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A taxonomic review of *Stenectinobregma* SCHEERPELTZ, a South African genus of Aleocharinae (Coleoptera, Staphylinidae), with descriptions of two new species

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A b s t r a c t : The genus *Stenectinobregma* SCHEERPELTZ is redefined. The genus *Gnypetoidea* SCHEERPELTZ is recognized as junior synonym of *Stenectinobregma*. Four valid species are recognised in the genus, two of which are described as new: *Stenectinobregma scheerpeltzi* nov.sp. and *S. transvaalica* nov.sp. The *Gnypetoidea punctipennis* SCHEERPELTZ is recognized as junior synonym of *Stenectinobregma brincki* SCHEERPELTZ. The taxa are diagnosed, keyed and illustrated.

Key words : Coleoptera, Staphylinidae, Aleocharinae, *Stenectinobregma*, *Gnypetoidea*, new species, taxonomy, Africa.

Introduction

The genus *Stenectinobregma* was established by SCHEERPELTZ (1974) to accommodate two new species: *Stenectinobregma brincki* and *S. rudebecki*. SCHEERPELTZ erected the new genus in the tribe Pronomaeini based on the build of mouthparts and the 4-5-5 tarsal formula. Till now, no additional species have been assigned to *Stenectinobregma*.

The current paper provide a redescription of the genus *Stenectinobregma*, descriptions and illustrations of new and previously known species, and a key to the species.

The type material is deposited in the following institutions

BMNH The Natural History Museum, London (M.J.B. Brendell, R. BOOTH)
ISEA Institute of Systematics and Evolution of Animals PAS, Kraków
MRAC..... Musee Royal de'Afrique Centrale, Tervuren (M. de Meyer)
ZML Zoological Museum Lund (R. Danielsson)

Genus *Stenectinobregma* SCHEERPELTZ 1974 (Figs 1-6)

Stenectinobregma SCHEERPELTZ 1974: 203.

T y p e s p e c i e s : *Stenectinobregma brincki* SCHEERPELTZ 1974: 205 (by original designation)

Gnypetoidea SCHEERPELTZ 1974: 231 **nov.syn.**

T y p e s p e c i e s : *Gnypetoidea punctipennis* SCHEERPELTZ 1974: 233 (by monotypy).

D i a g n o s i s : Body. Small, length 2.8-3.4 mm. Body (Fig. 1) slender, parallel-sided, convex, glossy.

Head. Circular, temples arcuately narrowed to hind angles; eyes weakly to moderately protruding from lateral contours of head; head without infraorbital ridge. Antennae long, moderately to strongly increased in width apically, extending to $\frac{1}{2}$ of elytral length.

Mouthparts. Maxillary palpi 4-segmented (Fig. 2), palpomere 1 very short, palpomere 2 elongate, palpomere 3 longer than palpomere 2, palpomere 4 relatively long, about $\frac{1}{2}$ of length of palpomere 3. Galea long and slender, shorter than lacinia (Fig. 2). Lacinia long and stylate. Labrum (Fig. 4) widest in posterior half, not emarginate apically and with characteristic arrangement of setae. Labial palpi 2-segmented (Fig. 3), palpomere 1 elongate, palpomere 2 subequal in length to palpomere 1. Ligula (Fig. 3) narrow, bifid to about middle, lobes parallel-sided. Mentum trapezoidal (Fig. 5), widest at base, apical margin deeply concave, anterior angles strongly produced, 6 long setae on each side present. Mandibles curved towards apex, right mandible (Fig. 6) with distinct molar tooth at middle of inner margin, moderately serrate in dorsal molar region; "velvety patch" area composed of combination of anterior row of teeth and basal area of very fine spinules.

Thorax. Pronotum quadrate, distinctly convex, glossy, widest in apical third, lateral sides narrowed concavely to hind angles. Hypomera fully visible in lateral view. Mesocoxae moderately widely separated. Mesosternal process narrowly triangular, rounded at apex, extending to 2 of mesocoxae; metasternal process triangular in outline, broadly rounded at apex, extending to $\frac{1}{2}$ of mesocoxae. Mesocoxal cavities margined posteriorly by fine bead.

