

A new species of *Neavella* from Madagascar (Diptera: Tabanidae)

by

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ABSTRACT. — *Neavella madagascariensis* sp. n. is described from Madagascar and a revised key to the genus is provided. The status of the other Malagasy Diachlorini is reviewed.

Introduction

The Afrotropical genus *Neavella* Oldroyd is distinguished within the Diachlorini by having bare or microscopically hairy eyes, sometimes banded, with (in the known males) the upper facets greatly enlarged, broad frons with large basal callus, pollinose subcallus, antennae with elongate flagellum, and wings with an appendix to vein R_4 . The genus was previously known from three species which were reviewed by Oldroyd (1954). Recently-collected material has revealed the following new species.

Neavella madagascariensis sp. n.

Description of ♀. Head. — Eyes bare, without pattern. Frons slightly divergent towards base (index 2.5), yellowish-brown pollinose with generally distributed dark hairs. Frontal callus (fig. 1) dark brown and roughly triangular in shape, touching eyes in the lower corners and with a short median extension. Subcallus, face and parafacials pale yellowish pollinose (reddish ground colour shows through in greasy specimens) and excepting subcallus, with short white hairs. Ocellar rim whitish with mixed light yellow and black hairs. Beard white. Antennae (fig. 3) long and slender; scape and pedicel orange with short black hairs, flagellum reddish, becoming darker apically. Palpi (fig. 2) pale yellow with mostly whitish hairs. Proboscis dark brown about as long as height of head.

Thorax. — Mesonotum brownish-grey pollinose with a narrow median stripe and a pair of diffuse sublateral stripes that are darker and browner and with short mixed light and dark hairs. Scutellum brownish-grey pollinose with pale yellowish hairs. Pleurae and coxae light grey pollinose and with whitish hairs. Legs reddish with femora thinly grey pollinose and fore tibiae and all tarsi darker. Hairs mostly pale on mid and hind femora and, ventrally, on fore femora and mid and hind tibiae, otherwise mostly dark. Squamae hyaline with brown rim. Halteres light brown with whitish knob. Wings clear with light brown stigma and a short appendix to vein R_4 .

Abdomen. — Basal 3-4 tergites largely dull reddish through grey tomentum, diffusely darker medially and paler both laterally and on hind-margins. Rest of tergites generally becoming darker but otherwise similar. The extent of the reddish colour is somewhat variable. Hairs of tergites mostly pale laterally and on hind-margins, otherwise black. Sternites reddish through grey tomentum and with mostly pale hairs, the apical sternites distinctly darker.

Bodylength 9-11 mm, winglength 7-9 mm.

Material examined. — Holotype ♀, Madagascar: Tuléar, NE. of Morondava, Beroboka Reserve, nr. coast, 17-24.V.1983, M. C. Day & J. S. Noyes (British Museum (Natural History)); paratypes 10 ♀♀, same data (in BMNH and Section d'Entomologie Faunistique, C.N.R.T., Parc Tsimbazaza, Antananariva, Madagascar); paratypes 2 ♀♀, Madagascar: Tuléar, Ankilibe, at sea level, 43 46'E, 23 25'S, 22.IV.1984, R. Hensen & A. Aptroot (Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam).

Discussion. — *Neavella madagascariensis* sp. n. is only the third species of the tribe Diachlorini to be recorded from Madagascar. The others are *Neavella albipectus* (Bigot) and *Seguyiella seyrigi* (Séguy), which are discussed below. *Neavella albipectus* (Bigot) was described from a single ♀ from "Madagascar" but has not been recorded there subsequently despite having been found widely elsewhere. This species is close to *N. madagascariensis* and is distinguished by

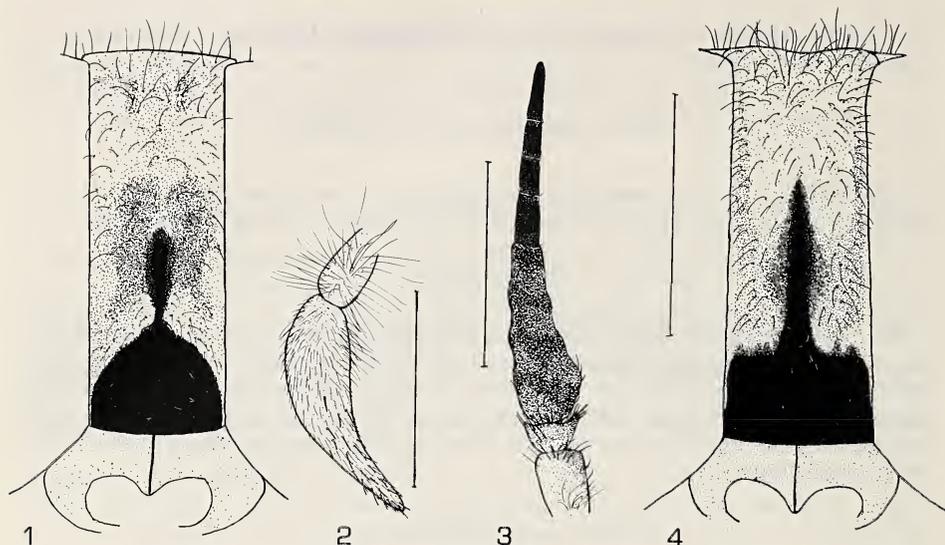


Fig. 1-3. *Neavella madagascariensis* n. sp., female paratype. 1, frons; 2, palp; 3, antenna. Fig. 4. *Neavella albipectus*, frons. Scale-lines; 1 mm.

