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## **New data on the Afrotropical Xantholinini. 10. New species from South Africa (Coleoptera: Staphilinidae)**

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## RESEARCH ARTICLE

## New data on the Afrotropical Xantholinini. 10. New species from South Africa (Coleoptera: Staphilinidae)

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## Abstract

The following new species from South Africa are described and illustrated: *Phacophallus capensis* **sp. n.** (Eastern Cape), *Notolinopsis complicitus* **sp. n.** (Eastern Cape), *Elapheia zuluensis* **sp. n.** (KwaZulu-Natal), and *E. natalensis* **sp. n.** (KwaZulu-Natal).

Key words: Africa, Eastern Cape, KwaZulu-Natal, morphology, rove beetles.

## Zusammenfassung

Die folgenden neuen Arten aus Südafrika werden beschrieben und illustriert: *Phacophallus capensis* **sp. n.** (Eastern Cape), *Notolinopsis complicitus* **sp. n.** (Eastern Cape), *Elapheia zuluensis* **sp. n.** (KwaZulu-Natal) und *E. natalensis* **sp. n.** (KwaZulu-Natal).

## Introduction

This contribution is based on specimens collected in South Africa and received on loan from the Staatliches Museum für Naturkunde in Stuttgart, Germany. Alongside known species, I was able to examine specimens belonging to four new species from the Eastern Cape and KwaZulu-Natal provinces of South Africa, thus increasing the knowledge of Afrotropical Xantholinini.

## Material and methods

The abbreviations used in the text are as follows: cB – A. BORDONI collection, Florence, Italy; SMNS – Staatliches Museum für Naturkunde Stuttgart, Germany. The examination of the specimens was done through a Wild M5A binocular and an Optika B-293 trinocular microscope.

Photographs were taken with a Visionary Digital photography system (LK Imaging System, Dun. Inc.) equipped with a Canon EOS 5DSR objective, and were subsequently processed with Helicon Focus Pro, Adobe Lightroom, and Adobe Photoshop CS6.

## Taxonomy

*Phacophallus capensis* **sp. n.**  
(Figs. 1–3, 13)

## Type material

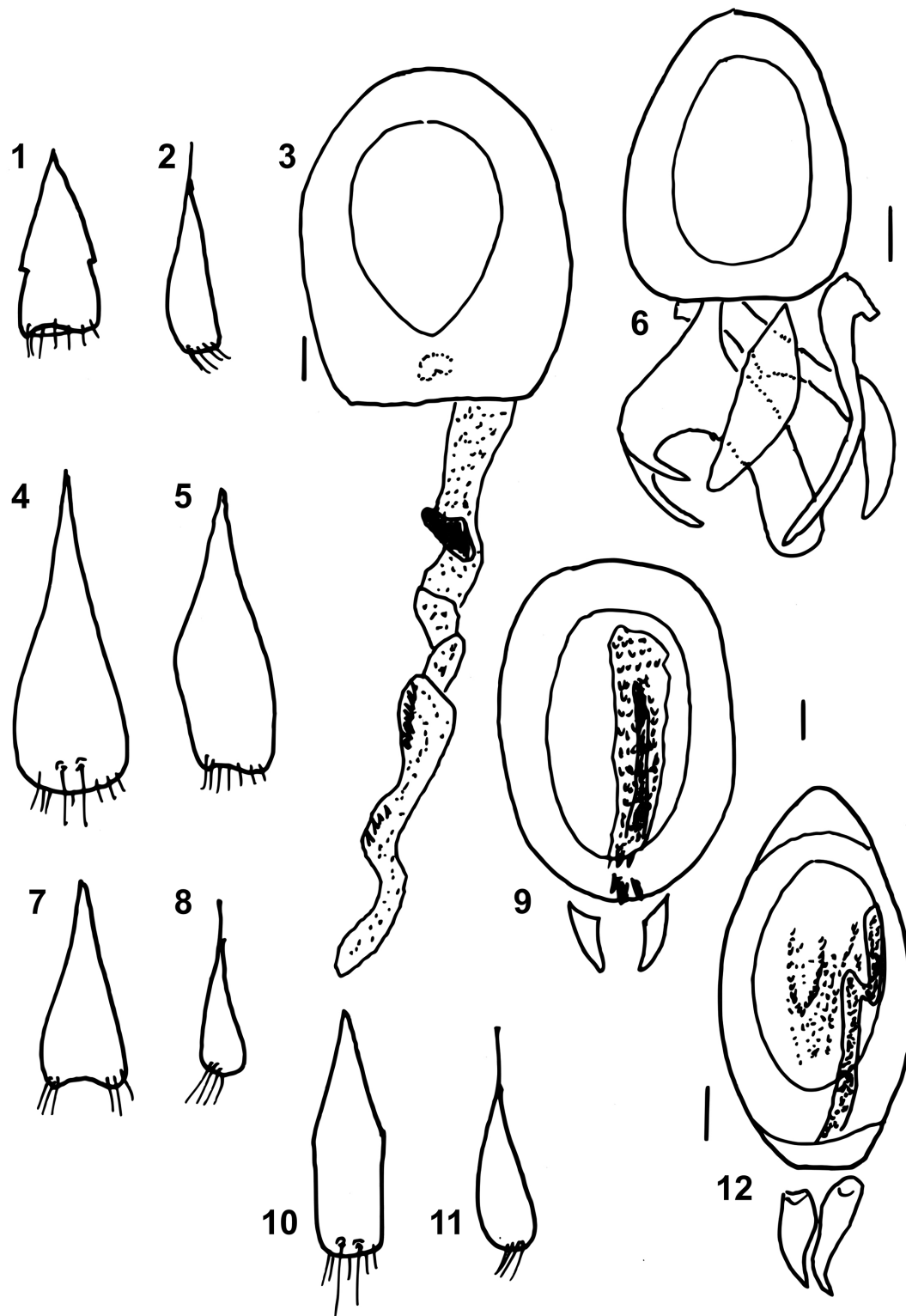
**Holotype** ♂ (Fig. 13): Republic of South Africa, Eastern Cape, N Fort Beaufort, Fort Fordyce N. R., 1000 m, 3–5.XII.2007, W. SCHAWALLER leg. (SMNS).