Elytra. Quadrate, lateral sides slightly arcuate, widest in the middle, postero-lateral angles distinctly sinuate.

Abdomen. Parallel-sided, widest at level of tergites V and VI, tergites III-V distinctly transversely impressed at base, impressions coarsely punctuate, sternites III-V moderately transversely impressed at base, impressions deeply and coarsely punctuate. Legs elongate, metatarsus moderately long, exceeding to $\frac{1}{2}$ of metatibia; basal article of metatarsus short, subequal in length to article 2, articles 3 and 4 subequal in length, slightly shorter than articles 1-2, article 5 elongate, as long as articles 3-4 combined; tarsal formula 4-5-5.

Key to the species of the genus *Stenectinobregma*

- 1 Surface of head and pronotum with distinct microsculpture; antennomere 3 shorter than 2; aedeagus as in Figs 7-8; spermatheca as in Fig. 9 *S. brincki* SCHEERP.
- Surface of head and pronotum without distinct microsculpture; antennomere 3 at least as long as 2; aedeagus and spermatheca different 2
- 2(1) Surface of tergites VI-VII lacking microsculpture; antennomere 3 longer than 2; elytral punctuation dense in anterior $\frac{3}{4}$ and sparse in posterior $\frac{1}{4}$; aedeagus as in Figs 15-16 *S. transvaalica* nov.sp.
- Surface of tergites VI-VII with distinct microsculpture; antennomeres 2 and 3 subequal in length; elytral punctuation different; aedeagus and spermatheca different 3
- 3(2) Antennomeres 8-10 wider than long; elytral punctuation dense in anterior $\frac{1}{2}$ and sparse in posterior $\frac{1}{2}$; aedeagus as in Figs 10-11 *S. scheerpeltzi* nov.sp.
- Antennomeres 8-10 longer than wide; elytral punctuation dense in anterior $\frac{1}{3}$ and sparse in posterior $\frac{2}{3}$; aedeagus as in Figs 12-13; spermatheca as in Fig. 14 *S. rudebecki* SCHEERP.

***Stenectinobregma brincki* SCHEERPELTZ 1974 (Figs 1 and 7-9)**

Stenectinobregma brincki SCHEERPELTZ 1974: 205.

Gnypetoidea punctipennis SCHEERPELTZ 1974: 233 **nov.syn.**

Type material: *Stenectinobregma brincki* SCHEERPELTZ. **Holotype:** ♀: S. Afr., Cape Prov., Kirstenbosch, 29.X.1950 (ZML). **Paratypes:** 2♂♂ and ♀: S. Afr., Cape Prov., Franschhoek Bosreserve, Upper Berg River, 1.XI.1950 (ZML); ♂: S. Afr., Cape Prov., Langebaan, 31.X.1950 (ZML).

Gnypetoidea punctipennis SCHEERPELTZ. **Holotype:** ♂: South Africa, Cape Prov., Cape Town, Table Mountains, Blinkwater, 4.XI.1950, No. 23 (ZML).

Additional material: Republic of South Africa: Cape Prov., Peninsula, Table Mountains, Kirstenbosch, 300 m, forest humus, XI.1960, N. Leleup, 15♂♂ and 9♀♀ (MRAC), 2♂♂ and ♀ (ISEA).

Redescription: Body. Length 3.0-3.3 mm, convex, parallel-sided, glossy; body colour dark brown to black, legs brown, antennae black with antennomeres 1-3 brown.

Head circular in outline, as long as wide, convex, glossy, narrower than pronotum, widest behind eyes; eyes relatively small, weakly protruding from lateral contours of head, length of each seen from above shorter than postocular region; surface of head with distinct isodiametric mesh microsculpture; punctuation fine and sparse, weakly visible in dense microsculpture; pubescence short and sparse, directed inward. Antennae moderately long, clearly increase in width apically, antennomere 3 slightly shorter than 2, antennomeres 4-5 longer than wide, antennomeres 6-10 as long as wide, antennomere 11 as long as antennomeres 9-10 combined.

