Genus	Vol. 4(1): 59-65	Wrocław, 30 IV 1993

A new genus of heleomyzid fly of the tribe *Oecotheini* from Afrotropical Region (*Diptera*: *Heleomyzidae*)

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ABSTRACT. A new heleomyzid genus *Aberdareleria* is based on *Aberdareleria freidbergi* n. sp. from Kenya. Its taxonomical status and characteristics and the key to the hitherto known genera of the tribe *Oecotheini* are given (6 original drawings).

Introduction

The Ethiopian species and genera of the *Heleomyzidae* were placed by COGAN (1971) in three tribes: *Heleomyzini*, *Suillini* and *Trixoscelini* (*Trixoscelidini*) but the genus *Prosopantrum* was left without tribal assignment. In his paper seven genera of the *Heleomyzidae* s. l. were recorded from Afrotropical Region. Six years later, in the paper on the *Trixoscelididae* COGAN (1977) listed synapomorphic characters of the family as outlined by GRIFFITHS (1972) and discussed the related genera. Besides, he removed the genus *Stuckenbergiella* COGAN from the *Heleomyzidae* to the *Trixoscelididae* and excluded *Neossos* MALLOCH, 1927 from the *Trixoscelididae*. MCALPINE, D.K. (1985) proposed a new classification of the *Heleomyzidae*, where he included the *Trixoscelididae* only as a tribe. Because the interpretation of the *Heleomyzidae* sensu MCALPINE, D.K. has not been generally accepted (see e. g. GILL, and PETERSON, 1987. Manual of Nearctic *Diptera*. Vol. 2) I prefer the traditional system presented by GORODKOV (1984) in the series of Palaearctic Catalogue of *Diptera*. The tribal placement of the new genus and other related genera follows GORODKOV (1972). Hitherto five genera of the *Heleomyzidae* were recorded from Afrotropical Region: *Suillia* ROBINEAU-

DESVOIDY (*Suillini*), *Kiboleria* LINDNER and *Tephrochlamys* LOEW (*Heteromyzini*), *Pseudoleria* GARRETT (*Heleomyzini*) and *Prosopantrum* ENDERLEIN (*Cnemospathini*). The genus *Prosopantrum* represented in the Afrotropical Region by one introduced species (COGAN, 1971) was removed from the *Heleomyzidae* to the family *Cnemospathidae* (GRIFFITHS, 1972), but other authors (see e g. MCALPINE, D.K., 1985) rather agree with the opinion that *Prosopantrum* could belong to the *Heleomyzidae*. As regards the terminology of external characters I mostly follow J. F. MCALPINE (1981).

Tribe: *Oecotheini* GORODKOV

Oecotheini GORODKOV, 1972: 82.

Diagnosis.- Antennae broadly separate, anterior orbital seta very small or fully reduced, first flagellomere with a slight, blunt apical dorsal angle. 1 + 3 dorsocentrals, scutellum with 2 pairs of scutellar setae, preapical bristles on each tibia well developed, VI male tergite very narrow or reduced, male genitalia with distiphallus extended and banded, rarely thread-like, surstyli (dististyli according to fusion and periandrial theories) reduced, postgonites and epiphallus well developed.

The tribe comprises four genera: *Oecothea* HALIDAY - Holarctic Region (GILL, 1965; GORODKOV, 1959 and 1984), 1 species introduced in Neotropical (GILL, 1965) and Australasian Regions (MCALPINE, D.K., 1985); *Eccoptomera* LOEW - Holarctic Region (GILL, 1962 and 1965; GORODKOV, 1984); *Pseudoleria* GARRETT - Nearctic Region (GILL, 1962, 1965 and 1968), 2 species introduced in Australasian Region (MCALPINE, D.K., 1984), one of them is recorded also from South Africa (COGAN, 1971) and *Aberdareleria* n. gen. - Afrotropical Region.

KEY TO THE GENERA OF *OECOTHEINI*

1. Mid tibiae with several bristles in the mid part ..... 2.
-. Mid tibiae without bristles, except near apex ..... 3.
2. Mid tibiae with several bristles along middle on anterodorsal, posterodorsal and ventral surfaces, female cerci with thorn- and hair-like setae..... *Aberdareleria*
-. Mid tibiae with several bristles along middle on anterodorsal and posterodorsal surfaces, female cerci with only hair-like setae ..... *Oecothea*
3. Mid femora with rows of bristles anteriorly, anepimeron with setae ..... *Pseudoleria*
-. Mid femora without rows of bristles anteriorly, anepimeron bare ..... *Eccoptomera*

Aberdareleria n. gen.

