

SPIXIANA	5	2	187–191	München, 1. Juli 1982	ISSN 0341-8391
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The reduction of the genus *Buddelundiscus* Verhoeff, 1942 to a synonym of *Aphiloscia* Budde-Lund, 1908

(Crustacea, Isopoda, Philosciidae)

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Abstract

A re-examination of the *Buddelundiscus annulicornis* Verhoeff, 1942 (Crustacea, Isopoda, Philosciidae) syntypes revealed that the genus *Buddelundiscus* Verhoeff, 1942 is synonymous with *Aphiloscia* Budde-Lund, 1908. As the name *annulicornis* is preoccupied in this genus, the new taxonomic status of this species is: *Aphiloscia verhoeffi* nomen novum.

The intrinsically difficult taxonomic – and zoogeographic – study of tropical isopods is further complicated by the problem of interpreting the scanty literature, a difficult – and sometimes impossible – task due to its fragmentariness and the often non-homogeneous methods of description. A correct identification of previously described species is often possible only after re-examination of the original material. Thus we are extremely grateful to Dr. L. Tiefenbacher of the Munich Museum for having loaned us the syntypes of *Buddelundiscus annulicornis*, described as a new genus and new species by VERHOEFF (1942). Their re-examination confirmed our previous supposition (FERRARA & TAITI, 1979; TAITI & FERRARA, 1980) that the genus *Buddelundiscus* Verhoeff, 1942 is synonymous with *Aphiloscia* Budde-Lund, 1908.

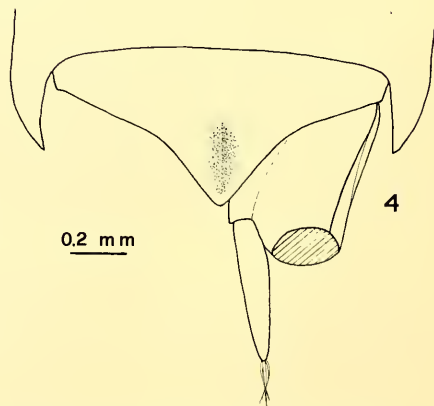
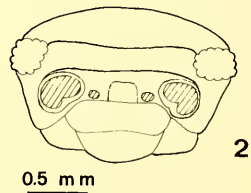
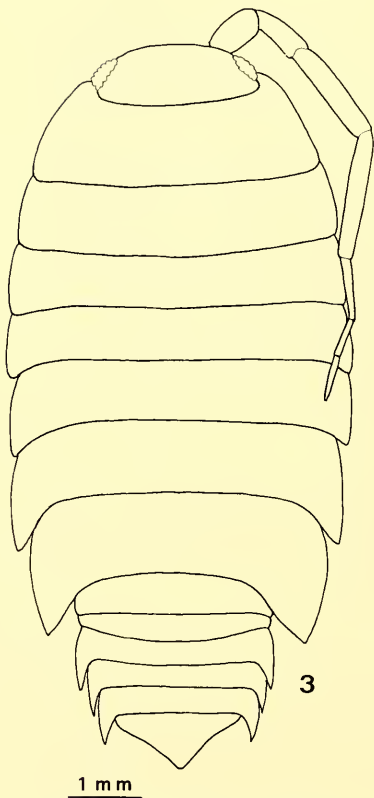
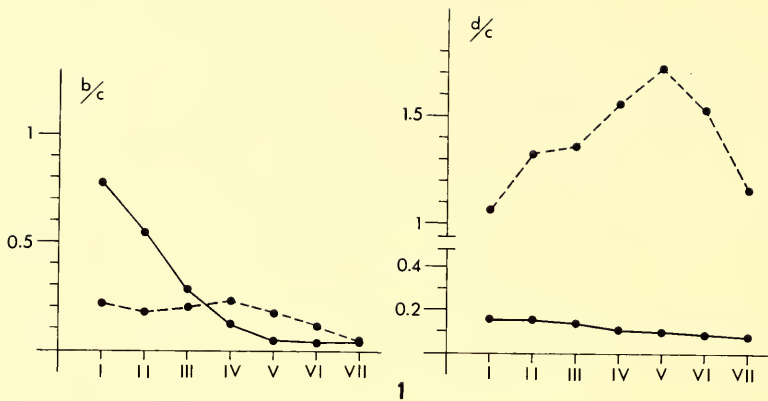
In order to facilitate future comparisons with congeneric species we thought it useful to furnish a complete re-description of this species which would, at the same time, cancel the errors contained in the original description while demonstrating its appartenance to the genus *Aphiloscia*. As the name *annulicornis* is preoccupied in *Aphiloscia*, the new taxonomic status of *Buddelundiscus annulicornis* Verhoeff, 1942 is

