

New species of African Platygastriinae (Hymenoptera: Platygastriidae)

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Samenvatting. Nieuwe soorten Afrikaanse Platygastriinae (Hymenoptera: Platygastriidae)
Zeven nieuwe soorten Platygastriidae worden beschreven uit Afrika: *Leptacis graciliventr*is, *L. luboi*, *L. microcera*, *Platygaster flagellata*, *P. matuschanskavaskyi*, *P. natalensis* en *P. setosa*.

Résumé. Espèces nouvelles de Platygastriinae Africain (Hymenoptera: Platygastriidae)
Sept espèces nouvelles de Platygastriinae sont décrites en provenance d'Afrique: *Leptacis graciliventr*is, *L. luboi*, *L. microcera*, *Platygaster flagellata*, *P. matuschanskavaskyi*, *P. natalensis* et *P. setosa*.

Key words: Hymenoptera – Platygastriidae – *Leptacis* – *Platygaster* – Africa – new species.

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All the 7 new species (types and paratypes) described below are preserved in the Museum of Zoology, Lund University (Sweden). They were part of a loan of platygastriids by courtesy of curator Roy Danielsson.

*Leptacis graciliventr*is sp. nov. (fig. 1)

Material examined. Holotype ♀: Republic of South Africa, Cape Province, Tsitsikama, Forest Park, Stormsrivier (33°58'S 23°54'E) 14–16.X.1994 (R. Danielsson).

Description. ♀: Colour brownish black, T1 lighter; A1–A6 and legs yellowish; mandibles, A7–A10 and last segment of tarsi brown. Head smooth, from above 1.8× as wide as long, 1.1× as wide as thorax; occipital carina distinct, vertex distinctly elevated medially. Lateral ocelli separated from eye by their diameter. Head from front 1.05× as wide as high. A1 hardly 0.9× as long as height of head. A2 one-third as long as A1, twice as long as A3 which is hardly twice as long as wide. A4 1.4× as long as A3, 2.5× as long as wide. A5 about half as long as A4. A7 1.4× as long as wide, A8–A9 wider, each 1.2× as long as wide. A10 hardly 1.7× as long as A9. Mesosoma 1.7× as long as wide, 1.2× as high as wide. Sides of pronotum smooth. Mesoscutum smooth, faintly sculptured anteriorly, uniformly and rather densely hairy, without notauli; hind margin hardly convex. Mesopleura smooth. Scutellum (fig. 1) smooth and hairy as mesoscutum, spine and lamella hardly present. Metapleura smooth, with whitish pilosity posteriorly. Propodeal carinae rather low, brownish, slightly curved. Fore wing hardly as long as body (22:23), 2.9× as long as wide, whitish, with fine dense hairs; marginal cilia hardly 0.15 width of wing. Hind wing 7.8× as long as wide; marginal cilia 0.6 width of wing. Metasoma longer than head and mesosoma combined (25:23), as wide as thorax, 2.5× as long as wide. T1 about 1.2× as long as wide, with almost parallel sides, shiny, with some faint carinae. T2 1.4× as long as wide, with pilosity in small basal foveae, rest smooth and bare. T3–T6 combined half as long as T2, smooth except for scattered traces of reticulation, with a few rather superficially implanted hairs; T6 pointed, 1.75× as wide as long.