Type-species: *Aberdareleria freidbergi* n. sp., by monotypy.

Gender: feminine. The name is derived from Aberdare (locus typicus) and *Leria*.

DIAGNOSIS

Aberdareleria is very similar to *Oecothea* HALIDAY in CURTIS, 1837 but differs from the latter and from other genera of *Oecotheini* in the following combination of character states: only 1 pair of large orbital setae (in *Eccoptomera* the anterior orbital is very small or reduced, in *Pseudoleria* two orbital setae well developed), gena wide, prosternum and anepimeron bare, hypopleuron with 1-2 small black setulae, prescutellar setae absent. Vein A_1 +CuA_2 extending faintly to margin. Mid tibiae with several bristles along middle on anterodorsal, posterodorsal, anteroventral and ventral surfaces and mid femora with irregular rows of black setae anteriorly (fig. 2). In *Aberdareleria* cerci are strongly pigmented with thorn- and hair-like setae, spermathecae have a small appendix and their basal parts are sclerotized. In *Oecothea* cerci are only hair-like and the spermathecae are round and not sclerotized in their basal parts (see GORODKOV, 1959).

DESCRIPTION

Medium-size-fly, body length (without antennae) 6.0 mm; mostly orange-brownish. Orbital plate parallel to eye margin, anterior part of front rather yellowish-orange. 1 pair of fronto-orbital setae, 1 pair of ocellar setae, 2 pairs of well developed verticals, postverticals convergent. Head higher than long, genal setae relatively strong (fig. 1). Palpi yellowish-orange. Proboscis uniformly dark brown. Precoxal bridge well developed. First flagellomere relatively small, slightly elongated with a slight, blunt dorsal apical angle. Arista brownish, very short pubescent, longer than height of head.

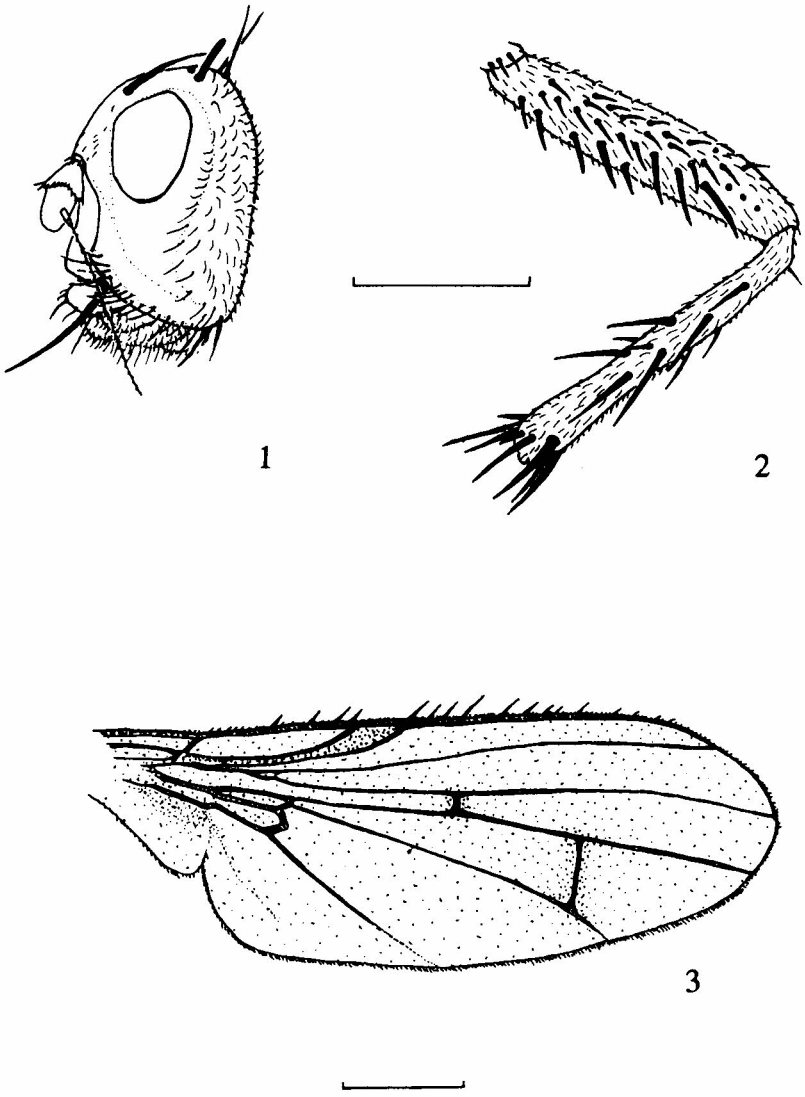
Thorax: coloration orange-brownish, mesonotum slightly darkened. Chaetotaxy: 1 + 3 pairs of dorsocentrals, all equal in length, 1 postpronotal seta, 2 pairs of notopleurals, the hind one without setulae around it, 1 presutural seta, 1 supra-alar, 2 postalar setae, no prescutellars, 2 pairs of scutellars. Scutellum covered by several setulae relatively thin, but longer than those on mesonotum. Prosternum bare, anterior corner of anepisternum setulose, remaining part bare, katepisternum with 1 strong black seta, sparsely setulose, anepimeron completely bare. Hypopleuron below spiracle setulose.