Aphiloscia verhoeffi, nomen novum

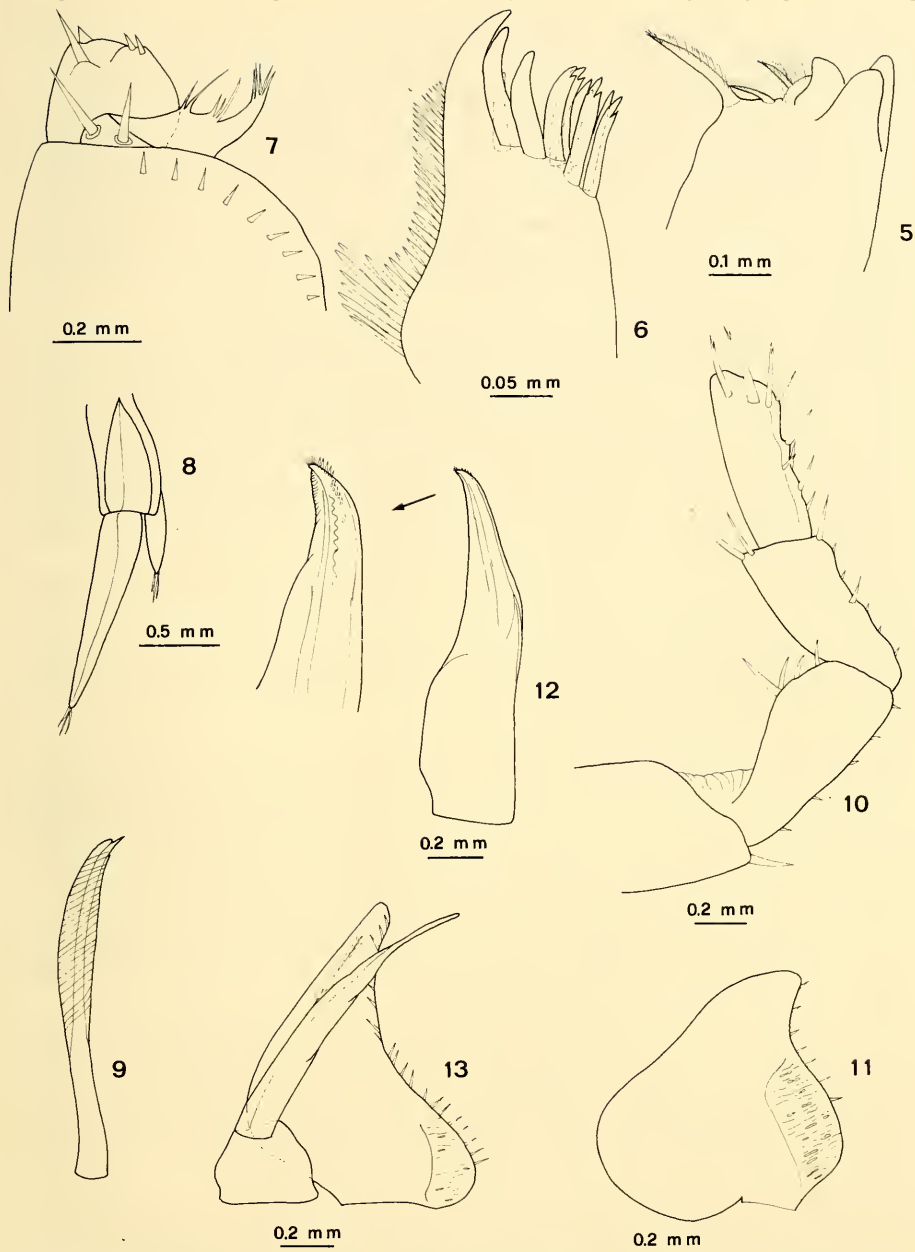
Buddelundiscus annulicornis VERHOEFF, 1942: 65–66, figs. 36–39; BARNARD, 1960: 508; SCHMOELZER, 1974: 157; FERRARA & TAITI, 1979: 112; TAITI & FERRARA, 1980: 67

Material. – Mozambique: 1♂ (Lectotypus), 11♀♀ (Paralectotypi), Port Amelia, leg. M. Zitzmann, 1927, ex Coll. Verhoeff, Zool. Staatssamml. München, Abt. Wirbellose Tiere.

Description. – Maximum dimensions, 11×5.5 mm. Color variable from dark to yellowish-brown, usually with a pale spot at the base of the pereon epimera which have co-



Figs. 1-4: *Aphiloscia verhoeffi* nom. nov. Fig. 1: b/c and d/c co-ordinates of noduli laterales. - Fig. 2: cephalon, frontal view. - Fig. 3: the animal in dorsal view. - Fig. 4: telson.



