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# New species of South African Platygastrinae (Hymenoptera, Platygastridae)

Peter Neerup BUHL

#### Abstract

The following 23 species new to science are described: Aceroteta africana, Euxestonotus pilipterus, Inostemma soederlundi, Iphitrachelus danielssoni, Leptacis acanthia, L. bispinosa, L. disticha, L. exigua, L. fusiformis, L. pallidispina, L. pilosa, L. soederlundi, L. tenuis, Platygaster cuspidata, P. malaisei, P. platyptera, P. pubiventris, P. subplana, P. tsitsikamensis, Synopeas capensis, S. procerus, S. soederlundi, and S. sundholmi. The work is illustrated by 90 text-figures.

#### Zusammenfassung

23 neue Arten werden beschrieben: Aceroteta africana, Euxestonotus pilipterus, Inostemma soederlundi, Iphitrachelus danielssoni, Leptacis acanthia, L. bispinosa, L. disticha, L. exigua, L. fusiformis, L. pallidispina, L. pilosa, L. soederlundi, L. tenuis, Platygaster cuspidata, P. malaisei, P. platyptera, P. pubiventris, P. subplana, P. tsitsikamensis, Synopeas capensis, S. procerus, S. soederlundi und S. sundholmi. Die Arbeit ist mit 90 Abbildungen versehen.

#### Introduction

This paper is based on 125 specimens of South African Platygastridae, a loan by courtesy of Roy Danielsson, Museum of Zoology, Lund University (Sweden) were all material is preserved. All specimens were collected by Michael SÖDERLUND with Malaise trap in Cape Province, Tsitsikama Coastal National Park (34\*02'S, 23\*53'E), July 1995 - Janu-

ary 1996. The most common species in the material was Leptacis athos MASNER, 1960 followed by L. africana MASNER, 1960.

#### Aceroteta africana sp. nov. (figs 1-3)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), XI.-XII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.85 mm. Dark brown; A1-A6, mandibles and legs yellow; A7-A10 brown. Head from above (fig. 1) 2.0 x as wide as long, very slightly wider than mesosoma; occiput finely transversely reticulate-coriaceous, without hyperoccipital carina; vertex faintly reticulate; frons smooth, with faint transverse microsculpture in lower half; malar space and clypeus finely reticulate-coriaceous. OOL = 1.8 ocellar diameter; LOL = 1.2 OOL. Head in frontal view 1.2 x as wide as high; antenna (fig. 2) with A1 0.8 x as long as height of head.

Mesosoma 1.5 x as long as wide, slightly higher than wide (14:13). Sides of pronotum reticulate in about upper half in anterior 0.7, rest smooth but with some hairs. Mesoscutum weakly and uniformly reticulate-coriaceous, densely and evenly hairy, without notauli; hind margin straight. Mesopleuron smooth except for a few short wrinkles just below tegula. Scutellum sculptured and hairy as mesoscutum. Metapleuron with pilosity all over. Propodeal carinae dark, meeting posteriorly.

Fore wing 1.2 x as long as body, 2.8 x as long as wide, slightly brownish, with fine and dense microtrichia; brown submarginal vein reaching 0.25 length of wing; marginal cilia 0.2 width of wing. Hind wing 11 x as long as wide; marginal cilia 1.25 width of wing.

Metasoma (fig. 3) 0.9 x as long as head and mesosoma combined, about as wide as mesosoma. T1 evenly crenulated. T2 hairy basally, smooth. T3-T6 smooth, each with a transverse row of superficially implanted long hairs.

Apical antennal segments relatively wider than in the only other described species of the genus, A. borealis KOZLOV & MASNER, 1977, compared with Finnish material of A. borealis.

## Euxestonotus pilipterus sp. nov. (figs 4-6)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.1 mm. Black, A1-A2 and legs yellowish brown; A3-A10 medium brown. Head from above (fig. 4) 2.0 x as wide as long, 1.2 x as wide as mesosoma; occiput distinctly and slightly transversely reticulate-coriaceous; vertex smooth except for a small spot of reticulation along inner side of each lateral ocellus; frons smooth. LOL = 2 OOL. Head in frontal view one and a third times as wide as high; antenna (fig. 5) with A1 hardly 0.9 x as long as height of head; preapical segments each nearly 1.5 x as long as wide.

Mesosoma 1.6 x as long as wide, fully 1.1 x as high as wide. Sides of pronotum with slight rugosity in upper anterior corner, rest smooth. Mesoscutum with sparse hairs, distinctly reticulate-coriaceous in anterior 0.4, rest smooth; notauli missing in anterior 0.25. Mesopleuron smooth. Scutellum smooth, with sparse hairs. Metapleuron with pilosity all over. Propodeal carinae parallel, area between them fully as long as wide, smooth and shiny.

Fore wing hardly 0.8 x as long as body, 2.2 x as long as wide, with brownish tint and rather fine and dense microtrichia; marginal cilia at their longest fully 0.1 width of wing. Hind wing 5.8 x as long as wide; marginal cilia 0.3 width of wing.