Wings: Membrane lightly brown darkened, anterior crossvein near middle of discal cell, costal spines well developed (fig. 3).

Legs: yellowish orange. 1 preapical bristle on each tibia, but on the mid tibia the preapical is stronger. Mid tibia with bristles on the anterodorsal, posterodorsal, anteroventral and ventral surfaces. Mid and hind femora with dorsolateral bristles. Mid femora with four irregularly placed rows of strong black bristles, hind femora with subapical dorsolateral bristles grouped in two rows. Tarsi short setulose except fifth tarsomeres. The first tarsomere of mid leg in the basal part with 1 black bristle posteriorly.

Abdomen: orange-brownish, all tergites short setulose with strong black marginal setae.

Female terminalia: cerci strongly pigmented with thorn- and hair-like setae, VIII and IX sternite well developed, strongly sclerotized and setose (fig. 4). VIII tergite well sclerotized, in the medial-apical part membraneous, IX tergite narrow and ring-shaped (fig. 5), three round and dark brown spermathecae with a small appendix (fig. 6).



1-3. *Aberdareleria freidbergi* sp. n., female: 1 - head, 2 - mid femora and mid tibia, 3 - right wing; scale 1 mm

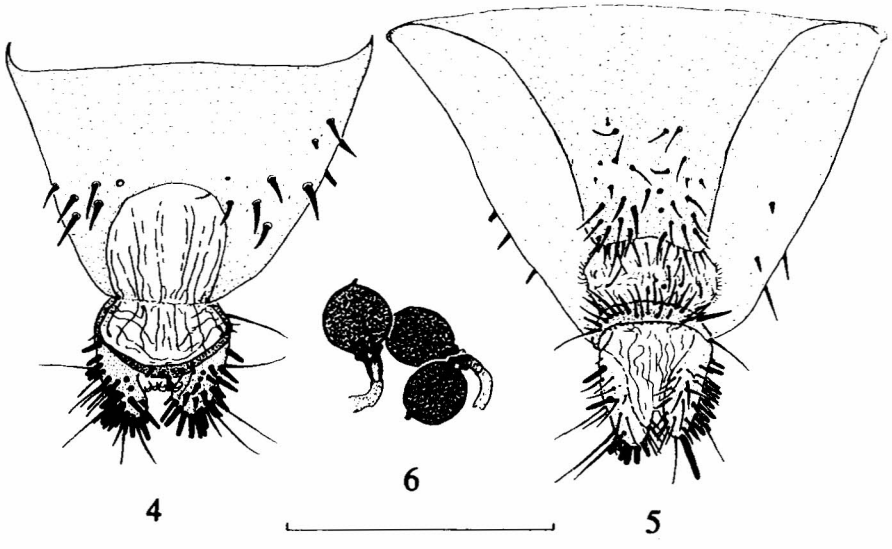
Aberdareleria freidbergi n. sp.

DIAGNOSIS

Head in side view about 1.4 time as high as long (fig. 1), first flagellomere darkened in the apical part, about 0.375 of cheek height. Cheek-eye ratio about 0.75. Medial vein ratio 1.445. Abdomen: tergites I-II and the basal part of tergite III greyish-red. Remaining segments orange-brownish.

