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A first record of *Cymatopus* (Diptera: Dolichopodidae) from Madagascar with the description of a new species

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Abstract

Cymatopus stuckenbergi new species from Madagascar is described. It belongs to the *pilosus*-group characterised by non-raptorial fore legs and ornamented hind legs. The costa runs around the wing. It is the first record of *Cymatopus* from the western side of the Indian Ocean.

Key words: Diptera, Dolichopodidae, Aphrosylinae, *Cymatopus*, Madagascar.

Introduction

Cymatopus Kertèsz is a marine genus of flies that are found on rocky shores. The genus is very heterogeneous with several species groups. Eighteen species are momentarily assigned to it and are mostly confined to the Australasian and Oriental Region. Four species from the eastern Pacific and Caribbean region should probably be removed from *Cymatopus* (GROOTAERT & MEUFFELS, 1993). *Cymatopus capensis* PARENT (1939) from South Africa was placed in synonymy to *Aphrosylus griseatus* (CURRAN, 1926:403) by DYTE AND SMITH (1980), becoming later the type species of the new genus *Cemocarus* MEUFFELS ET GROOTAERT (1984). GRICHANOV (1999) mentioned an undescribed species of *Cymatopus* from Madagascar.

MEUFFELS & GROOTAERT (1984) and GROOTAERT & MEUFFELS (1993, 2001) revised the Australasian species. Additionally, EVENHUIS & GROOTAERT (2002) provided some new distributional records for the Oriental region. Finally EVENHUIS (2005) described and illustrated an additional four species from Fiji and related areas. In the 1984, 1993, 2001 and 2005 articles, keys to species are given, and behavioural notes are given for a few species.

Treating unidentified material from Madagascar collected by Brian Stuckenberg, we found a new species of *Cymatopus* belonging to a peculiar species group, the *longipilus*-group that probably represents a new subgenus or even genus of the subfamily Aphrosylinae to be created in the future. It is peculiar in that the costa runs around the wing, the fore legs are non-raptorial, but simple and the hind legs are ornamented. It presents also the first record of the genus *Cymatopus* in the western part of the Indian Ocean.

Holotype and two paratypes of the new species are deposited in the Natal Museum, Pietermaritzburg, three more paratypes are deposited the Royal Belgian Institute of Natural Sciences (Brussels).

Cymatopus stuckenbergi sp.n.

Figs 1-9

MATERIAL EXAMINED: Holotype, male, on beach, Fenerive, Madagascar, Dec. 1955, B. Stuckenberg [NMSA]. Paratypes, 1 male and 1 female, the same label [NMSA]; 3 males, on beach, Fenerive, Madagascar, Dec. 1955, B. Stuckenberg / R.I.Sc.N.B. I.G. 20.938 / P. Vanschuytbroeck det. 1957: Saccopheronta caffra Curran [RBINS].

DESCRIPTION: Frons, face, occiput, palpus, and proboscis with bronze-black ground colour, grey pollinose. A row of strong black postocular setae, one pair of strong occipital, vertical, and postvertical setae present. Ocellar tubercle with one pair of strong setae. Ventral postcranium with sparse black irregular cilia supplementing postocular row. Eyes haired. Face narrow, the narrowest above suture. Ratio of height of epistome to its minimal width to its maximum width to height of clypeus to its maximal width to height of palpus, 4 : 0.5 : 2 : 3 : 2 : 2. Antenna with yellow scape, yellow-brown pedicel and black postpedicel; pedicel with short setae, postpedicel as long as high, rounded, with apical stylus and short hairs. Stylus bisegmented,