## Description

**Male.** Length of body: 6.4 mm; length from anterior margin of head to posterior margin of elytra: 2.9 mm. Body dark reddish-brown, with black head. Head subrectangular, narrow anteriorly, with widely rounded posterior angles. Eyes medium-sized and almost flat. Surface of head with long ocular grooves and 2–3 series of deep punctures on the sides. Pronotum convex, longer than and as wide as head, with oblique anterior margins, widely rounded anterior angles, non emarginate sides; surface with dorsal series of 2 anterior and 3 posterior punctures, lateral series of 3 punctures. Elytra large, dilated posteriorly, longer and wider than pronotum, with marked humeral angles; surface with 4–5 series of fine and spaced punctures. Abdomen with fine, sparse punctures.

Tergite and sternite of male genital segment as in Figs. 1–2. Aedeagus (Fig. 3) 0.81 mm long, sub-spherical; inner sac with three areas of spinulae.

<sup>1</sup> 325th contribution to the knowledge of Staphylinidae.



**Figs. 1–12.** Male genitalia structures of the new species. 1–3. *Phacophallus capensis* sp. n. – 1. Tergite of male genital segment. 2. Sternite of male genital segment. 3. Aedeagus. 4–6. *Notolinopsis complicitus* sp. n. – 4. Tergite of male genital segment. 5. Sternite of male genital segment. 6. Aedeagus. 7–9. *Elapheia zuluensis* sp. n. – 7. Tergite of male genital segment. 8. Sternite of male genital segment. 9. Aedeagus. 10–12. *Elapheia natalensis* sp. n. – 10. Tergite of male genital segment. 11. Sternite of male genital segment. 12. Aedeagus. Scale bars: 0.1 mm.

## Differential diagnosis

The new species differs from *P. elephantorum* Bordoni, 2016, from the same Cape province, by the punctuation of the pronotum and, in particular, by the inner sac of the aedeagus without spines.

## Etymology

The specific epithet refers to the type locality.

## Distribution

The species is known only from the type locality.

***Notolinopsis complicitus* sp. n.**

(Figs. 4–6, 14)



**Fig. 13.** *Phacophallus capensis* sp. n.; holotype ♂ (SMNS), dorsal habitus. Scale bar: 2 mm.



**Fig. 14.** *Notolinopsis complicitus* sp. n.; holotype ♂ (SMNS), dorsal habitus. Scale bar: 2 mm.

## Type material

**Holotype** ♂ (Fig. 14): Republic of South Africa, Eastern Cape, N Fort Beaufort, Fort Fordyce N. R., 1000 m, 3–5.XII.2007, W. SCHAWALLER leg. (SMNS).

## Description

**Male.** Length of body: 10 mm; length from anterior margin of head to posterior margin of elytra: about 4.5 mm. Body dark reddish-brown; antennae and legs brown. Head sub-rectangular, barely narrower anteriad, with widely rounded posterior angles; surface with transverse microstriation and fine, scattered punctation except for a median stripe. Eyes small and flat. Pronotum longer and narrower than head, with oblique anterior margins, rounded anterior angles and slightly emarginate sides; surface with dorsal





**Fig. 15.** *Elapheia zuluensis* sp. n.; holotype ♂ (SMNS), dorsal habitus. Scale bar: 2 mm.

series of 10–11 punctures and lateral series of 5 anterior punctures. Elytra shorter and narrower than pronotum, with more or less obsolete humeral angles; surface with very fine punctation, arranged in some series. Abdomen with traces of transverse micro-striation and fine punctures on the sides of each segment.

