

On *Afrauropus* and *Monodauropus*, two African genera of Pauropoda (Myriapoda)

Ulf SCHELLER

Häggeboholm, Häggesled, SE-53194 Järpås (Sweden)
ulf.scheller@telia.com

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ABSTRACT

The microscopic preparations of *Monodauropus mirabilis* Remy, 1953, and *Afrauropus occiduus* Remy, 1959 (both made by Paul Remy himself and housed in the Muséum national d'Histoire naturelle, Paris) have been restudied. The holotype of the former no longer exists. The one of the latter species shows characters, which require the suppression of Remy's family Afrauropidae Remy, 1959, and moving the genus to Pauropodidae Lubbock, 1867. A new diagnose for *Afrauropus* is proposed.

KEY WORDS

Myriapoda,
Pauropoda,
Afrauropus,
Monodauropus,
Africa.

RÉSUMÉ

Afrauropus et *Monodauropus*, deux genres africains de Pauropoda (Myriapoda). Les préparations microscopiques des types de *Monodauropus mirabilis* Remy, 1953, et *Afrauropus occiduus* Remy, 1959 (faites par Paul Remy lui-même et déposées au Muséum national d'Histoire naturelle, Paris) ont été revues. L'holotype du premier taxon est malheureusement perdu depuis longtemps, celui de la seconde espèce montre des caractères qui requièrent la suppression de la famille des Afrauropidae Remy, 1959, et le transfert du genre *Afrauropus* Remy, 1959, dans la famille des Pauropodidae Lubbock, 1867. Une nouvelle diagnose d'*Afrauropus* est proposée.

MOTS CLÉS

Myriapoda,
Pauropoda,
Afrauropus,
Monodauropus,
Afrique.

INTRODUCTION

Among the many species described by P. A. Remy two species from Africa stand out distinctly in having very peculiar characters not met with in other pauropods: *Monodauropus mirabilis* Remy, 1953 found at Adiopodoumé in Ivory Coast (Remy 1953) and *Afrauropus occiduus* Remy, 1959 collected on Mt. Nimba in Guinea (Remy 1959). The holotypes were mounted by Remy on microscopic slides and lodged in the Muséum national d'Histoire naturelle, Paris. A study of these slides has revealed the following results.

SYSTEMATICS

Genus *Monodauropus* Remy, 1953

Monodauropus mirabilis Remy, 1953

TYPE MATERIAL. — Holotype by monotypy, "Femelle 9 pp. Vuillaume 28.VI.51", microscopic slide (PMLA001).

The collecting site in Ivory Coast stated in Remy's description is "Institut intercolonial d'Adiopodoumé", which is situated in the Abengourou Region at the road between Abidjan and Abengourou.

REMARKS

The coverglass has been removed long time ago and the type specimen could not be found.

Remy's description states that, as distinguished from other species in Pauropodidae Lubbock, 1867 the setae of the tergites were very thick, fusiform, annulate and yellow and that they were placed in distinctly sclerotized shields. The legs were unusually short. Remy was an able taxonomist and there is no reason to question his observations but because the holotype has disappeared, *Monodauropus mirabilis* has to be considered *incertae sedis* until further specimens have been collected.

Genus *Afrauropus* Remy, 1959

Afrauropus Remy, 1959: 1020.

AMENDED DIAGNOSIS. — A genus in Pauropodidae with: 1) anterior margin of sternal antennal branch shorter

than posterior margin; 2) globulus of sternal antennal branch with long-stalked capsule; 3) tergal side of head with a few setae only; 4) tergites II-VI with bothriotricha only, other setae lacking; and 5) pygidial sternum with setae b_1 and b_2 .

TYPE SPECIES. — *Afrauropus occiduus* Remy, 1959, by present designation and monotypy.

DISTRIBUTION. — Known from Guinea only.

Afrauropus occiduus Remy, 1959

TYPE MATERIAL. — Holotype by monotypy, "Mâle 9pp. Mts Nimba (Lamotte)" (PMLA002).

According to Remy's description the collecting data are: "Camp du Gouan, forêt 1200 m, 25 mars, 1957".

REMARKS

Remy (1959) erected a new genus, *Afrauropus*, and a new family, Afrauropidae, for this specimen because he found the following features not seen in other pauropods: the antennal globulus had two pyriform organs inside the basket of bracts; the empodia of the tarsi were stalked, and as far as can be seen in Remy's drawing (1959: fig. 6, 4) he could not find any claws; head with only one single seta (between and posterior of the antennal bases) and tergites without other setae than the bothriotricha. In some characters the specimen was more alike pauropods already described, e.g., as to antennal stalk, pygidial chaetotaxy, leg segmentation and occurrence of bothriotricha.