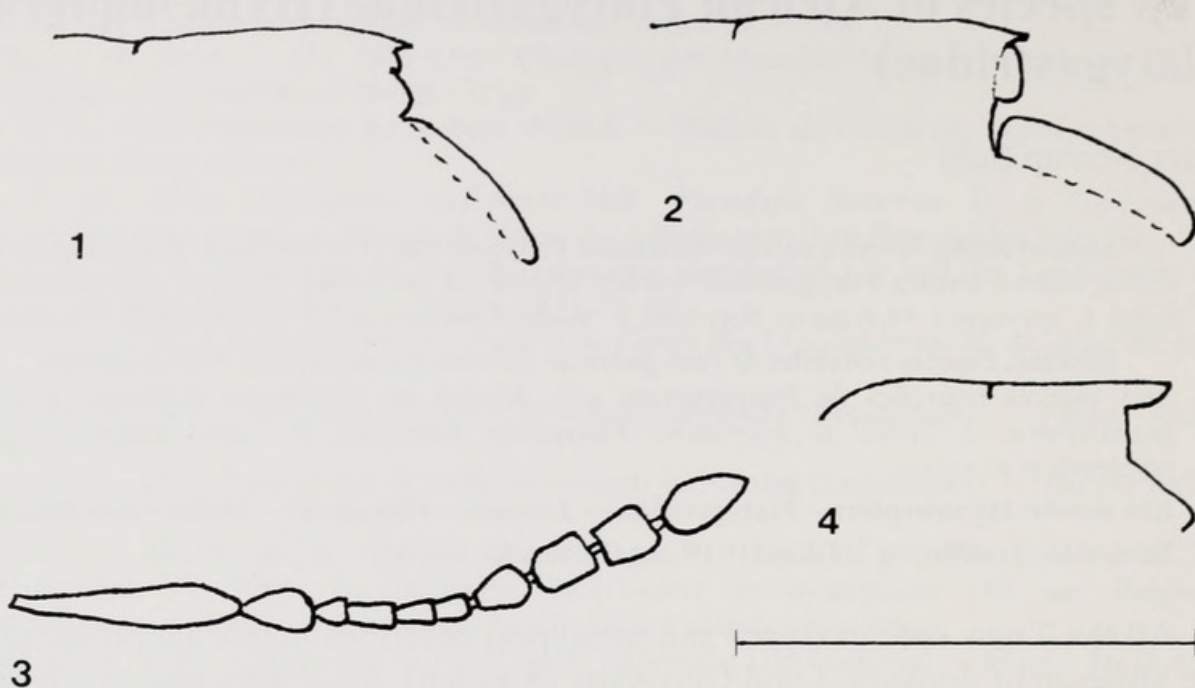


Fig. 1: *Leptacis graciliventrис* sp. nov., female scutellum.

Fig. 2: *Leptacis luboi* sp. nov., female scutellum.

Figs. 3–4: *Leptacis microcera* sp. nov. female – 3. Antenna; 4. Scutellum. Scale bar = 0.25 mm.

Comments. Runs to *L. risbeci* Masner, 1960 in Masner's (1960) key to African *Leptacis*, but this species has A3 and A4 of nearly equal length.

***Leptacis luboi* sp. nov.** (fig. 2)

Material examined. Holotype ♀: Republic of South Africa, Cape Province, Nature's Valley, at Groot Rivier (33°58'S 23°33'E) 15–17.X.1994 (R. Danielsson). Paratype: 1♀ same data.

Description. ♀: Length 1.05 mm. Colour blackish; antennae, mandibles and legs light brown, A8–A10 darker. Head from above 1.8× as wide as long, very slightly wider than thorax; occiput smooth, with a few faint transverse wrinkles and a high carina; vertex and frons finely reticulate, frons smooth medially; lateral ocelli separated from eye by slightly less than their diameter. Head from front fully 1.1× as wide as high. A1 hardly shorter than height of head. A2 0.25× as long as A1. A3 hardly 0.5× as long as A2, 1.4× as long as wide. A4 1.8× as long as A3, 2.5× as long as wide. A5 about half as long as A4, hardly longer than wide. A7–A10 forming club, A7 hardly transverse, A8–A9 each 1.25× as wide as long, A10 1.75× as long as A9. Mesosoma 1.6× as long as wide, fully 1.1× as high as wide. Sides of pronotum smooth, finely reticulate in upper anterior corner. Mesoscutum smooth, rather densely and uniformly hairy, without notauli; hind margin almost straight. Mesopleura smooth. Scutellum (fig. 2) sculptured and hairy as mesoscutum, with a very small spine and a small semitransparent lamella below. Metapleura smooth and bare except posteriorly. Propodeal carinae high and semitransparent, slightly curved. Fore wing fully 1.1× as long as body, 2.8× as long as wide, with faint yellowish tint and dense hairs on disc; marginal cilia almost 0.3 width of wing. Hind wing about 10× as

long as wide; marginal cilia fully 1.1 width of wing. Metasoma as long as head and mesosoma combined, very slightly wider than thorax. T1 hardly as long as wide, densely pubescent laterally, with a couple of weak carinae and an even weaker medial one. T2 with hairy basal foveae, 1.2× as long as wide. T3–T6 combined hardly 0.4× as long as T2, smooth, with several rather deeply implanted hairs.

Comments. Named after Dr. Lubomir ("Lubo") Masner, Ottawa. In scutellar spine most similar to *L. celisi* (Risbec, 1958), *L. risbeci* Masner, 1960, and *L. graciliventrif* sp. nov., but it differs from all these most readily in antennal structure, cf. Masner (1960) and above.