Figs. 5–13: *Aphiloscia verhoeffi* nom. nov. Fig. 5: mandible apex. – Fig. 6: outer branch of maxillula. – Fig. 7: maxilliped apex. – Fig. 8: uropod, lateral view. – Fig. 9: spine of pereopod 1 carpus, ♂. – Fig. 10: pereopod 7, ♂. – Fig. 11: pleopod 1 exopodite, ♂. – Fig. 12: pleopod 1 endopodite, ♂. – Fig. 13: pleopod 2, ♂.

lorless margins. Antennae dark, fifth joint of peduncle with a light ring in the middle. Eyes large with 22–23 ommatidia arranged in four rows. Each pereon segment with 30–50 gland pores per side along the entire sulcus marginalis. Two series of noduli laterales on each side of pereon segments; their b/c and d/c co-ordinates as in Fig. 1. Cephalon (Fig. 2) with well-defined frontal line, slightly bent in the middle; supra-antennal line thin and straight. Pereon segments 1–3 with straight posterior borders and rounded angles; segment 4 with slightly concave posterior borders and right-angled corners; segments 5–7 with increasingly concave borders and acute-angled corners. Pleon epimera (Fig. 3) large, acutely produced and bent backwards. Telson (Fig. 4) much shorter than uropod protopodites with markedly concave sides and almost pointed apex; a medial impression is visible dorsally.

Appendages. Antennae very long (reaching pereon segment 6 when flattened backwards) with scapus joints slightly keeled; fifth joint longer than flagellum whose segments are in the ratio of 7:5:6. Molar penicil of mandible (Fig. 5) consisting of a single unbranched seta; outer branch of maxillula (Fig. 6) with 4+6 (5 cleft) teeth; maxilliped endite (Fig. 7) typical of the genus, i. e. without setae or penicil and with three small apical spines. All pleopod exopodites equipped with respiratory areas. Uropod protopodite (Fig. 8) with a triangular depression on outer margin; insertion of endopodite proximal to that of exopodite.

Male. Pereopod 1: a brush of spines (Fig. 9) on carpus and distal half of merus. Pereopods 2–6 missing in the only male studied. Pereopod 7 (Fig. 10) ischium with straight sternal margin. Pleopod 1 exopodite (Fig. 11) with inner margin sinuose and a short triangular posterior lobe slightly bent outwards; endopodite (Fig. 12) similar in shape to the other species of *Aphiloscia*, apex with a medial row of short spines and a tuft of tiny setae. Pleopod 2 as in Fig. 13.

Remarks. – *A. verhoeffi* differs from *A. vilis* (Budde-Lund, 1885), *A. montana* Taiti & Ferrara, 1980, *A. trifasciata* Taiti & Ferrara, 1980, *A. digitata* Taiti & Ferrara, 1980, *A. congolensis congolensis* Arcangeli, 1950, *A. congolensis damasi* Arcangeli, 1950 and *A. sordida* Arcangeli, 1950 in the shape of pleopod 1♂; from *A. guttulata* (Gerstaecker, 1873) in the absence of concave posterior borders on pereon segments 1–3; from *A. maculicornis* (Budde-Lund, 1898) in the presence of clearly curved telson sides; from *A. annulicornis* (Budde-Lund, 1885) in the different color pattern. However, the last three species have been described only superficially without any information on the male traits which are essential to a correct identification.

According to the label inside the tube – added when Verhoeff's collection was incorporated by the Munich Museum – these specimens are the Paratypes while the Type is at the Hamburg Museum. While Verhoeff did not indicate any specimen as the Type in his paper, the male dissected by him (and examined by us) is the one on which he based his drawings and most of his description. Thus it seems proper to designate this as the Lectotype.

SCHMOELZER (1974) described two new species of *Buddelundiscus* from Tanzania – *B. maranguus* and *B. marginatus* – which should both be transferred to the genus *Aphiloscia*. However, according to their descriptions, it is doubtful whether these belong to the latter genus. They should be re-examined in order to place them in their correct taxonomic position.

Zusammenfassung

Eine Revision der Syntypen von *Buddelundiscus annulicornis* Verhoeff, 1942 (Crustacea, Isopoda, Philosciidae) zeigt, daß die Gattung *Buddelundiscus* Verhoeff, 1942 als Synonym von *Aphiloscia* Budde-Lund, 1908 betrachtet werden muß. Da der Name *annulicornis* innerhalb der Gattung schon besetzt ist, klingt der neue taxonomische Status dieser Art wie folgend: *Aphiloscia verhoeffi* nomen novum.

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Angenommen am 15. 12. 1981

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 1982

Band/Volume: [005](#)

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Artikel/Article: [The reduction of the genus *Buddelundiscus* Verhoeff, 1942 to a synonym of *Aphiloscia* Budde-Lund, 1908 \(Crustacea, Isopoda, Philosciidae\). 187-191](#)