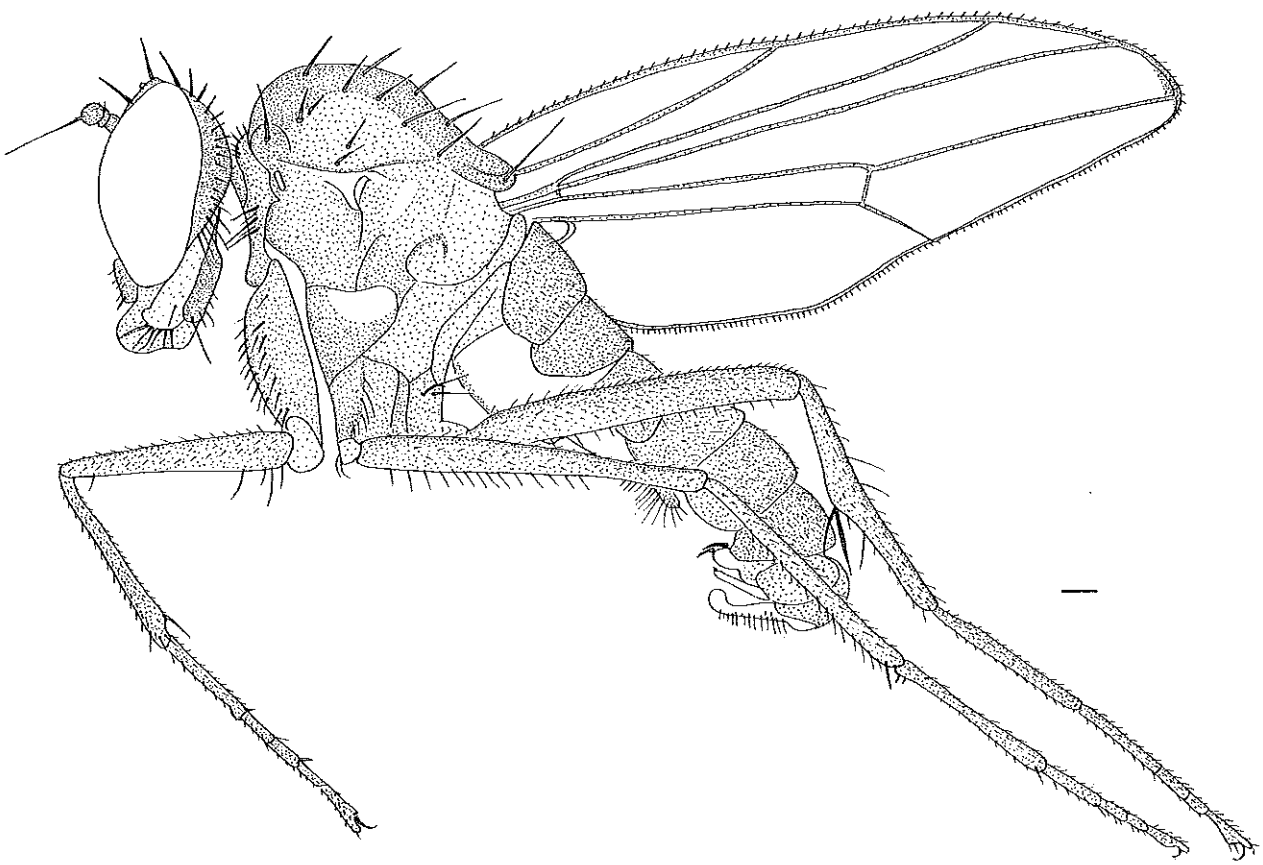


Fig. 1. – *Cymatopus stuckenbergi* sp. n. habitus paratype male.

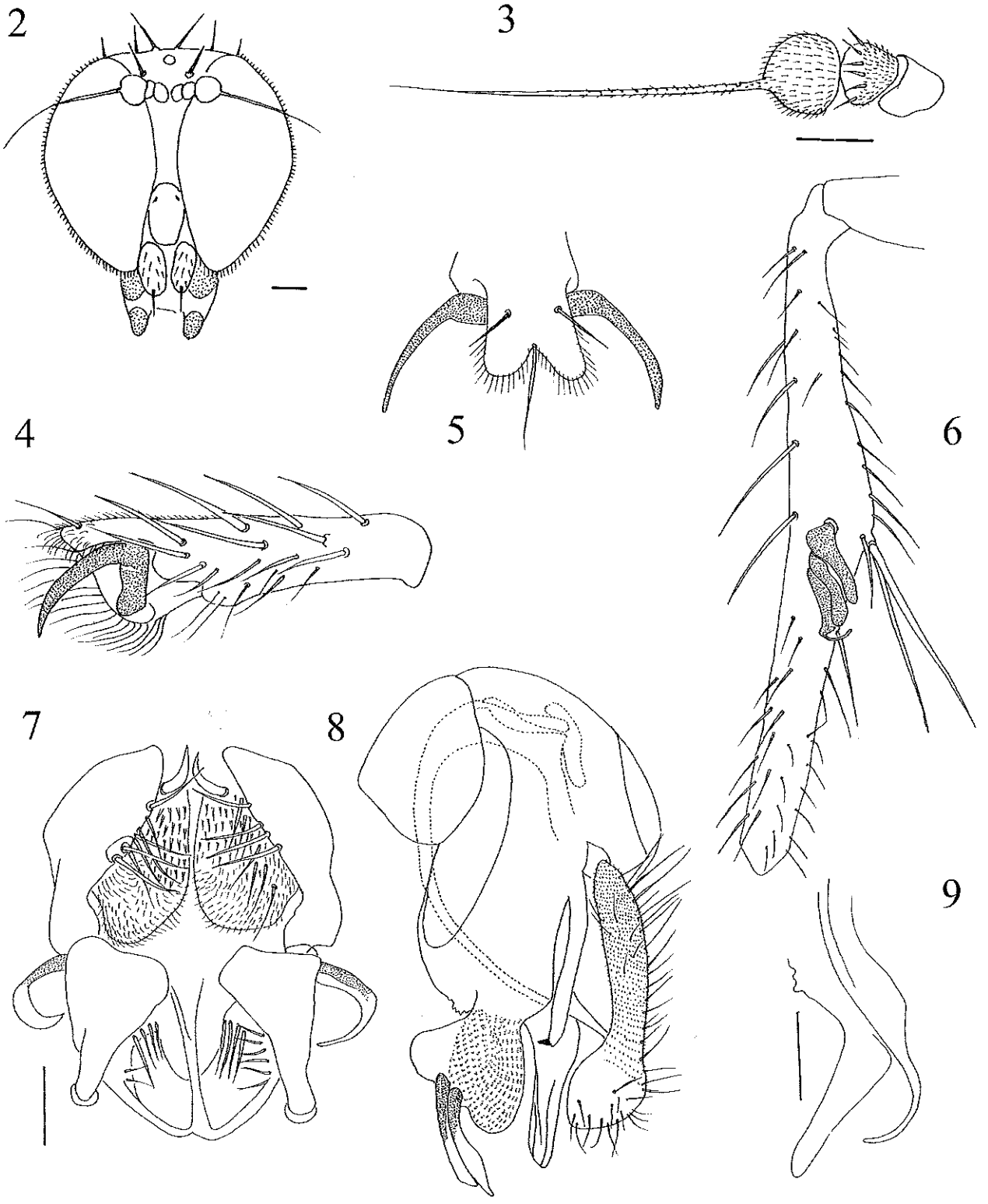
thick at base, otherwise fine and bare. Length ratio of scape to pedicel to postpedicel to stylus, 1 : 1 : 1.5 : 7.5. Palpus and proboscis with short black hairs.