***Leptacis microcera* sp. nov.** (figs. 3–4)

Material examined. Holotype ♀: Sierra Leone, S. of Freetown, close to Sussex (8°20'N 13°11'W) 30.XI.1993 (Lund University Sierra Leone Expedition 1993 - L. Cederholm, R. Danielsson, R. Hall).

Description. ♀: Length 0.6 mm. Colour dark brown; A1–A4 and legs yellowish. Head from above hardly 2.0× as wide as long, 1.3× as wide as thorax. Occiput distinctly transversely reticulate-coriaceous, with a complete carina; vertex and frons almost smooth. Lateral ocelli separated from eye by slightly less than their diameter. Head from front 1.3× as wide as high. Antenna (fig. 3) with A1 0.9× as long as height of head. A4 hardly longer than A5, hardly twice as long as wide. A8–A9 each very slightly longer than wide. Flagellar pubescence distinct. Mesosoma 1.7× as long as wide, 1.25× as high as wide. Sides of pronotum smooth except for reticulation in anterior corner. Mesoscutum finely reticulate-coriaceous, with scattered hairs and without notauli, hind margin straight. Mesopleura smooth. Scutellum (Fig. 4) at level of mesoscutum, with a straight spine which reaches about middle of propodeum, with a lamella below. Metapleura smooth, with pubescence along hind margin. Propodeal carinae low, straight, not semitransparent. Fore wing with scattered long hairs on disc, almost clear; marginal cilia fully 0.4 width of wing. Hind wing with marginal cilia slightly longer than width of wing. Metasoma 1.1× as long as mesosoma, narrower than this (11:12). T1 hardly as long as wide, with a few hairs. T2 smooth, with small basal foveae and a few hairs. T3–T6 short, combined about 0.4× as long as T2, with fine microsculpture.

Comments. Runs to *L. kivuensis* (Risbec, 1958) in Masner's (1960) key to females of African *Leptacis*, but *kivuensis* and *microcera* have very different antennal structure. *L. microcera* is also somewhat similar to *L. pumilio* Masner, 1960 (only male known), but this species has no occipital carina, cf. Masner (1960).

***Platygaster flagellata* sp. nov.** (figs. 5–7)

Material examined. Holotype ♀: Republic of South Africa, Cape Province, Plattenbergbaai (34°03'S 23°22'E) 17.X.1994 (R. Danielsson).

Description. Female: Length 1.1 mm. Colour shiny black; antennae and legs dark brown; both ends of tibiae, and segments 1–4 of all tarsi, light brown. Head from above (fig. 5) 1.8× as wide as long, fully 1.1× as wide as thorax. Occiput rather finely but densely transversely striated; vertex finely transversely

reticulate; frons smooth, with numerous wrinkles around antennal insertions. Head from front wider than high (25:22). Antenna (fig. 6) with A1 shorter than height of head (9:11). Mesosoma 1.4× as long as wide, very slightly higher than wide. Sides of pronotum smooth, with scattered hairs. Mesoscutum with sparse hairs, longitudinally reticulate-coriaceous, smooth laterally and posteriorly; notauli absent; mid lobe distinctly prolonged to base of scutellum; scuto-scutellar grooves covered by distinct hairs. Mesopleura smooth. Scutellum evenly convex, above mesoscutum, smooth, with scattered hairs, slightly transverse. Metapleura with whitish pilosity all over. Propodeal carinae short and dark, area between them smooth and shiny, distinctly transverse. Fore wing reaching apex of metasoma, almost clear, densely hairy but in basal third almost bare, 2.4× as long as wide; marginal cilia hardly 0.1 width of wing. Hind wing 4.6× as long as wide, with two frenal hooks; marginal cilia slightly more than 0.2 width of wing. Metasoma (fig. 7) longer than head and mesosoma combined (24:21), hardly 0.9× as wide as thorax, 1.5× as wide as high. T1 evenly crenulated. T2 with a few striae in weak basal foveae to 0.4 of length, with a few very short wrinkles medially. T3–T6 smooth, T3–T5 each with a medially interrupted transverse row of rather superficially implanted hairs, T6 with hairs laterally.

Comments. Differs from the *Platygaster*-species described from South Africa by Sundholm (1970) in having flagellar segments much more slender.

***Platygaster matuschanskavaskyi* sp. nov.** (fig. 8)

Material examined. Holotype ♀: Swaziland, 3 km N Simunye (26°11'S 31°57'E) 27.X.1994 (R. Danielsson). Paratypes: 2♀, Republic of South Africa, Cape Province, Koomplanskloof, 10 km S Citrusdal, 200–270 m (32°40'S 19°01'E) 4–6.X.1994 (R. Danielsson).