Pronotum quadrate, convex, glossy, widest in apical third, lateral sides rounded in front, gradually narrowed in straight line to obtuse hind angles; before base with wide and relatively deep transverse impression, surface with strong isodiametric mesh microsculpture; punctuation relatively coarse and dense, interstices between punctures equals their diameter; pubescence at midline directed anteriorly.

Elytra subquadrate, slightly wider than pronotum, at suture as long as pronotal length at midline; surface lacking microsculpture; punctuation coarse and diverse in density: dense, with interstices between punctures smaller than their diameter in apical ½ and sparse with interstices between punctures 2 times their diameter in posterior ½.

Abdomen subparallel-sided, widest at level of tergites V-VI, bases of tergites III-V each with deep transverse impression; impressions coarsely punctate; tergal punctuation minute, pinprick-like, and sparse; surface of tergites III-IV lacking microsculpture, tergite V with obsolete isodiametric mesh microsculpture, tergites VI-VII with strong isodiametric mesh microsculpture; pubescence relatively long and sparse, semierect.

Male. Aedeagus as in Figs 7-8. Female. Spermatheca as in Fig. 9.

Remarks: *Stenectinobregma brincki* is similar to *S. scheerpeltzi* nov.sp., from which it can be distinguished by the head and pronotal surface with strong isodiametric mesh microsculpture, the antennomere 10 as long as wide, the sparser pronotal puncturation, the distinct microsculpture of tergites VI-VII and by the shape of aedeagus.

***Stenectinobregma scheerpeltzi* nov.sp. (Figs 10-11)**

Type material: Holotype: ♂: South Africa, Cape Prov., Cape Peninsula, Kirstenbosch, 5.XI.1950, No. 25, *Gnypetoidea punctipennis* Scheerp. Cotypus (ZML). Paratypes: 2♂♂: South Africa, Cape Prov., Knysna distr., Swart River, forest humus, I.1961, N. Leleup (MRAC).

Taxonomic notes: The holotype of the new species was included in the type series of *Gnypetoidea punctipennis* and labeled as "cotypus". In fact, this specimen represent new species described here under the name "*scheerpeltzi*".

Redescription: Body. Length 2.9-3.0 mm, convex, parallel-sided, glossy; body colour brown, tergites 3-4 reddish-brown, legs yellow, antennae brown.

Head circular in outline, as long as wide, convex, strongly glossy, narrower than pronotum, widest behind eyes; eyes small, weakly protruding from lateral contours of head, length of each seen from above shorter than postocular region; surface of head lacking microsculpture; punctuation fine and sparse; pubescence short and sparse, directed inward. Antennae moderately long, clearly increase in width apically, antennomeres 2 and 3 subequal in length, antennomere 4 longer than wide, antennomere 5 as long as wide, antennomeres 6-10 transverse, increasing in width, antennomere 10 about 2 times wider than long, antennomere 11 as long as antennomeres 9-10 combined.

Pronotum quadrate, convex, strongly glossy, widest in apical third, lateral sides rounded in front, gradually narrowed in straight line to obtuse hind angles; before base with wide and deep transverse impression, surface without microsculpture; punctuation coarse and dense, interstices between punctures smaller than their diameter; pubescence at midline directed anteriorly.

Elytra subquadrate, slightly wider than pronotum, at suture as long as pronotal length at midline; surface lacking microsculpture; punctuation coarse and diverse in density: dense, with interstices between punctures smaller than their diameter in apical $\frac{1}{2}$ and sparse with interstices between punctures 2 times their diameter in posterior $\frac{1}{2}$.

Abdomen subparallel-sided, widest at level of tergites V-VI, bases of tergites III-V each with deep transverse impression, impressions coarsely punctuate, tergal punctuation minute, pinprick-like, and sparse, surface of tergites III-V lacking microsculpture, tergites VI-VII with obsolete isodiametric mesh microsculpture; pubescence relatively long and sparse, semierect.

Male. Aedeagus as in Figs 10-11. Female unknown.

Remarks: See under *S. brincki*.