The renewed study revealed the following observations deviating from or complimentary to Remy's description:

- 1) head. There are at least two more tergal setae than Remy found (Fig. 1A), both short, striate, blunt and inserted between and close to the antennal bases but more anteriorly than the seta observed by Remy. There might be a seta behind the temporal organs too. No insertion areas of other setae could be seen;
- 2) antennae. Remy found that the globulus of the sternal antennal branch had two pyriform capsules inside the basket of bracts. As far as the author could see Remy had made a mistake in interpreting the space on both sides of the capsule which both were somewhat pyriform (Fig. 1B). In fact the capsule is attached to an unusually long stalk dividing the

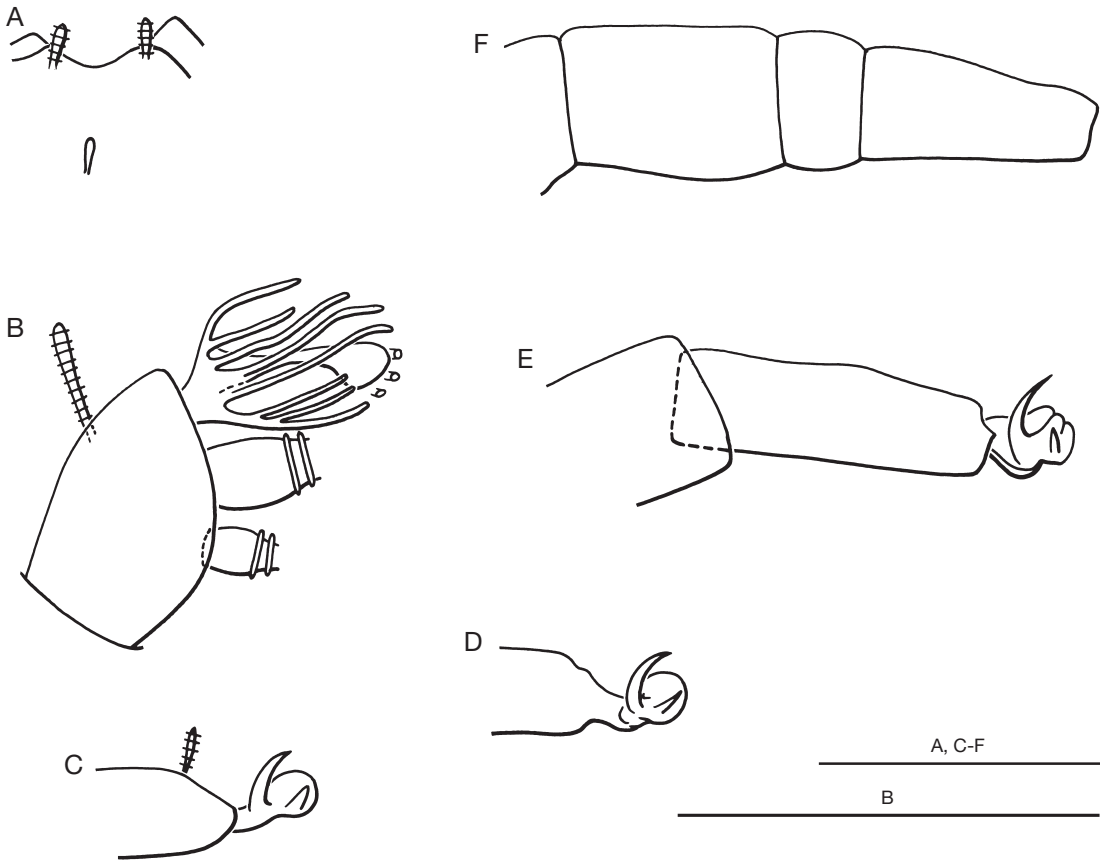


FIG. 1. — *Afrauropus occiduus* Remy, 1959, holotype: **A**, anterior part of head between bases of antennae with three setae; **B**, sternal antennal branch of right antenna, tergal view; **C**, distal part of tarsus of leg 5; **D**, distal part of tarsus of leg 8; **E**, tarsus and part of tibia of leg 9; **F**, tarsus, metatarsus and tibia of leg 6. Scale bars: 20 μ m.

space inside the bracts in two “pyriform” empty spaces. The globulus of the sternal antennal branch is proportionately large and has inside the basket of bracts a long-stalked and small capsule; 3) legs. Remy found that the empodia were stalked, a character which was unique for *Afrauropus* when it was described. Stalked empodia have later been found in other species (in *Allopauropus* Silvestri, 1902 and *Cauvetauropus* Remy, 1952).

As far as can be seen from Remy’s drawing the empodia of leg 4 have no claws, but they are there (Fig. 1C-E).

Legs 1 and 9 are 5-segmented, those interposed are 6-segmented, with metatarsus. The latter is short, ring-shaped (Fig. 1F), a character also found

in other species (in *Allopauropus* Silvestri, 1902 and *Cauvetauropus* Remy, 1952).

The new observations require a suppression of the family *Afrauropidae* Remy, 1959 (Remy 1959: 1020) and a transfer of the genus to *Pauropodidae* Lubbock, 1867. The original diagnosis of the genus is amended consequently.

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