Description. ♀: Length 1.3–1.4 mm. Colour black, antennae and legs dark brown, apex of A2 and entire A3 lighter (in holotype only); apex of fore femur, basal half and apex of all tibiae, and segments 1–4 of all tarsi light brown. Head from above 1.9× as wide as long, 1.2× as wide as thorax, strongly narrowed behind eyes; occiput densely and rather strongly transversely striated; vertex reticulate, with fine irregular rugosity and with transverse wrinkles; frons fan-like striated, transversely striated above antennae, in upper half also with fine irregular rugosity. Lateral ocelli separated from eye by 1.2 their diameter; OOL:POL:LOL = 8:21:10. Head from front 1.3× as wide as high. Antenna with A1 shorter than height of head (10:13); A2 1.2× as long as A3–A4 combined, almost 3× as long as wide; A3 hardly 0.6× as long as A4; A4 1.7× as long as wide, fully 1.1× as long as A5 which is 1.5× as long as wide; A7–A9 each about 1.2× as long as wide; A10 1.6× as long as A9. Mesosoma 1.5× as long as wide, hardly 1.1× as high as wide. Sides of pronotum smooth, with scattered hair-implantations. Mesoscutum almost smooth, with faint traces of longitudinal microsculpture, with scattered hairs; notauli very faintly indicated throughout, mid lobe slightly prolonged but hardly reaching base of scutellum; scuto-scutellar grooves rather wide, with few hairs. Mesopleura smooth. Scutellum evenly convex, slightly above mesoscutum and somewhat denser hairy than this, smooth. Metapleura with whitish pilosity all over, but not dense. Propodeal

carinae short, dark, smooth area between them much transverse. Fore wing reaching base of T6, clear, bare in basal half, $2.4\times$ as long as wide; marginal cilia very short. Hind wing $4.6\times$ as long as wide, with two frenal hooks; marginal cilia 0.2 width of wing. Metasoma (fig. 8) very slightly longer than head and mesosoma combined (58:55), hardly narrower than thorax, $1.9\times$ as wide as high. T1 strongly and evenly crenulated. T2 striated in basal foveae to hardly 0.5 of length, between foveae with a couple of striae to one-seventh of length. T3–T6 smooth, T3–T5 each with a complete transverse row of distinct hair-implantations, T6 with hairs laterally. Sternite 2 very slightly produced anteriorly.

Comments. Named in memory of Mr. Walter Matuschanskavasky (Matthau), USA (1920–2000). The holotype is somewhat brighter coloured than the paratypes which are also weaker sculptured on head and stronger sculptured on mesoscutum than holotype. The species differs from the *Platygaster*-species described by Sundholm (1970) most readily in the distinctly sculptured frons.

***Platygaster natalensis* sp. nov.** (figs. 9–11)

Material examined. Holotype ♀: Republic of South Africa, Natal, Richards Bay ($28^{\circ}46'S$ $32^{\circ}04'E$) 24.X.1994 (R. Danielsson).

Description. ♀: Length 1.15 mm. Colour black, antennae dark brown, basal half of A1 lighter; fore leg light brown except darkened coxa, femur only slightly darkened; mid leg light brown except darkened coxa and basal half of femur; hind leg dark brown except slightly lighter tibia and tarsus. Head from above (fig. 9) $1.8\times$ as wide as long, nearly $1.2\times$ as wide as thorax; occiput rounded, bare, shiny, evenly and slightly transversely reticulate-coriaceous; vertex with a few fine punctures and evenly reticulate-coriaceous, with smaller meshes than on occiput; frons faintly and evenly reticulate-coriaceous, with weak transverse wrinkles above antennal insertions. Head from front $1.2\times$ as wide as high. Antenna with A1 $0.8\times$ as long as height of head; A2 $2.3\times$ as long as wide, about as long as A3–A4 combined; A3 $1.3\times$ as long as wide; A4 fully $1.5\times$ as long as A3, $1.3\times$ as wide as this, $1.5\times$ as long as wide; A5 hardly shorter than A4, $1.25\times$ as wide as this; A6–A9 about equal, $1.25\times$ as wide as A5, each $1.1\times$ as wide as long; A10 $1.6\times$ as long as A9. Mesosoma nearly $1.6\times$ as long as wide, very slightly higher than wide. Sides of pronotum finely reticulate-coriaceous with broad smooth hind margin. Mesoscutum with few hairs; mid lobe finely reticulate-coriaceous in anterior half, smooth in posterior half; lateral lobes smooth; notauli complete, mid lobe rather broad posteriorly, very slightly prolonged; scuto-scutellar grooves narrow, hardly hairy. Mesopleura smooth. Scutellum (fig. 10) finely and evenly reticulate-coriaceous except anteriorly, sparsely hairy. Metapleura with dense whitish pilosity all over. Propodeal carinae nearly parallel, area between them smooth, about as long as wide. Fore wing $0.8\times$ as long as body, $2.5\times$ as long as wide, with weak yellowish tint, rather densely hairy except at extreme base; marginal cilia at their longest 0.1 width of wing. Hind wing $6.0\times$ as long as wide, with two frenal hooks; marginal cilia one-third the width of wing. Metasoma (fig. 11) hardly as long as head and