Etyymology: The species is dedicated to Otto SCHEERPELTZ (Wien), specialist of Staphylinidae.

***Stenectinobregma rudebecki* SCHEERPELTZ 1974 (Figs 12-14)**

Stenectinobregma rudebecki SCHEERPELTZ 1974: 207

Type material: Holotype: ♂: S. Afr., Cape Prov., Cape Town, Table Mnt., 2400 ft., 18.XII.1950, No 84 (ZML). Paratype: ♂: S. Afr., Cape Prov., Cape Peninsula, Hout Bay, Skoorsteenkop, 28.I.1951, No 161 (ZML).

Additional material: ♂: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Kirstenbosch, 300 m, forest humus, XI.1960, N. Leleup (MRAC). Paratypes: 6♂♂ and 4♀♀: same data as holotype (MRAC); ♂ and ♀: same data as holotype (ISEA); 8♂♂ and 2♀♀: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Bats Cave, XII.1960, N. Leleup (MRAC); ♂: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Bats Cave, XII.1960, N. Leleup (ISEA); 3♂♂ and ♀: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Oranje Kloof, 3-400 m, XII.1960, N. Leleup (MRAC); ♂: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Oranje Kloof, 3-400 m, XII.1960, N. Leleup (ISEA); ♀: Republic of South Africa, Cape Prov., Peninsula, Table Mountains, Wynberg Cave, XI.1960, N. Leleup (MRAC).

R e d e s c r i p t i o n : Body. Length 2.8-3.1 mm, convex, parallel-sided, glossy; body colour testaceous, legs yellow, antennae black with antennomeres 1-3 red.

Head circular in outline, as long as wide, convex, glossy, narrower than pronotum, widest behind eyes; eyes relatively small, weakly protruding from lateral contours of head, length of each seen from above shorter than postocular region; surface of head lacking microsculpture; punctuation fine and sparse; pubescence short and sparse, directed inward. Antennae moderately long, clearly increase in width apically, antennomeres 2 and 3 subequal in length, antennomeres 4-10 longer than wide, antennomere 11 as long as antennomeres 9-10 combined.

Pronotum quadrate, convex, glossy, widest in apical third, lateral sides rounded in front, gradually narrowed in straight line to obtuse hind angles; before base with wide and relatively deep transverse impression, surface without microsculpture; punctuation relatively coarse and dense, interstices between punctures smaller than their diameter; pubescence at midline directed anteriorly.

Elytra subquadrate, slightly wider than pronotum, at suture as long as pronotal length at midline; surface lacking microsculpture; punctuation coarse and diverse in density: dense, with interstices between punctures smaller than their diameter in apical 1/3 and sparse with interstices between punctures 5-6 times their diameter in posterior 2/3.

Abdomen subparallel-sided, widest at level of tergites V-VI, bases of tergites III-V each with deep transverse impression; impressions coarsely punctate; tergal punctuation minute, pinprick-like, and sparse; surface of tergites III-V lacking microsculpture, tergites VI-VII with distinct transversely stretched isodiametric mesh microsculpture; pubescence relatively long and sparse, semierect.

Male. Aedeagus as in Figs 12-13. Female. Spermatheca as in Fig. 14.

R e m a r k s : *Stenectinobregma rudebecki* is similar to *S. brincki* SCHEERPELTZ 1974, from which it can be distinguished by the paler body colour, the antennomeres 2 and 3 subequal in length, the antennomeres 4-10 longer than wide, the different punctuation of elytra, the head and pronotal surface without microsculpture and by the shape of aedeagus.

***Stenectinobregma transvaalica* nov.sp. (15-16)**

T y p e m a t e r i a l : Holotype: ♂: Republic of South Africa, Transvaal, Pietersburg distr., Woodbush, forest humus, IX.1960, N. Leleup (MRAC). Paratypes: 3♂♂: same data as holotype (MRAC); ♂: same data as holotype (ISEA).

R e d e s c r i p t i o n : Body. Length 3.2-3.4 mm, convex, parallel-sided, glossy; body colour brown, legs yellowish-red, antennae black with antennomeres 1-3 yellow.

