

**The spider beetles of the continental Africa (Coleoptera: Ptinidae).
Part III. *Eutaphroptinus* gen. n. from South Africa with description of
two new species belonging to the new genus**

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Abstract. The paper consists of the description of new genus of spider beetle, *Eutaphroptinus* gen. n., with two new species: *E. natalensis* sp. n. and *E. pseudonatalensis* sp. n. from South Africa. The descriptions are supplemented with figures illustrating the new taxa, remarks on their geographical distribution, and comparison with similar genera and species.

INTRODUCTION

This paper is the third of the planned series of publications concerning the spider beetles of continental Africa. The first two (Borowski 2009a, 2009b) contained data on 12 species of Ptinidae. Herein the description of a new genus, *Eutaphroptinus* gen. n., and its two species, *E. natalensis* sp. n. and *E. pseudonatalensis* sp. n., is provided. Both species occur mainly in the territory of the Republic of South Africa. The new genus resembles *Eutaphrimorphus* Pic, 1898 and *Silisoptinus* Pic, 1917 from which, however, it differs by many characters specified in the diagnosis.

MATERIALS AND USED ABBREVIATIONS

The paper is based on the materials loaned from following institutions:

- JB author's collection;
- MNHU Museum für Naturkunde der Humboldt-Universität, Berlin, Germany;
- NHML Natural History Museum, London, Great Britain;
- SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany;
- ZMUC Zoological Museum University of Copenhagen, Copenhagen, Denmark.

DESCRIPTIONS

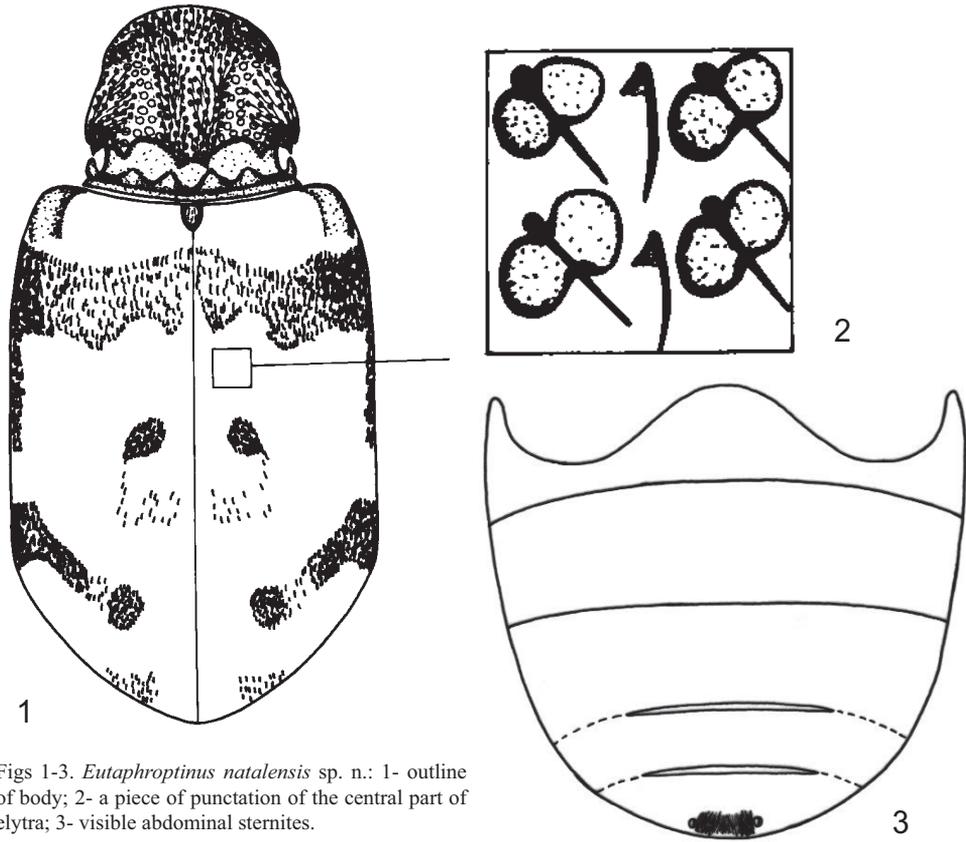
Eutaphroptinus gen. n.

(Fig. 1)

Type species: *Eutaphroptinus natalensis* sp. n.