being greyer and, usually, slightly larger with the frontal callus filling the basal part of the frons (fig. 4). These differences sound small but they are consistent in the material examined (over 100 ♀♀ of *N. albipectus* and 13 ♀♀ of *madagascariensis*) and there should be little difficulty in recognizing them.

Seguyiella seyrigi (Séguy) is known only from SE Madagascar. Its generic placement has been uncertain since Séguy (1955) described it as a species of *Chrysozona* Meigen (= *Haematopota* Meigen), although it has none of the characters of that genus. It has subsequently been placed in the Diachlorine genus *Limata* Oldroyd (Oldroyd 1957; Chainey & Oldroyd, 1980), and Travassos Dias (1956) designated it the type species of his monotypic genus *Seguyiella* which, however, he retained in the Haematopotini. The short antennal scape, bare basicosta, ventrally setulose vein Sc and the absence of spurs on the hind tibiae indicate that it belongs to the Diachlorini. The frontal structure (large, rounded basal and median calli which are narrowly joined medially) and the banded eyes suggest that placement of *seyrigi* within the monotypic *Seguyiella* is more appropriate than in the southern African mainland genus *Limata*. The hairy eyes, with the upper facets of the ♂ not greatly enlarged and the ♀ frontal structure readily separate *S. seyrigi* from *Neavella* spp.

Distribution and biology. — The genus *Neavella* is associated almost exclusively with coastal localities and, as such, has been found widely on the east African mainland from Mozambique to Kenya and on several Indian Ocean islands including Aldabra, Amirante Is., Astove Is., Madagascar (w. coast), Pemba, Seychelles, Sokotra (Abd-el-Kuri) and Zanzibar. Two species, *N. albipectus* (Bigot) and *N. producticornis* (Austen), have been recorded from boats up to a mile off-shore.

N. albipectus had been recorded biting turtles (Austen 1920; Oldroyd 1954) both at sea and on-shore, and collector's notes show that it will also attack goats and man. *N. producticornis* has been noted by collectors as attacking cattle and also feeding on honey-dew on lime leaves.

The immature stages are unknown.

Key to species of *Neavella* (females only)

1. Costal cell brown, contrasting with rest of wing which is clear 2
 Costal cell clear as is rest of wing 3
 2. Notopleural lobes shining yellow, contrasting with pollinose mesonotum. Eyes with a single band. Sokotra (Abd-el-Kuri) *notopleuralis* (Oldroyd)
 Notopleural lobes dull and pollinose, as is mesonotum. Eyes without bands. Mozambique, Tanzania (incl. Zanzibar & Pemba), Kenya *producticornis* (Austen)
 3. Frontal callus filling basal part of frons (fig. 4), with varying medial extension. Slightly larger (10-13 mm), more greyish species. Kenya, Tanzania (Zanzibar), Aldabra, Amirante Is., Astove Is., Seychelles, Madagascar (?) *albipectus* (Bigot)
 Frontal callus roughly triangular, reaching eyes only at base (fig. 1), and with short median extension. Slightly smaller (9-11 mm), more reddish species. W. coast Madagascar
 *madagascariensis* sp. n.
- The males of *albipectus* and *producticornis* may be separated by the above mentioned costal cell character. The males of *notopleuralis* and *madagascariensis* are unknown.

REFERENCES

- Austen, E. E., 1920. The Percy Sladen Trust Expedition to the Indian Ocean in 1905, and 1907-1909, under Mr. J. Stanley Gardiner, M. A. Diptera: Tabanidae. — *Bull. ent. Res.* 11: 43-45.
- Chainey, J. E. & Oldroyd, H., 1980. Family Tabanidae. — *Catalogue of the Diptera of the Afro-tropical Region*, (Crosskey, R. W. ed.) — 275-308. British Museum (Natural History), London.
- Dias, J. A. Travassos Santos, 1956. Um novo genero para a tribu Haematopotini (Diptera Tabanidae). — *Bolm Soc. Estud. Moçamb.* 26 (98): 13-19.
- Oldroyd, H., 1954. Tabanus and related genera. *The horse-flies (Diptera Tabanidae) of the Ethiopian Region*. 2: X, 1-341. British Museum (Natural History), London.
- , 1957. Subfamilies Chrysopinae, Sceptsidinae and Pangoniinae and a revised classification. *The horse-flies (Diptera Tabanidae) of the Ethiopian Region*. 3: XII, 1-489. British Museum (Natural History), London.
- Séguy, E., 1955. Un *Chrysozona* de Madagascar (Dipt. Tabanidae). — *Revue fr. Ent.* 22: 203-204.

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