Head circular in outline, as long as wide, convex, glossy, narrower than pronotum, widest behind eyes; eyes relatively small, weakly protruding from lateral contours of head, length of each seen from above shorter than postocular region; surface of head without microsculpture; punctuation fine and sparse; pubescence short and sparse, directed inward. Antennae moderately long, clearly increase in width apically, antennomere 3 longer than 2, antennomeres 4-10 longer than wide, antennomere 11 as long as antennomeres 9-10 combined.

Pronotum quadrate, convex, glossy, widest in apical third, lateral sides rounded in front, gradually narrowed in straight line to obtuse hind angles; before base with wide and

relatively deep transverse impression, surface lacking microsculpture; punctuation relatively coarse and dense, interstices between punctures equals their diameter; pubescence at midline directed anteriorly.

Elytra subquadrate, slightly wider than pronotum, at suture as long as pronotal length at midline; surface lacking microsculpture; punctuation coarse and diverse in density: dense, with interstices between punctures smaller than their diameter in apical $\frac{3}{4}$ and sparse with interstices between punctures 5-6 times their diameter in posterior $\frac{1}{4}$.

Abdomen subparallel-sided, widest at level of tergites V-VI, bases of tergites III-V each with deep transverse impression; impressions coarsely punctuate; tergal punctuation minute, pinprick-like and sparse; surface of tergites lacking microsculpture; pubescence relatively long and sparse, semierect.

Male. Aedeagus as in Figs 15-16. Female unknown.

Remarks: *Stenectinobregma transvaalica* nov.sp. is similar to *S. brincki* SCHEERPELTZ 1974, from which it can be distinguished by the head, pronotal and tergal surface without microsculpture, the antennomere 3 longer than 2, the antennomere 10 longer than wide, the elytra punctuation dense in anterior $\frac{3}{4}$ and sparse in posterior $\frac{1}{4}$ and by the shape of aedeagus.

Ety m o l o g y: The name is derived from Transvaal where the new species was found.

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Zusammenfassung

Die Gattung *Stenectinobregma* SCHEERPELTZ wurde neu definiert. Die Gattung *Gnypetoidea* SCHEERPELTZ wurde als ein früheres Synonym für *Stenectinobregma* anerkannt. Vier valide Arten wurden für die Gattung anerkannt. Zwei von ihnen wurden neu für die Wissenschaft beschrieben: *Stenectinobregma scheerpeltzi* nov.sp. und *S. transvaalica* nov.sp. Die Art *Gnypetoidea punctipennis* SCHEERPELTZ wurde als ein früheres Synonym für *Stenectinobregma brincki* SCHEERPELTZ anerkannt. Die Arten wurden besprochen, illustriert und in einen Schlüssel eingebunden.

References

SCHEERPELTZ O. (1974): Coleoptera: Staphylinidae (exclus. Subfam. Paederinae, except. Pars min.). — In: HANSTROM B., BRINCK P. & G. RUDEBECK (eds), South African Animal Life **15**: 43-394.