Description. Body length 2.0-2.4 mm. Body blackish-brown, with mouthparts and partly legs and antennae paler, reddish-brown. Head and ventral parts covered with white squamules. Antennae 11-jointed, antennomeres elongate. Interantennal space flattened, narrow. Eyes naked, small, indistinctly protruding from the outline of head. Pronotum broadly constricted in basal part so as to look like bipartite. Pronotal surface densely verrucose. Basal margin of anterior part with pair of sharp cusps at middle. Basal margin of anterior part with prominent sharp tubercle and two additional cusps at each lateral angle. Posterior surface of tubercles covered with white squamulae. Pronotal pubescence similar to that on elytral intervals. Posterior part of pronotum much narrower than anterior. Its anterior margin with 6 small, protruding tubercles, each with straight golden hair on tip. At middle of basal part of pronotum runs very deep, fissured, transverse constriction. Scutellum small, elliptical, covered with pale narrow squamulae. Elytra partly parallel-sided, broadly rounded in posterior part. Humeral protuberances large, strongly protruding. Puncture rows conspicuous, punctures deep, markedly constricted at middle (Fig. 2). Elytral scales wide, pale, usually purely white, arranged in transverse bands and spots. Hairs in punctures recumbent, similar to those on intervals. Intervals with sharp, protruding granules, each with straight erect hair. Abdomen with 5 visible segments of which 4 and 5 distinctly narrower than 2 and 3. Anterior margin of 4 and 5 segment with deep transverse groove at middle (Fig. 3). Apex of last visible segment with pair of low conical pricks and dense white hair-like squamulae between them. Underwings developed. Sexual dimorphism inconspicuous. Male genitalia very distinctive; penis small, placed transversely between parameres (Figs 4-5, 7-8). Male genital segment biramous with additionally forked apical part (Figs 6, 9).

Differential diagnosis. The new genus, *Eutaphroptinus* gen. n., shows some resemblance to *Silisoptinus* Pic and *Eutaphrimorphus* Pic, but differs mainly by structure of prothorax, abdominal segments and male genitalia. In *Silisoptinus* anterior part of prosternum is distinctly widened, enabling the beetle to shove there its head together with mouthparts - in *Eutaphroptinus* gen. n., like in *Eutaphrimorphus* and the majority of Ptinidae, it is narrow so that head cannot be hidden in prosternum and mouthparts are always visible from side. Moreover, in species of *Silisoptinus* both on metasternum and on sternites broad ovate depressions are seen, which never occur in *Eutaphrimorphus*, while the new genus shows only deep transverse groove at middle of anterior margin of 4 and 5 visible sternite. *Eutaphroptinus* gen. n. may also be distinguished from *Silisoptinus* and *Eutaphrimorphus* by the apex of last abdominal segment, adorned with a spot of pale squamules and sharp protruding prick on each side - such structures never occur in representatives of *Silisoptinus* or *Eutaphrimorphus*. The most distinctive feature is, however, the structure of male genitalia, totally different from



Figs 1-3. *Eutaphroptinus natalensis* sp. n.: 1- outline of body; 2- a piece of punctuation of the central part of elytra; 3- visible abdominal sternites.

that in any other hitherto known species. Especially peculiar is small, transversely elongated penis, strongly bent from middle and laid horizontally - viewed from inside mainly long and wide parameres are seen, while penis is hardly visible; in all hitherto known Ptinidae, penis is vertically elongated, usually as long as parameres, and not markedly bent.

Name derivation. The generic name is a combination of two other names in Ptinidae: *Eutaphrimorphus* Pic, to whom the new genus is partly similar, and *Ptinus* Linnaeus, the nominotypical genus for the family. Masculine gender.

***Eutaphroptinus natalensis* sp. n.**

(Figs 1-6)

Type material. Holotype (♂): „Natal: Kloof. 1500ft. Aug. 1926, S. Africa, R.E. Turner, Brit. Mus. 1926-350“, (NHML). Paratypes (1 spec.): “Natal: Kloof. 1500ft. Sept. 1926, S. Africa, R.E. Turner, Brit. Mus. 1926-404”, (JB); (1 spec.): “Tanzania, Uzungwa Mts. Mwanihana

Forest above Sanje, 1250 m., 25.viii.1982, M. Stoltze & N. Scharff leg.”, (DMHN); (3 spec.): “R.S.A.: Prov. Transvaal, Blydepoort, 20.xi.1981, leg. J. Klapperich”, (2 SMHN, 1 JB); (1 spec.): “RSA, KwaZulu-Natal, Ndumu Game Reserve, 20-22.xi.2002, leg. W. Schawaller” (SMHN); (1 spec.): “RSA, KwaZulu-Natal, Manguzi Forest, 15-16.xi.2002, leg. W. Schawaller”, (JB); (2 spec.): “RS Africa, 1.X.-29.xi.2002, Northern Prov., farm Lajuma near Louis Trichardt, Soutpansberg, 23°07’S/29°27’, leg. Axel Schenhofer”, (1 NMHU; 1 JB).

