

Uroplectoides abyssinicus gen. n., sp. n., a new genus and new species of scorpion (Scorpiones, Buthidae) from Ethiopia

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(With 9 figures)

Abstract

A division of the genus *Uroplectes* Peters, 1861 is proposed with the creation of one new genus *Uroplectoides* gen. n., having as a type species *Uroplectoides abyssinicus* sp. n. from Ethiopia. In the present paper, yet another new combination is proposed : *Lychas emiliae* Werner, 1916 = *Uroplectes emiliae* (Werner) = *Uroplectoides emiliae* (Werner) **comb. n.** This species, originally described in the genus *Lychas* C. L. Koch, 1845, was transferred to the genus *Uroplectes* by Vachon (1982). It is suggested that other species presently within the genus *Uroplectes* may in the future be transferred to the genus *Uroplectoides* gen. n.; however, this is pending further revisions.

Introduction

Since its creation by Peters (1861), the genus *Uroplectes* has been the subject of an important number of studies (e.g. Kraepelin 1899; Hewitt 1918, 1925; Lawrence 1955; and especially Lamoral 1979). The large number of species described in or associated with *Uroplectes* (over 50), makes this genus one with the largest number of species in the Afrotropical region. The generalised characteristics of *Uroplectes*, as for instance in the diagnosis proposed by Lamoral (1979: p. 618), suggest the possible existence of more than one generic group within the present genus. In fact, some of the statements proposed by Lamoral (1979) appear to lead to confusion, e.g. "telson vesicle with or without subaculear tubercle", "tergites with or without lateral accessory keels", "carapace without keels or with vestigial posterior median keels", etc.

The recent study of a single specimen collected in the region of the Valley of Omo river in Ethiopia, reveals it to be a new genus, sharing some of its characters with *Uroplectes* and presenting others which indicated the necessity for erecting a new generic taxon to accommodate this species. Moreover, in a previous study Vachon (1982) suggested that the species described as *Lychas emiliae* by Werner (1916) from Kijabe in Kenya, did not belong to *Lychas* but should be transferred to *Uroplectes*. A careful analysis of Vachon's decision shows that he was partly correct, since the species described by Werner (1916) could not belong to the genus *Lychas*. However, Vachon based his decision only on the patterns of the dorsal trichobothria of the femur