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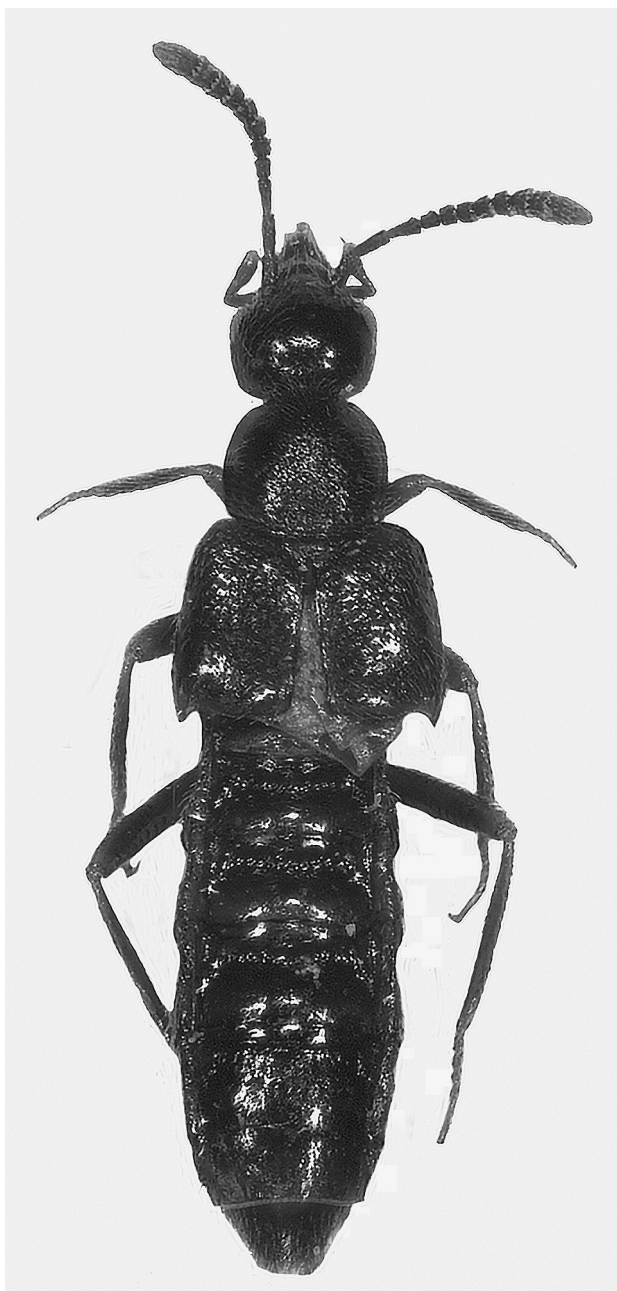