mesosoma combined (24:25), about as wide as thorax, 1.4× as wide as high. T1 with two widely separated longitudinal carinae, area between them smooth except for a few short crenulae along anterior margin, T1 laterally distinctly hairy. T2 with deep and smooth but hairy basal foveae which are 1.3× as long as T1, area between foveae with a few short striae to hardly 0.2 the length of tergite, rest of T2 smooth. T3–T5 smooth, T3 with a few hairs laterally, T4–T5 each with a complete transverse row of superficially implanted hairs; T6 with scattered hairs and traces of reticulation.

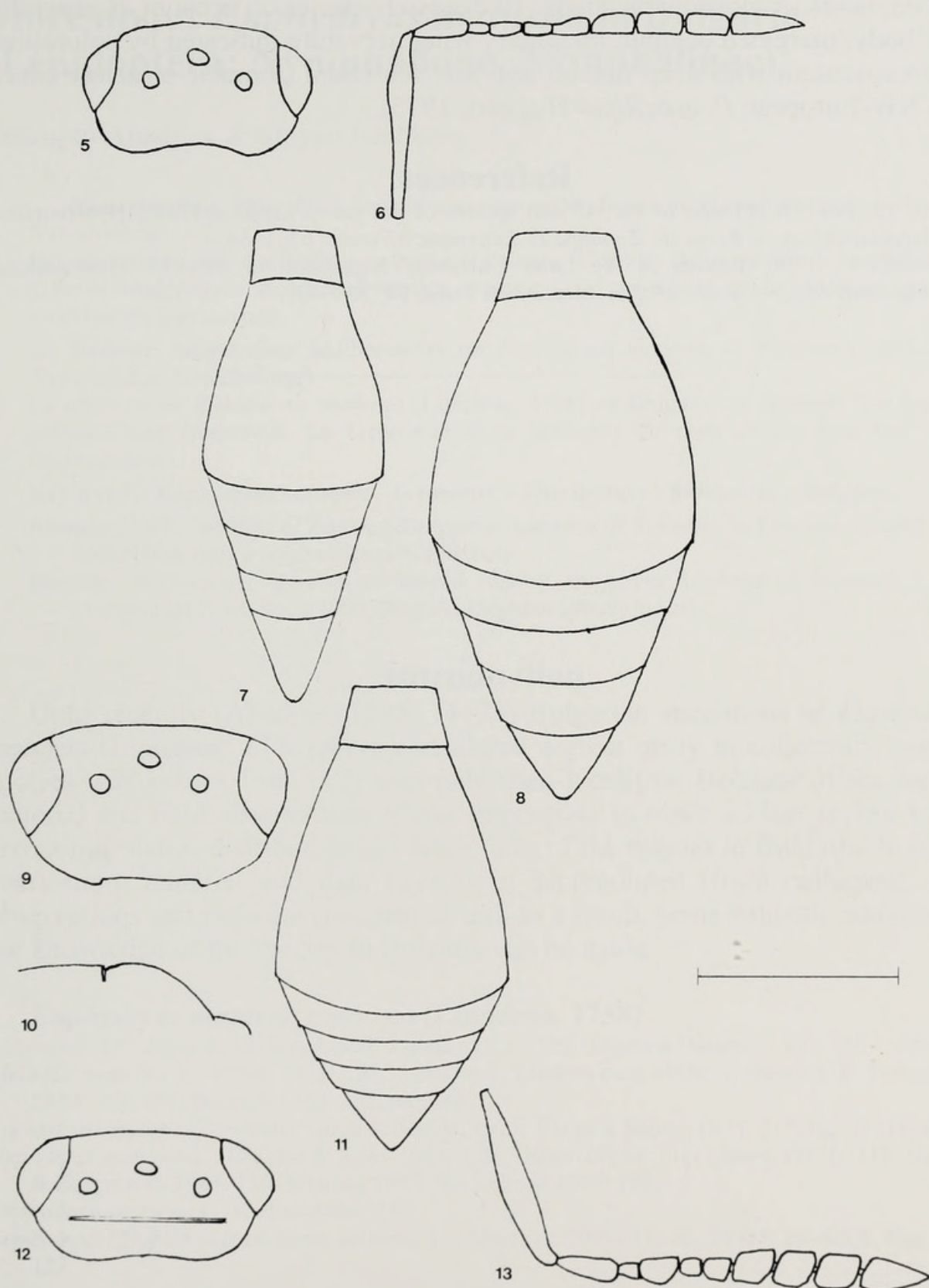
Comments. Differs distinctly from the other known *Platygaster*-species of the Afrotropical region by having occiput rounded, without striae, and notauli complete.

