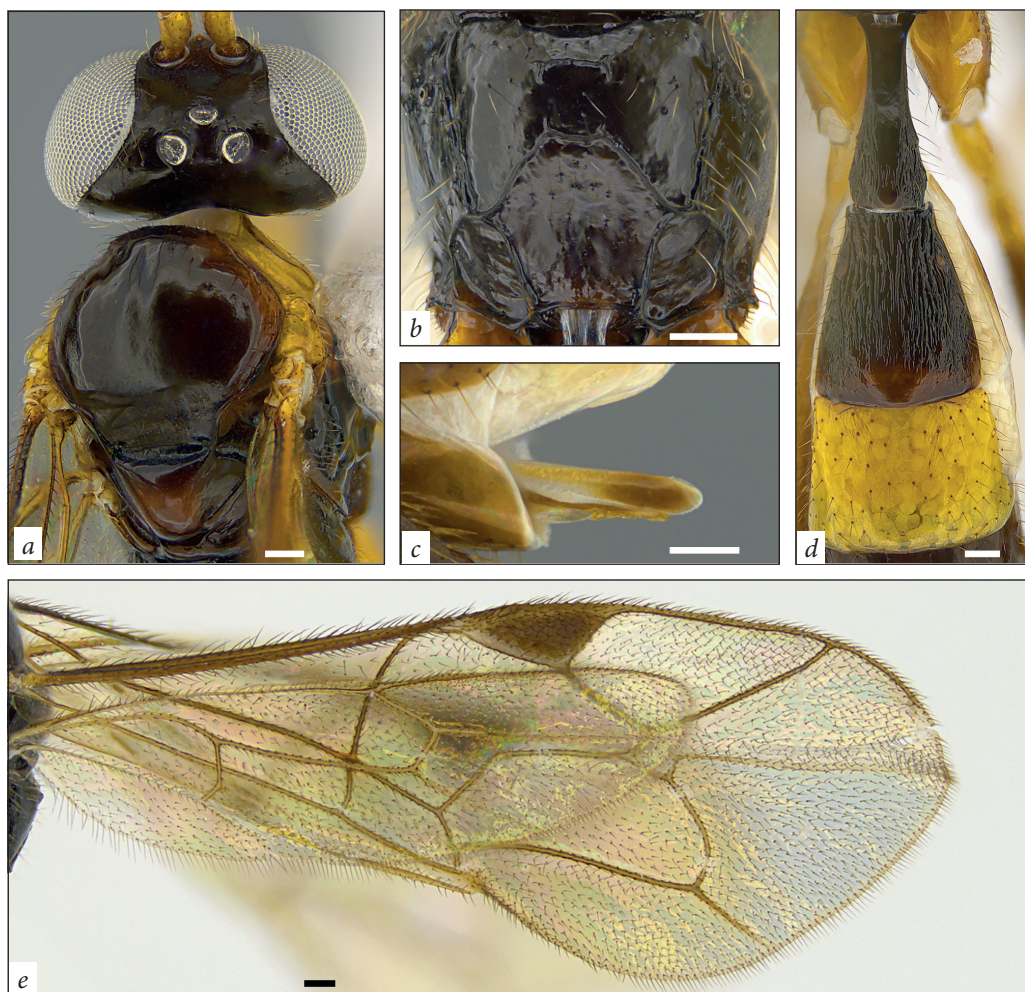


Fig. 2. *Symplecis antennalis* sp. n., holotype female: *a* — view of head, mesoscutum, and scutellum; *b* — dorsal view of propodeum; *c* — lateral view of the ovipositor and sheaths; *d* — dorsal view of metasomal tergites 1–3; *e* — lateral view of wings. Scale bar 0.1 mm

Head (Figs 1, *b–d*, 2, *a*) generally shiny, smooth and sparsely pubescent. Antenna with 18 flagellomeres, first flagellomere $4.6 \times$ as long as maximum width. Face about $0.9 \times$ as long as wide, smooth, impunctate. Eye large and glabrous, strongly divergent to clypeus. Clypeus about $0.6 \times$ as long as wide, smooth; its apical margin straight. Malar space almost absent, about $0.1 \times$ the basal width of mandible; subocular sulcus absent. Mandible untwisted; lower tooth visible in the frontal view, weakly shorter than upper tooth. Vertex smooth; maximum diameter of lateral ocellus as long as ocellar-ocular distance; occipital carina present. Temple short and strongly narrowed behind eye.

Mesosoma (Figs 1, *d*, 2, *a–b*). Propleuron sparsely pubescent. Pronotum smooth and shiny; epomia absent. Mesoscutum glabrous except of anterior 0.2 and lateral margins; notauli present anteriorly. Scutellum and metascutellum smooth and glabrous. Mesopleuron smooth, sparsely pubescent along anterior margin and ventrally; epicnemial carina present; sternauli present on anterior

0.4. Metapleuron smooth and sparsely pubescent; submetapleural and pleural carinae present. Propodeum smooth and sparsely pubescent; area superomedia laterally not delimited by carinae, area petiolaris closed.

Legs relatively slender; hind femur $4.7 \times$ as long as maximum width, fifth tarsomere about $1.1 \times$ as long as third tarsomere.

Wings (Fig. 2, *e*). Fore wing with areolet closed (vein 3rs-m present); vein 2rs-m about $0.7 \times$ the distance between 2rs-m and 2m-cu; vein 1cu-a opposite to M&RS. Hind wing with nervellus intercepted below the middle, distal abscissa of Cu unpigmented.

Metasoma (Fig. 2, *c–d*) generally strongly sculptured anteriorly. First tergite about $2.7 \times$ as long as apical width, smooth, longitudinally wrinkled posteriorly; dorso-lateral and latero-median carinae present almost to apex of the tergite. Second tergite $1.2 \times$ as long as apical width, longitudinally wrinkled on anterior 0.8. Remaining tergites smooth. Ovipositor straight, about $0.5 \times$ the length of the first tarsomere of hind tarsus and $0.25 \times$ the length of hind tibia.

Colour. Body generally brownish-black. Head brownish-black except mandible (except apices), scape and flagellomeres 11–15 yellow, and pedicel, anellus and first two flagellomeres orange. Mesosoma brownish-black except propleuron, pronotum and mesopleuron anteriorly orange; fore and mid legs orange except coxae, trochanters and trochantelli yellow; hind coxa, trochanter and trochantellus orange, partly brownish, hind femur, tibia and tarsus brown. Metasoma brownish-black except third tergite entirely and seventh tergite posteriorly yellow.

Male. Unknown.

Distribution. Kenya.

Etymology. The species is named after the banded antenna. Adjective.

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