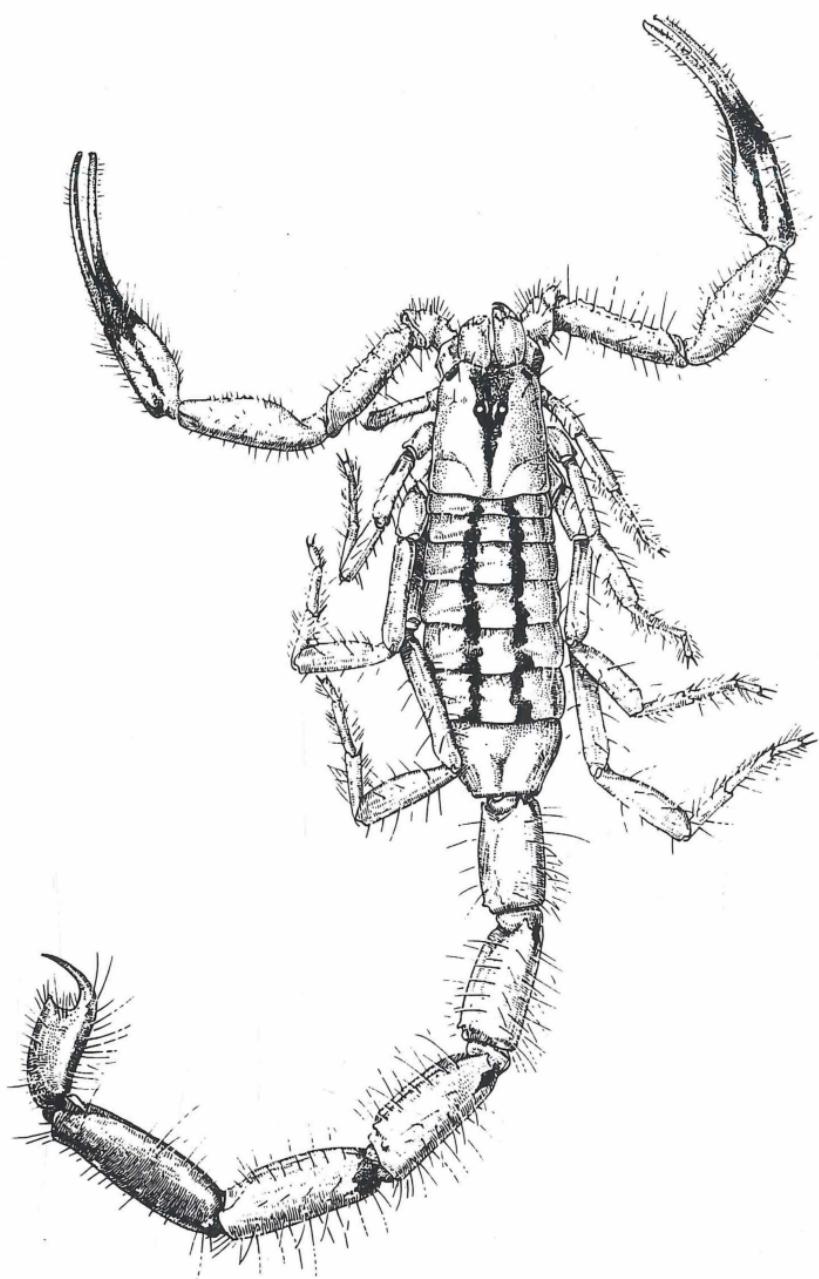
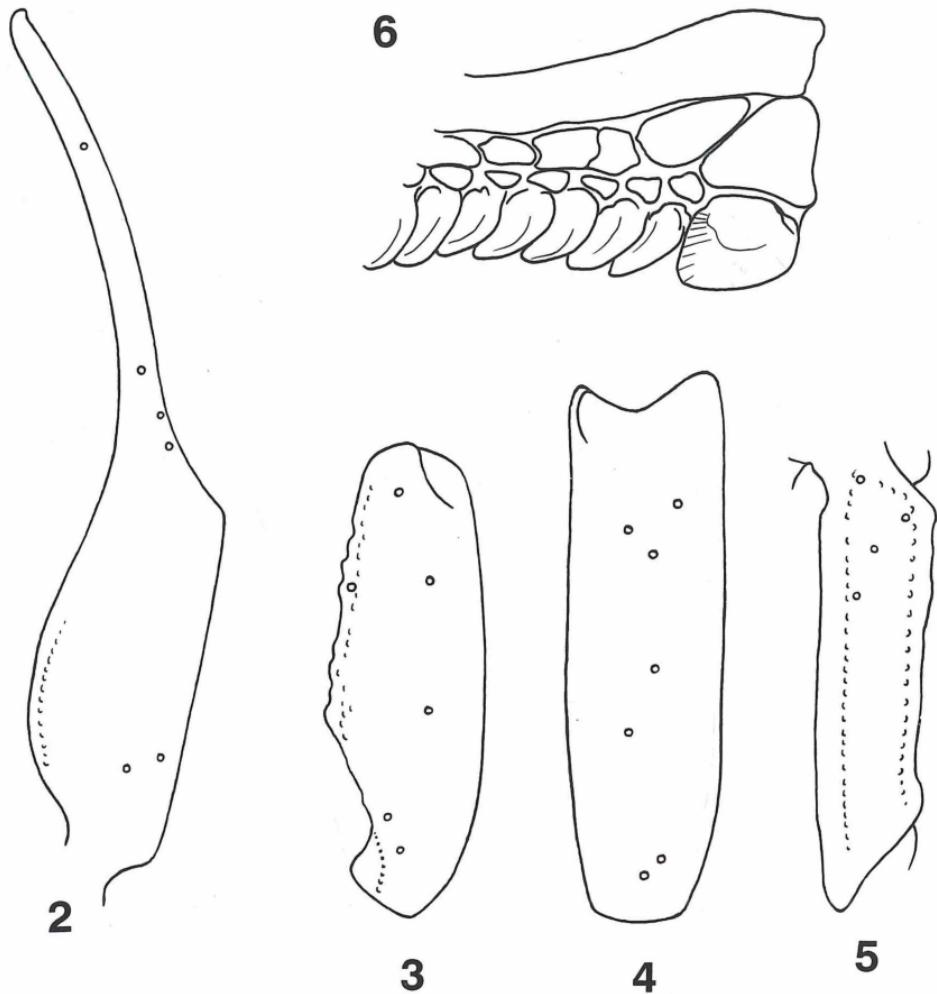