Description. Length 2.1-2.4 mm. Body blackish-brown, lustrous. Antennal joints elongated, slightly widened towards apices; first two black, others bicolorous: basal halves red, apical black. Front densely covered with yellowish-white squamulae; thick, short, yellow setae dispersed between them. Pronotum black, surface densely papillose, each papilla with short straight golden hair at top. Hairs at middle directed obliquely backwards, on sides towards lateral tubercles. Anterior part of pronotum with irregularly distributed squamulae, more dense on posterior portions of lateral tubercles. Inside of constriction with fine but conspicuous reticulate microsculpture. Scutellum short, widened at middle, covered with tiny, narrow, whitish-gray or white hair-like squamulae. Protruding, sharp granulae on intervals particularly conspicuous in lateral and apical parts of elytra. Hairs on intervals yellowish-golden, of equal length, semierect, directed backwards; those in punctures recumbent, somewhat thinner than on intervals but of similar length. On first 4 intervals, hairs point in part obliquely towards sides and apex (Fig. 2), otherwise directly backwards. Elytral scales narrowly elliptical, making two transverse bands and some small spots. Anterior band, placed behind humeral protuberances, extends to suture and scutellum; posterior runs somewhat obliquely from lateral margin to second interval, where it may make an ovate, sometimes isolated spot. Disk of elytra with irregularly distributed small speckles or single scales; small spot or group of scales before apex. Hind margin of elytra reddish-brown. Ventral side densely covered with narrow white squamulae. Tarsi and tibiae reddish-brown, femora darkened apically or entirely blackish-brown. Legs partly covered with narrow white squamulae. Parameres strongly widened and pointed apically. Their pubescence scant, with but few hairs just at apex (Fig. 4). Penis from middle distinctly bent towards base (Fig. 5). Apical part of genital segment in male wide (Fig. 6).

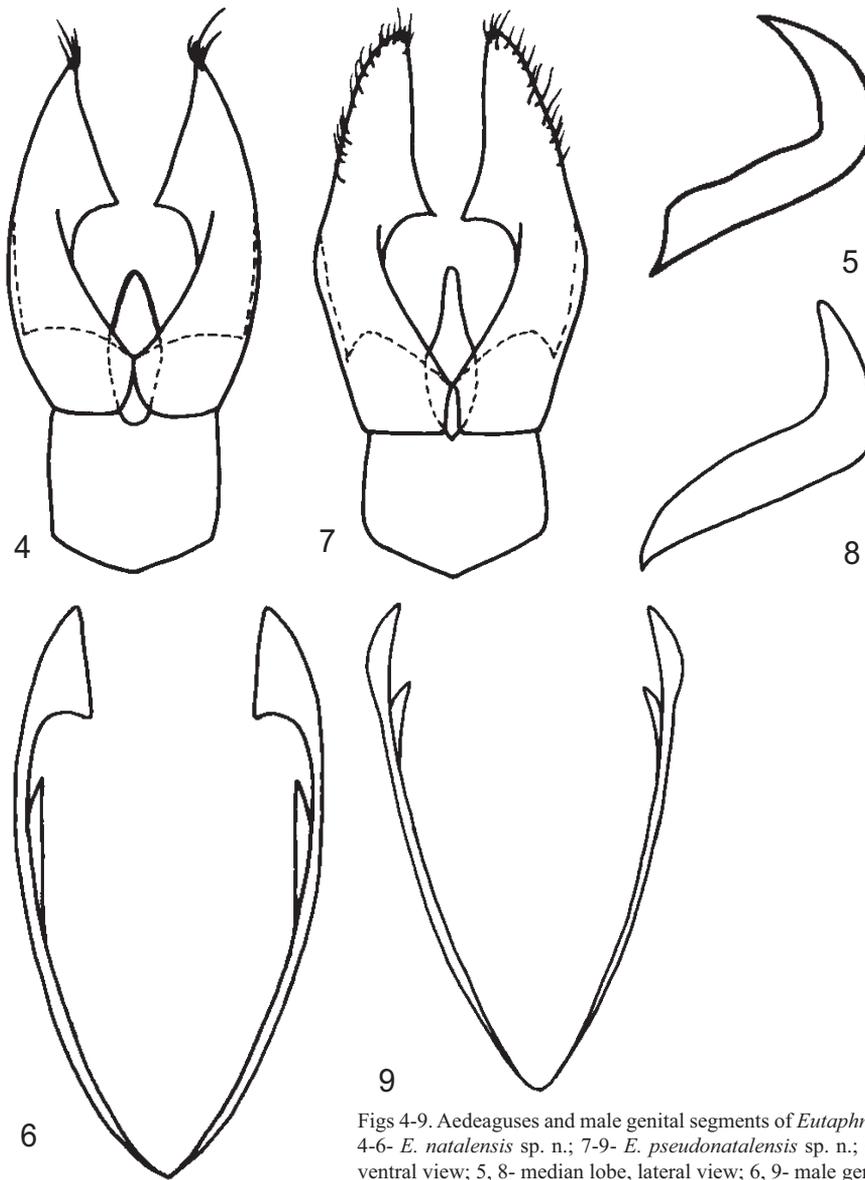
Name derivation. The name of this species has been derived from the province of RSA, Natal, where the majority of material was collected.