DESCRIPTION

Body length (without antennae) 6.0 mm. Head in side view about 1.4 times as high as long (fig. 1), Orbital plate parallel to eye margin, anterior part of front mostly yellowish-orange, posterior part behind orbital seta orange-brownish like ocellar triangle. One strong vibrissa with 1-2 small black setulae above. Genal setae relatively strong and black, in 1 irregular row. 1 strong orbital seta. Eye ellyptical and small. Cheek-eye ratio about 0.75. Face yellowish-brown, palpi yellowish-orange like the first two antennal segments. First flagellomere dark brown in the apical part and relatively small, about 0.375 cheek height. Proboscis regularly dark brown. 2 strong verticals, postverticals relatively weaker.



4-6. *Aberdareleria freidbergi* sp. n., female: 4-5 - female terminalia: 4 - in ventral view, 5 - in caudal view, 6 - spermathecae; scale 0.5 mm

Thorax: mesonotum reddish-brown, dorsal and pleural parts of thorax orange-brownish. Dorsal part densely covered by short black setulae. Scutellum yellowish-red. Postscutellum reddish-orange.

Chaetotaxy: prosternum bare, 1 postpronotal seta, 2 pairs of notopleurals, the hind one without setulae around it, no prescutellars, 2 pairs of scutellars. Scutellum covered by several setulae relatively thin, but longer than those on mesonotum. 1 + 3 dorsocentral setae. 2 proepisternals, the second one about 0.66 of the first. Proepisternum with a few additional black setulae. Anterior corner of anepisternum with several small setulae (about 10). Katepisternum with 1 strong black seta and one small additional, sparsely setulose, anepimeron fully bare. Hypopleuron below spiracle with a few black setulae.

Wings: length 6.2 mm, width 2.5 mm (fig. 3). Membrane lightly brown darkened, crossveins dark brown, anterior crossvein near middle of discal cell, costal spines well developed. Costal spines strong and longer than width of the costa. Veins yellowish-brown. Medial vein ratio 1.445. Halteres white on club, stem yellowish, at the basis setulose.

Legs: yellowish orange, short setulose. Mid and hind femora with dorsolateral bristles. Mid femora with 4 rows of irregularly placed and strong black bristles anteriorly (fig. 2), hind femora with 7-8 black subapical dorsolateral bristles grouped in 2 rows. Mid tibia with black bristles: 4-5 on anterodorsal, 2 on posterodorsal, 2-3 on anteroventral, 1 on ventral surfaces and some apicals (fig. 2). Fifth tarsomeres of fore and mid tarsi a little darkened. All tibiae and tarsi short setulose except fifth tarsomeres.

Abdomen: Tergites I-II and the basal part of tergite III greyish-red. Remaining segments orange-brownish. All tergites short setulose with strong black marginal setae. Sternites I-II greyish-red, the remaining orange-brownish.

Female terminalia: cerci strongly pigmented with thorn- and hair-like setae, VIII sternite very elongate-trapezoidal, in the mid part concave, in the apical part gradually divided, IX sternite well developed, strongly sclerotized and setose (fig. 4). VIII tergite well sclerotized, in the medial-apical part membraneous, IX tergite narrow and ring-shaped, well sclerotized and pigmented (fig. 5), three round and dark brown pigmented spermathecae with a small appendix, 2 of them connected with one ductus, basal part of spermathecae as sclerotized as the head (fig. 6).

TYPE MATERIAL

Holotype female, labelled: Kenya, Abardare [=Aberdare], 3000-4000m, 1 XII 1986, A. FREIDBERG / *Aberdareleria freidbergi* n. sp. (red), preserved in Department of Zoology, Tel Aviv University George S. Wise, Israel. Specimen pinned, right first flagellomere and fifth tarsomere of midleg glued on white triangular label. Missing: right orbital seta, left humeral and 2 notopleurals, right dorsocentrals, right katepisternals and fifth tarsomeres of I-III legs on left side.

DISTRIBUTION

Afrotropical Region, Kenya.

The species is dedicated to the collector of the type-specimen Dr. Amnon FREIDBERG (TAU).

Acknowledgements: I would like to express my sincere thanks to the curator of the collection: Dr. A. FREIDBERG, Department of Zoology, Tel Aviv University George S. Wise, Faculty of Life Sciences, Israel for the loan of specimen for determination.

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