Fig. 1. *Uroplectoides abyssinicus* gen. n., sp. n.: holotype (♀), dorsal view.



Figs 2-6. *Uroplectoides abyssinicus* gen. n., sp. n., holotype (♀): 2 - chela, trichobothrial pattern (dorso-external aspect); 3 and 4 - tibia, dorsal and external aspects; 5 - femur, dorsal aspect; 6 - anterior region of pectine showing the structure of the basal middle lamellae.

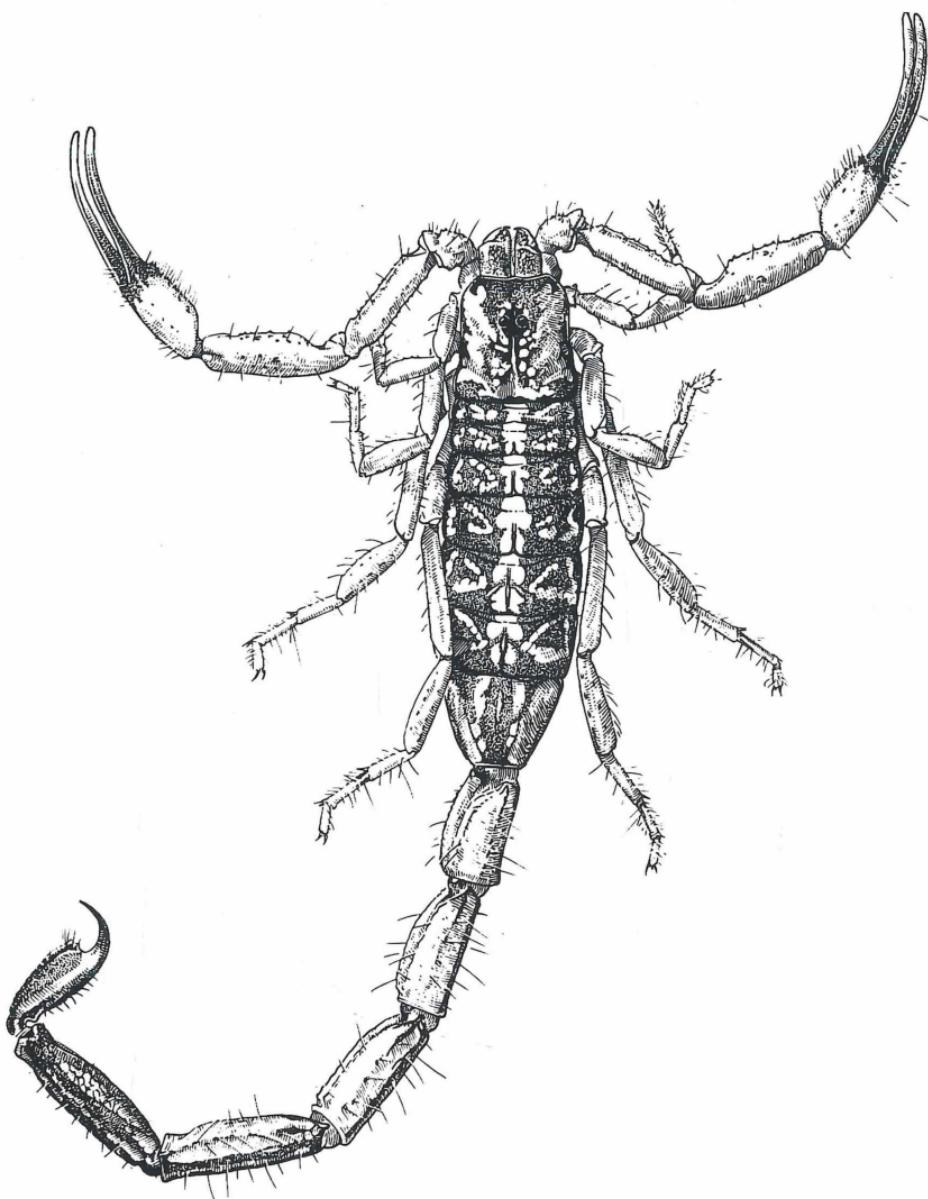


Fig. 7. *Uroplectoides emiliae* (Werner): holotype (σ), dorsal view.

(α as for *Uroplectes* or β as for *Lychas*; see also Vachon 1975). The study of other characters shows that the species *Uroplectes emiliae* (= *Lychas emiliae*) should now be transferred to the new genus described here.

It is quite possible that some other species presently in the genus *Uroplectes*, will have to be transferred to the *Uroplectoides* gen. n. Only a thorough revision can, however, justify such further changes.

Uroplectoides gen. n.

DIAGNOSIS: The new genus is closely related and similar to the genus *Uroplectes*. It can, however, be distinguished from this taxon by the following features: (A) anterior margin of carapace with a moderate to strong concavity. In *Uroplectes* the anterior margin is straight, with a very small median projection; (B) metasomal segments virtually without keels; only the dorsal keels can justifiably be described as vestigial. Tegument without granulations, with a punctuated aspect as in other buthid genera such as *Butheoloides* Hirst, 1925 