Tergite and sternite of male genital segment as in Figs. 4–5. Aedeagus (Fig. 6) 1.11 mm long, ovoid, with asymmetric, complex parameres and long distal lobulae.

#### Differential diagnosis

*Notolinopsis complicatus* sp. n. differs from *N. nquadu* Bordoni, 2016, from Transkei, by the length of the body (10.0 mm instead 8.7), by the punctation of the pronotum (10–11 punctures instead of 5–6), by the surface of the elytra (shiny instead of with polygonal micro-reticulation), and by the structure of the aedeagus.

#### Etymology

The specific epithet is the Latin adjective “*complicatus*” (-a, -um), meaning “enveloped”.

#### Distribution

The species is known only from the type locality

#### *Elapheia zuluensis* sp. n. (Figs. 7–9, 15)

#### Type material

**Holotype** ♂ (Fig. 15): Republic of South Africa, Kwa-Zulu-Natal, 15 km S Pongola, 1.II.2008, P. SCHÜLE leg. (SMNS).

**Paratypes**: same data, SW Magudu, 27°34'S, 31°35'W, 4–5.I.2009, P. SCHÜLE, 1 ♀ (SMNS), 1 ♂ (cB).



**Fig. 16.** *Elapheia natalensis* sp. n.; holotype ♂ (SMNS), dorsal habitus. Scale bar: 2 mm.

### Description

Male. Length of body: 4.6 mm; length from anterior margin of head to posterior margin of elytra: about 2.7 mm. Body reddish-brown with darker head; antennae and legs brown. Head sub-rectangular, with sub-parallel sides and narrowly rounded posterior angles. Eyes medium-sized and slightly protruding; surface of head with fine punctuation, except for a median stripe. Pronotum longer and narrower than head, with oblique anterior margins and rounded anterior angles; surface with dorsal series of 7–8 punctures and lateral series of 4–5 punctures. Elytra long, sub-rectangular, with narrowly rounded humeral angles; surface with fine punctuation arranged in some series. Abdomen with fine punctuation on the sides of each segment.

Tergite and sternite of male genital segment as in Figs. 7–8. Aedeagus (Fig. 9) 0.6 mm long, ovoid, with symmetric, short parameres; inner sac long and narrow, with a median black area below a surface covered with fine scales.

### Differential diagnosis

The species differs from *E. gracilenta* (Scheerpeltz, 1974) (Fig. 17) from the Democratic Republic of the Congo, Tanzania, Malawi, Zimbabwe, Swaziland, and South Africa by the punctuation of the pronotum (7–8 punctures instead 13–14 punctures), by the shape of eyes (medium-sized and moderately protruding instead of large and prominent), and by the structure of the inner sac of the aedeagus.

### Etymology

The specific epithet refers to the Zululand region.

### Distribution

The species is known only from the type locality.

### *Elapheia natalensis* sp. n.

(Figs. 10–12, Fig. 16)

### Type material

Holotype ♂ (Fig. 16): Republic of South Africa, Kwa-Zulu-Natal, SW Magudu, 27°34'S, 31°35'W, 4–5.I.2009, P. SCHÜLE leg. (SMNS)

### Description

Male. Length of body 4.8 mm; from anterior margin of head to posterior margin of elytra: about 2.8 mm. Other characters similar to *E. zuluensis* sp. n., but anteriorly narrower head, longer pronotum, and shorter and posteriad-dilated elytra.

Tergite and sternite of male genital segment as in Figs. 10–11. Aedeagus (Fig. 12) 0.81 mm long, ovoid, with asymmetric, short parameres; inner sac with on the right a narrow, long structure covered with dense scales, and on the left a vast area covered with sparse scales.

### Differential diagnosis

Similar to *E. zuluensis* sp. n., from which differs by the following characters: anteriorly narrower head, longer pronotum, shorter and posteriad-dilated elytra, and structure of the aedeagus.

### Etymology

The specific epithet refers to the old name of the province: Natal.

### Distribution

The species is known only from the type locality.

### *Elapheia gracilenta* (Scheerpeltz, 1974)

(Fig. 17)



Fig. 17. *Elapheia gracilenta* (Scheerpeltz, 1974); male from South Africa (SMNS), dorsal habitus. Scale bar: 2 mm.

**Material examined**

Republic of South Africa, KwaZulu-Natal, SW Magudu, 27°34'S, 31°35'W, 4–5.I.2009, P. SCHÜLE leg.; 17 exx. (SMNS), 5 exx. (cB).

**Distribution**

Democratic Republic of the Congo, Tanzania, Malawi, Zimbabwe, Swaziland, South Africa (BORDONI 2016).


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