Metasoma (fig. 6) nearly 0.9 x as long as head and mesosoma combined, slightly narrower than mesosoma. T1 strongly and evenly crenulated. T2 striated to 0.25, medially to 0.15 of length. Hind margin of T2 and most of T3-T6 covered by fine micropunctures, T3-T6 each with a transverse row of superficially implanted hairs (medially interrupted on T3).

Differs from the similar *E. charon* BUHL, 2004 e.g. in having dense microtrichia on fore wings, differently sculptured metasoma, and longer apical tergites, cf. BUHL (2004a, 2004b).

#### Inostemma soederlundi sp. nov. (figs 7-9)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34'02'S, 23°53'E), XI.-XII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.6 mm. Black, cornutus of T1 dark brownish; A1 and legs light reddish brown; A2-A10, coxae and last segment of tarsi dark brown.

Head from above (fig. 7) 1.9 x as wide as long, slightly wider than mesosoma (13:12), finely transversely reticulate-coriaceous on occiput, slightly more distinct and not transversely so on vertex and frons; vertex very slightly concave, frons slightly biconvex. OOL equal to longer diameter of lateral ocellus; LOL = 1.6 OOL. Head in frontal view 1.5 x as wide as high; antenna (fig. 8) with A1 nearly 0.9 x as long as height of head, A3-A4 about equal, each 1.8 x as long as wide, preapical segments clearly transverse.

Mesosoma 1.25 x as long as wide, 1.20 x as wide as high. Mesoscutum reticulate-coriaceous, smoother medially, with distinct, complete notauli which are slightly widened posteriorly. Mesopleuron smooth on about medial half, reticulate-coriaceous above and below. Scutellum flat, rather smooth.

Fore wing slightly overreaching tip of metasoma, 2.4 x as long as wide, slightly brownish, with fine and dense microtrichia; dark brown subcostal vein reaching 0.3 length of wing; marginal cilia short. Hind wing 4.2 x as long as wide; marginal cilia hardly 0.2 width of wing.

Metasoma (fig. 9) 1.1 x as long as head and mesosoma combined (without cornutus), hardly as wide as this. T1 densely crenulated, cornutus smoothly longitudinally striated, only just overreaching anterior margin of mesosoma. T2 finely longitudinally striated, striae gradually becoming faint longitudinal microsculpture more or less reaching hind margin of tergite, medially smooth. T3-T6 each with distinct reticulate microsculpture, posteriorly smoother; T3-T5 each with a medially interrupted transverse row of superficially implanted hairs; T6 with numerous scattered hairs, one and a third times as wide as long.

Named after the collector.

Differs from *I. laminatus* (KIEFFER, 1913) and the two *Inostemma*-species described by SUNDHOLM (1970) e.g. in antennal structure, from *I. senegalense* RISBEC, 1950 in shape of cornutus of T1 and of apical tergites, and from *I. africanum* GHESQUIÈRE, 1939 in lacking dense hairs on body and in sculpture of metasoma, cf. RISBEC (1950).

#### Iphitrachelus danielssoni sp. nov. (figs 10-11)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), IX.-X.1995, Malaise trap, Michael SÖDERLUND leg.

Paratype: 12, same data as holotype but I.1996.

9: Length 1.0 mm. Blackish, A1-A2 and legs including coxae pale brownish yellow; part of propodeum and entire T1 light brown; A3-A8 dark brown.

Head from above (fig. 10) 2.0 x as wide as long, very slightly wider than mesosoma, almost uniformly and rather strongly reticulate-coriaceous. OOL = 0.6 LOL, and OOL = 0.25 POL. Head in frontal view one and a third times as wide as high. Antenna (fig. 11) with A1 as long as height of head, with a wide semitransparent lamella along entire length; clava fully 4 x as long as wide.

Mesosoma 1.2 x as long as wide, almost 1.2 x as wide as high. Pronotum laterally, mesoscutum and scutellum sculptured as head; notauli complete, almost smooth, only slightly widened posteriorly, here separated by a distance distinctly longer than the width of one of them; mid lobe in anterior half with a medial longitudinal impression. Scutoscutellar groove wide and smooth. Propodeum with membraneous tissue only slightly produced postero-laterally (propodeal membrane not foamy).

Fore wing with faint yellowish tint, 2.0 x as long as wide, 0.9 x as long as body, with fine and rather dense microtrichia; subcostal vein less than one-fifth as long as wing; marginal cilia hardly present. Hind wing 4.7 x as long as wide; marginal cilia 0.1 width of wing.

Metasoma  $0.9 \, x$  as long as head and mesosoma combined,  $0.7 \, x$  as wide as mesosoma,  $2.25 \, x$  as long as wide. T1 without foamy structure, only with three weak longitudinal carinae medially, otherwise smooth and shiny. T2-T6 smooth, T2 along anterior margin with a narrow line of pubescence, apical tergites with very few hairs.

Named after curator Roy DANIELSSON, Lund.

Closest to *I. lar* WALKER, 1835 in structure of antenna, propodeum and T1 but differs from this species in arrangement of ocelli. *I. danielssoni* differs from the only other described Afrotropical species of the genus, *I. africanus* HUGGERT, 1976 (only male known) e.g. in structure of mesoscutum, propodeum and T1. Cf. HUGGERT (1976).