or *Orthochirus* Karsch, 1892. In *Uroplectes* the keels are present and strong and the tegument is moderately to strongly granulated; (C) vesicle with a very strong, rhomboidal, subaculear tooth. In *Uroplectes* the subaculear tooth is absent or vestigial (minute). The trichobothrial pattern is A- α , orthobothriotaxic.

Type species: *Uroplectoides abyssinicus* sp. n.

Composition: *U. abyssinicus* sp. n., *U. emiliae* (Werner, 1916) **comb. n.**

Uroplectoides abyssinicus sp. n. (Figs 1-6)

HOLOTYPE ♀: Ethiopia, region of the Omo river Valley, III/1976, Coll. J. Grand. Deposited in the Zoologisches Museum of the University of Hamburg (ZMH Reg. No. A55/98).

ETYMOLOGY: Patronym refers to the ancient name of Ethiopia, Abyssinia.

Description (based on female holotype). The morphometric measurements are given below.

Coloration. Basically reddish-yellow with some darker reddish to blackish zones on the tergites and metasomal segments III to V. Prosoma: carapace yellowish with a single triangular blackish spot extending from the anterior margin to the end of the carapace; eyes surrounded by black pigment. Mesosoma: yellowish with confluent dark zones and two longitudinal blackish spots. Metasoma: segments I and II yellowish; III and IV reddish; V dark reddish. Vesicle dark reddish but lighter than segment V; aculeus dark reddish. Venter yellowish. Chelicerae yellowish; fingers reddish. Pedipalps: globally yellowish; chela reddish yellow. Legs yellowish.