***Platygaster setosa* sp. nov.** (figs. 12–13)

Material examined. Holotype ♂: Republic of South Africa, Cape Province, Tsitsikama, Forest Park, Stormsrivier (33°58'S 23°54'E) 14–16.X.1994 (R. Danielsson). Paratype: 1 ♀, Stormsrivier Pass (33°59'S 23°55'E) 19.X.1994 (R. Danielsson).

Description. ♂: Length 1.0 mm. Colour blackish, A1–A2 and legs brownish yellow, A3–A10 brown. Head from above (fig. 12) 2.0× as wide as long, fully 1.1× as wide as thorax. Occiput with numerous hairs, smooth medially, reticulate-coriaceous laterally, with strong carina; vertex reticulate-coriaceous laterally and between ocelli, rest smooth; frons smooth. Head from front wider than high (13:11). Antenna (fig. 13) with A1 longer than height of head (19:18), hairs of flagellum very short. Mesosoma 1.5× as long as wide, hardly as high as wide (22:23). Sides of pronotum with dense hair-implantations and some weak reticulation. Mesoscutum uniformly and rather densely hairy, finely reticulate-coriaceous anteriorly, rest smooth; notauli complete; midlobe slightly prolonged, scuto-scutellar grooves narrow, triangular, with a few hairs. Mesopleura smooth. Scutellum hardly convex, at level of mesoscutum, hairy as this, almost smooth, in dorsal view transverse, with margined sides. Metapleura with distinct whitish pilosity all over. Propodeal carinae dark, low, parallel; area between them smooth, about as long as wide. Fore wing 1.1× as long as body, with yellowish tint but clear in basal 0.25 with imaginary subcostal and basal veins darker, rather densely hairy all over; marginal cilia slightly more than 0.1 width of wing. Hind wing 5.8× as long as wide, with two frenal hooks; marginal cilia one-third the width of wing. Metasoma as long as head and mesosoma combined, fully as wide as thorax (24:23). T1 1.8× as wide as long, medially smooth, bare and with three longitudinal carinae close together, laterally with numerous hairs. T2 with long and distinct basal foveae, without striae but with a few hairs, tergite also hairy laterally. T3–T7 combined 0.4× as long as T2, smooth, with a few rather superficially implanted hairs.

Female: Much damaged but head and mesosoma essentially as male. Flagellar segments distinctly longer than wide. Metasoma fully as long as head and mesosoma combined.



Figs. 5–7: *Platygaster flagellata* **sp. nov.** female – 5. Head from above; 6. Antenna; 7. Metasoma.

Fig. 8: *Platygaster matuschanskavaskyi* **sp. nov.**, female metasoma.

Figs. 9–11: *Platygaster natalensis* **sp. nov.** female – 9. Head from above; 10. Scutellum; 11. Metasoma.

Figs. 12–13: *Platygaster setosa* **sp. nov.** male – 12. Head from above; 13. Antenna.

Scale bar = 0.25 mm.

Comments. A most characteristic *Platygaster*-species on account of generally hairy body, margined occiput, imaginary wing nervature indicated by coloration, and mesoscutum with deep notauli and low scutellum (thoracic structure much as in NW-European *P. gracilipes* Huggert, 1975).

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Buhl, Peter Neerup. 2003. "New species of African Platygastriinae (Hymenoptera: Platygasteridae)." *Phegea* 31(1), 25–32.

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