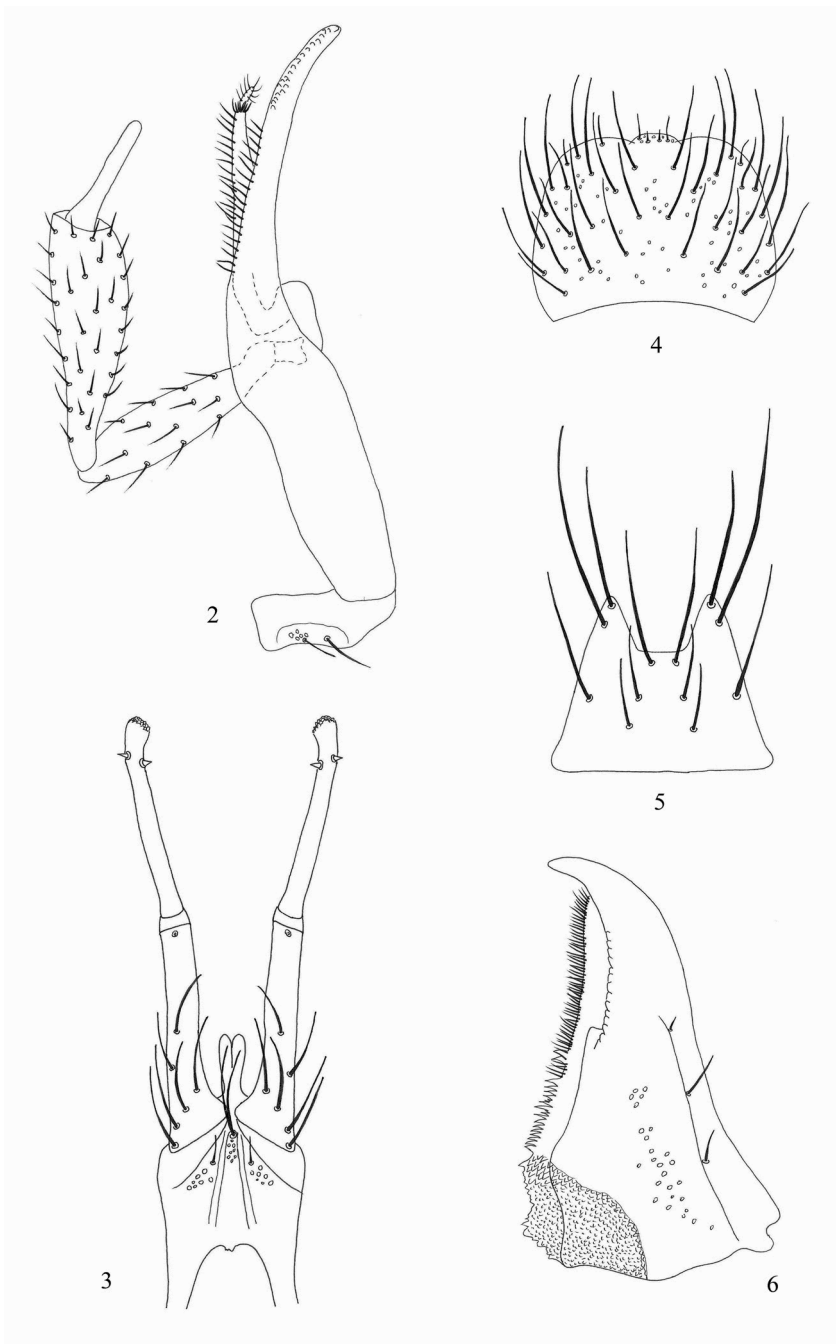
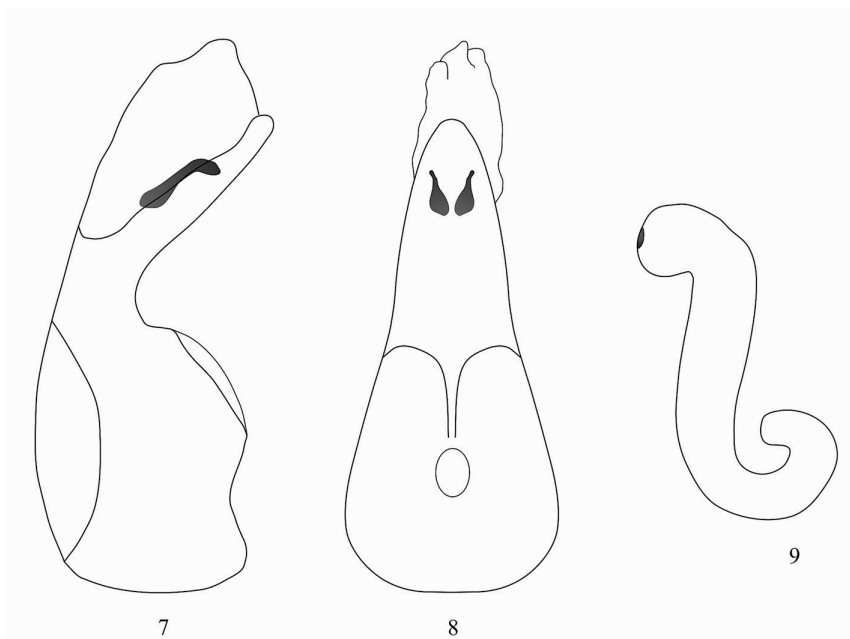