Morphology. Carapace very feebly granular, almost smooth; anterior margin with a median to strong concavity. No keels; furrows very feeble. Median ocular tubercle anterior to the center; median eyes separated by one and a half ocular diameters. Three pairs of lateral eyes. Sternum subtriangular. Mesosoma: tergites with very feeble

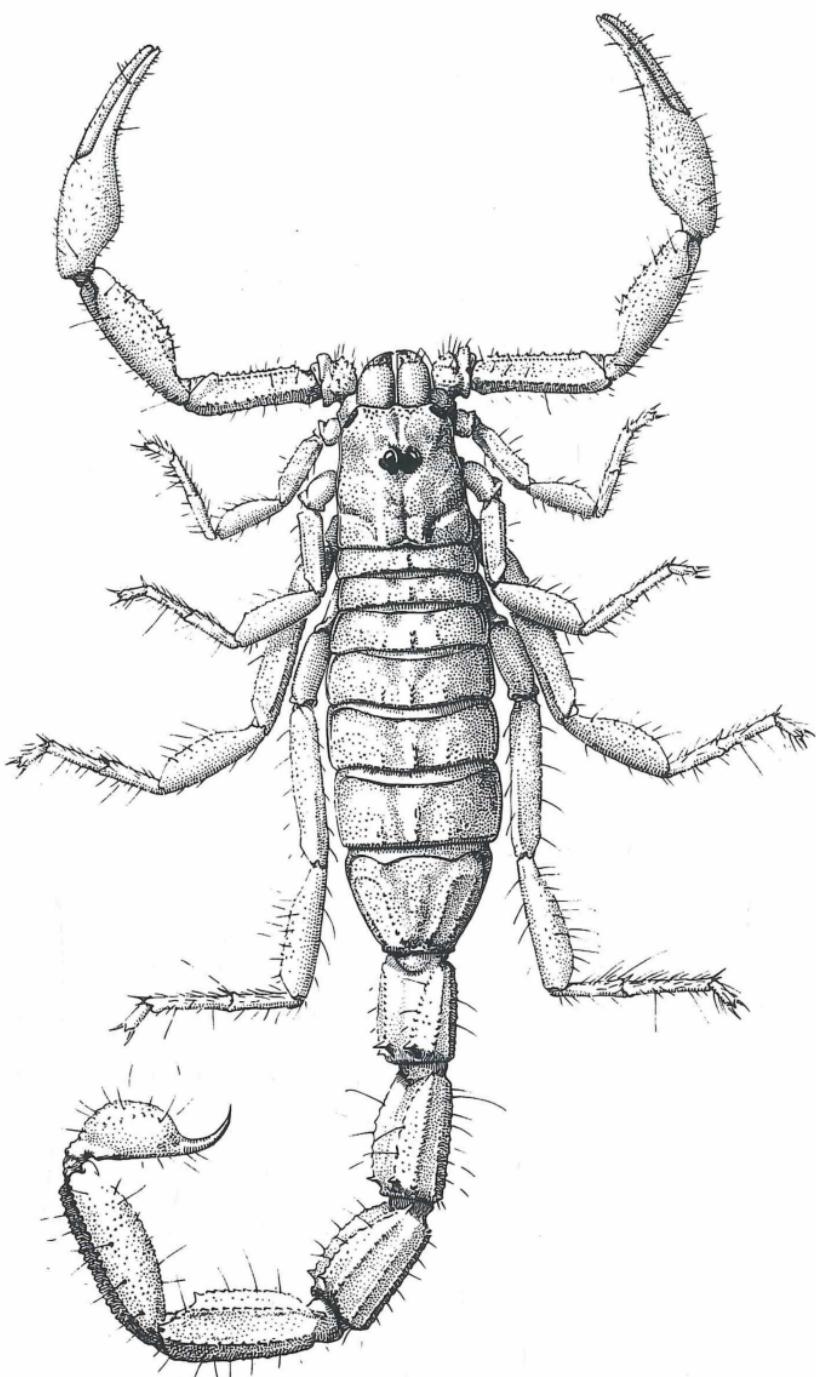


Fig. 8. *Uroplectes carinatus* Pocock: female from Kalahari, Botswana.