Eutaphroptinus pseudonatalensis sp. n.

(Figs 7-9)

Type material. Holotype (♂): „Port St. John, Pondoland, July 10-31.1923, S. Africa, R.E. Turner, Brit. Mus. 1923-398”, (MHNL). Paratypes (2 spec.): “Port St. John, Pondoland, Sept. 1923, S. Africa, R.E. Turner, Brit. Mus. 1923-398”, (1 MHNL, 1 JB); (1 spec.): “Port St. John, Pondoland, Aug 15-31.1923, S. Africa, R.E. Turner, Brit. Mus. 1923-398”, (MHNL).

Description. Length 2.0-2.2 mm. Body black Antennomeres elongate, first two black, others



Figs 4-9. Aedeaguses and male genital segments of *Eutaphroptinus* gen. n.: 4-6- *E. natalensis* sp. n.; 7-9- *E. pseudonatalensis* sp. n.; 4, 7- aedeagus, ventral view; 5, 8- median lobe, lateral view; 6, 9- male genital segment.

reddish-brown. Front densely covered with broad but small white squamulae, between them single fine, recumbent, squamiform hairs occur. Pronotum black, coarsely papillose, papillae with fine golden hairs on top. Pubescence at middle of disk directed obliquely backwards, that on lateral parts point towards tops of lateral tubercles. Scales on lateral tubercles sparse. Inside of constriction smooth. Scutellum covered with fine silvery hairs. Protruding sharp

granules on intervals large, prominent, equally well developed throughout elytral surface. Hairs on intervals narrow, of equal length, yellowish-golden, semierect, directed somewhat obliquely lateroposteral on first two intervals, towards elytral apex otherwise; those in punctures thinner but of similar length, recumbent. Elytral scales short, wide, silvery-white or greyish-blue, dispersed all-over elytral surface sometimes with tendency to gather into transverse bands (especially near humeri); indistinct spot of rather sparse scales before elytral apex. Ventral side covered with narrow greyish-white scales. Legs yellowish-red, partly covered with narrow white squamulae. Parameres markedly widened and indistinctly pointed in apical part, conspicuously pubescent: short and rather dense hairs occur throughout upper, external margin (Fig. 7). Penis bent at right angle somewhat behind midlength (Fig. 8). Apical part of male genital segment narrow (Fig. 9).

Name derivation. Name is a combination of Greek words *pseudēs*, *pseudōnymos* (false, false named) and *natalensis* - the name of the similar species described above.

Remarks. Both newly described species inhabit mainly the southwestern part of RSA, but one specimen of *E. natalensis* sp. n. was collected in southern Tanzania (env. Sanje), what allows to suppose that *Eutaphroptinus* gen. n. is an eastern-African element probably occurring from south-eastern RSA through Mozambique, eastern Zimbabwe and Malawi to southern or possibly even central Tanzania - only further collecting of the representatives of this genus could help in more precise clarification of its geographical distribution.

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REFERENCES

- BOROWSKI J. 2009a: The spider beetles of the continental Africa (Coleoptera: Ptinidae). Part I - Genus *Mezium* Curtis. *Studies and Reports of District Museum Pargue-East, Taxonomical Series* 5:1-10.
- BOROWSKI J. 2009b: The spider beetles of the continental Africa (Coleoptera: Ptinidae). Part II - *Dignomorphus danielssoni* n. gen. and n. sp. from South Africa. *Genus* 20: 257-261.

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