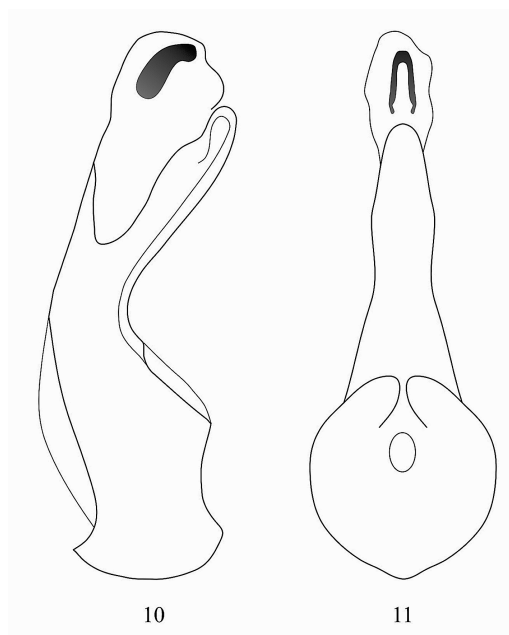
Fig. 1: *Stenectinobregma brincki* SCHEERPELTZ: habitus.



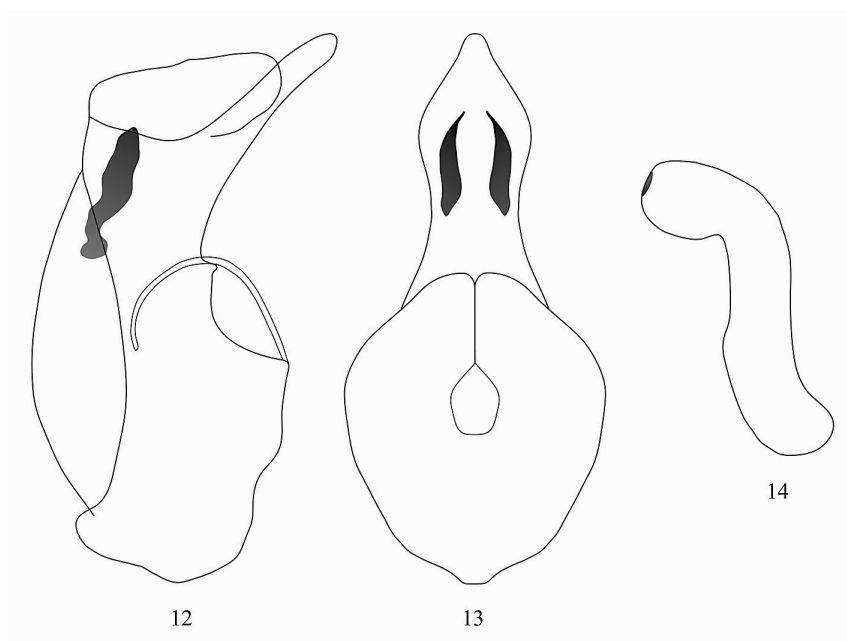
Figs 2-6: *Stenectinobregma brincki* SCHEERPELTZ: (2) maxilla, (3) labium, (4) labrum, (5) mentum, (6) mandibles.



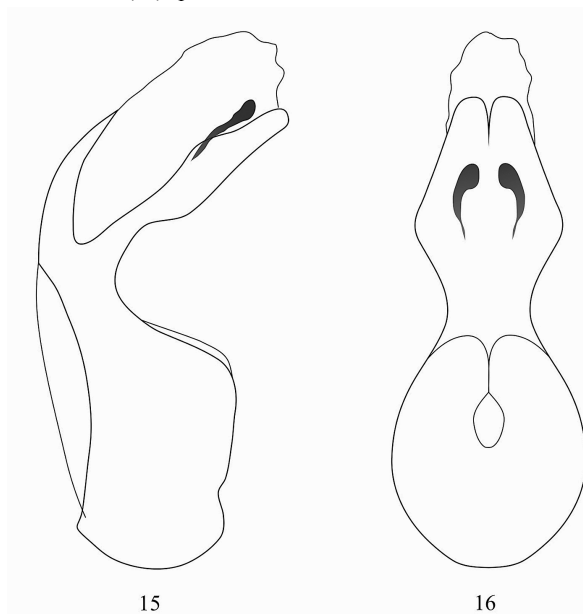
Figs 7-9: *Stenectinobregma brincki* SCHEERPELTZ: (7) aedeagus in lateral view, (8) aedeagus in ventral view, (9) spermatheca.



Figs 10-11: *Stenectinobregma scheerpeltzi* nov.sp.: (10) aedeagus in lateral view, (11) aedeagus in ventral view.



Figs 12-14: *Stenectinobregma rudebecki* SCHEERPELTZ: (12) aedeagus in lateral view, (13) aedeagus in ventral view, (14) spermatheca.



Figs 15-16: *Stenectinobregma transvaalica* nov.sp.: (15) aedeagus in lateral view, (16) aedeagus in ventral view.

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