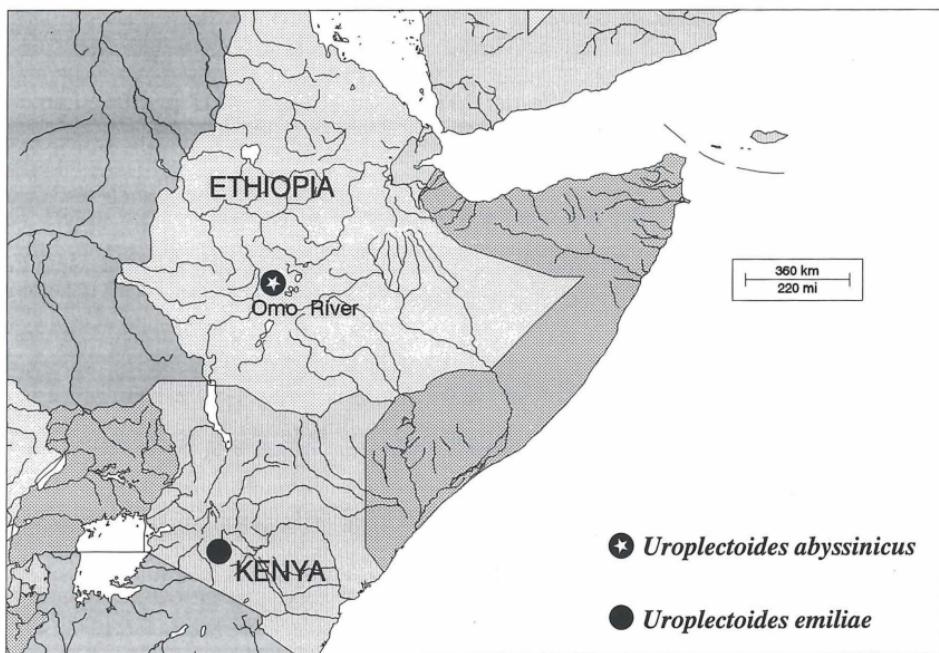


Fig. 9. The type localities of *Uroplectoides abyssinicus* gen. n., sp. n. and *U. emiliae* (Werner).

granulation, almost smooth. Median keel feeble to moderate in all tergites. Tergite VII pentacarinate, but all keels vestigial. Venter: genital operculum divided longitudinally. Pectine: pectinal tooth count 15-15; basal middle lamellae of each pecten moderately dilated. Sternites smooth with elongate stigmata; VII without keels. Metasoma: segments I to V with only vestigial dorsal keels. Tegument smooth and punctuated. Telson smooth with a long and strongly curved aculeus. Subaculear tooth very strong and rhomboidal. Cheliceral dentition characteristic of the family Buthidae (Vachon 1963); ventral aspect of both finger and manus with long dense setae and no teeth on ventral proximal margin. Pedipalps: femur pentacarinate but feebly crenulate; tibia and chelae with some vestigial keels but very feebly crenulate; all faces smooth. Movable fingers with 11/12 oblique rows of granules. Trichobothriotaxy: A- α , orthobothriotaxy (Vachon 1973, 1975). Legs: tarsi with very numerous fine setae ventrally. Tibial and pedal spurs present and strong on legs III and IV.

M e a s u r e m e n t s (in mm): Carapace: length 4.6, anterior width 3.3, posterior width 5.4; Metasomal segment I: length 3.9, width 2.8; Metasomal segment V: length 5.0, width 2.8, depth 2.1; Vesicle: width 1.9, depth 1.8; Pedipalp: femur length 3.9, femur width 1.2, tibia length 4.8, tibia width 1.6, chelae length 7.8, chelae width 1.6, chelae depth 1.2; Movable finger: length 5.4.

Uroplectoides emiliae (Werner, 1916), comb. n.
 (Fig. 7)

Lychas emiliae Werner, 1916: Werner 1916 (p. 87), Lampe 1917 (p. 194), Lamoral & Reynders 1975 (p. 511); *Uroplectes emiliae*: Vachon 1984 (p. 369).

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