Thorax black, slightly shining. Four strong dorsocentral bristles, the last one is the longest; acrostichals absent. Prothorax with four black bristles. Scutellum with 2 pairs of strong black setae.

Legs mostly black, with black setae, trochanters and apices of femora brown. Fore and middle coxae with black cilia, hind coxa with two external seta. Fore femora with 3-4 fine ventral cilia in basal half, as long as femora diameter, and one subapical postero-ventral cilia. Fore tibia with short apico-ventral seta. Length ratio of fore tarsomeres from first to fifth, 6.5 : 2.5 : 2.0 : 1.5 : 2.0. Mid femora with ventral cilia in basal half, half as long as femora diameter, with several subapical postero-ventral cilia. Mid tibia with 2-3 short apical setae. 1st to 4th tarsomeres of mid tarsus each with short apical seta. Length ratio of mid tarsomeres from first to fifth, 10.5 : 4.5 : 2.3 : 2.0 : 3.0. Hind femora with several subapical postero-ventral cilia. Hind tibia with 2-3 fine antero-dorsal, 1 postero-dorsal setae; also with several somewhat elongate antero- and postero-dorsal cilia in apical half; ventrally swollen, with prominence bearing 2 strong ventral black setae, approximately 1/4 the length of tibia, and 3 remarkable thick shining black postero-ventral setae, approximately as long as tibia diameter; one of the latter setae leaf-like, the 2nd spine-like and the 3rd hook-shaped. Length ratio of hind tarsomeres from first to fifth, 9.5 : 5.5 : 2.5 : 2.0 : 2.5.

Wings hyaline, narrow, veins brown; wing apex narrowly blackish along costa between R4+5 and M1+2. Costa running around the wing. R1 extending behind the mid-wing. Ratio of part of costa between R2+3 and R4+5 to this between R4+5 and M1+2, 8.3 : 4.0. R4+5 and M1+2 straight, parallel in apical part. Ratio of cross-vein m-cu to apical part of CuA1, 2 : 5.,Lower calypter small, yellow-brown, with fine, shining light, cilia. Halters brown.

Abdomen black, with short black setae; six terga fully visible; 4th sternum with short hairs, somewhat projecting backward; 6th tergum nearly as long as 5th one; 7th tergum reduced. 8th segment approximately half as large as epandrium. Hypopygium black, grey pollinose. Cercus black-brown, strap-like, narrow, slightly widened and rounded at apex, as long as



Figs 2-9. – *Cymatopus stuckenbergi* sp. n. paratype male. 2. Head frontal view; 3. antenna; 4. terminal tarsomere; 5. terminal tarsomere front view; 6. hind tibia posteriorly; 7. Hypopygium dorsal view; 8. hypopygium lateral view; 9. tip of hypandrium and aedeagus. Scale 0.1 mm.

epandrium, with dense dorsal hairs along entire length, the hairs approximately as long as cercus width. Surstylus narrow, with pointed apex. Epandrial lobe large, wide, suboval, with two long and wide setae positioned in the middle of apical margin.

Body length without antennae 3.5 mm.

DISTRIBUTION: Madagascar.

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