## Leptacis acanthia sp. nov. (figs 12-15)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

Paratypes: 799, same data as holotype; 19, same data but VII.-VIII.1995.

9: Length 1.2 - 2.1 mm. Black; A1, mandibles and legs including coxae light reddish-brown, apex of hind femur darkened; A2-A10 dark brown.

Head from above (fig. 12)  $1.9 \, x$  as wide as long, hardly wider than mesosoma, distinctly, transversely reticulate-coriaceous with small meshes, without hyperoccipital carina but somewhat angled. OOL hardly half the diameter of lateral ocellus; OOL:LOL = 1:3. Head in frontal view  $1.1 \, x$  as wide as high. Antenna (fig. 13) with A1 fully as long as height of head, A4  $3.5 \, x$  as long as A3.

Mesosoma 1.9 x as long as wide, 1.25 x as high as wide. Sides of pronotum reticulate-coriaceous in upper anterior corner, in lower half with faint longitudinal microsculpture

except along wide hind margin. Mesoscutum very finely and uniformly reticulate-coriaceous, rather densely and evenly hairy, without notauli; hind margin almost straight, semitransparent brown, with dense hairs above scuto-scutellar grooves. Mesopleuron with weak longitudinal microsculpture in about upper 0.25, rest smooth. Scutellum (fig. 14) sculptured and hairy almost as mesoscutum, with a sharp, brownish spine reaching just behind middle of T1. Metapleuron smooth, with pilosity only in about posterior 0.3. Propodeal carinae low and dark, well separated, area between them smooth and shiny.

Fore wing hardly shorter than body, 2.8 x as long as wide, brownish, with fine and dense microtrichia; marginal cilia one-eighth the width of wing. Hind wing 5.9 x as long as wide; marginal cilia hardly 0.4 width of wing.

Metasoma (fig. 15) as long as mesosoma, hardly as wide as this. T1 with two longitudinal carinae, smooth and bare between them, hairy at sides. T2 with two hairy basal foveae, some fine striae on inner edges of foveae reach one-fifth the length of tergite. T3-T5 each with a transverse stripe of strong reticulation, T6 with such sculpture all over except along anterior margin. Apical tergites with some very fine hairs.

Similar to Palaearctic *L. lignicola* KIEFFER, 1916 but with even longer A4, lighter coxae, and slightly longer metasoma, cf. also KIEFFER (1926). *L. acanthia* runs to *L. aramis* MASNER, 1960 in MASNER's (1960) key, but *L. acanthia* has slightly shorter A4 and longer scutellar spine.

#### Leptacis bispinosa sp. nov. (figs 16-19)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), IX.-X.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.8 mm. Brownish black, head black; antenna dark brown, A1 light brown towards base; legs light brown, thickened part of mid and hind femora and tibiae, and hind coxa, dark brown.

Head from above (fig. 16) 1.6 x as wide as long, hardly 1.1 x as wide as mesosoma; occiput finely and densely reticulate-coriaceous all over (hardly transversely so), with a rather sharp hyperoccipital carina; vertex and frons sculptured almost as occiput. Lateral ocelli separated from eye by 0.7 their longer diameter; OOL:LOL = 2:3. Head in frontal view 1.1 x as wide as high; antenna (fig. 17) with A1 1.25 x as long as height of head.

Mesosoma 1.9 x as long as wide, 1.3 x as high as wide. Sides of pronotum faintly longitudinally reticulate-coriaceous, becoming smoother posteriorly. Mesoscutum with uniform sculpture very similar to that of head, almost evenly and moderately hairy; notauli faintly indicated in posterior half, almost parallel; mid lobe posteriorly slightly pointed to base of scutellum and light brownish here; scuto-scutellar grooves covered by dense hairs. Mesopleuron dull and with longitudinal wrinkles in slightly less than upper half, rest smooth. Scutellum (fig. 18) finer sculptured than mesoscutum, moderately hairy, slightly keeled along middle, at each posterior corner with a rather long and fine, semitransparent spine, below with a lamella. Metapleuron smooth and bare, only with pilosity along posterior margin. Propodeal carinae semitransparent, fused.

Fore wing fully as long as body, 2.8 x as long as wide, faintly brownish, with strong and moderately dense microtrichia; marginal cilia absent. Hind wing 6.6 x as long as wide; marginal cilia 0.3 width of wing.

Metasoma (fig. 19) 0.9 x as long as head and mesosoma combined, hardly wider than

mesosoma. T1 with two converging longitudinal carinae, smooth and bare between them, laterally hairy. T2 smooth, with two small tufts of pubescence at base. T3-T6 each with rugosity posteriorly and with numerous fine hairs which form a transverse row on T4 and T5.

A striking species on account of bispinose scutellum. Could deserve a distinct subgenus. The lack of marginal cilia on fore wings is also aberrant in *Leptacis*.

## Leptacis disticha sp. nov. (figs 20-23)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), VII.-VIII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.90 mm. Black; A1-A6 and legs light reddish-brown; A7-A10, T1, and thickened part of hind femur and hind tibia dark brown.

Head in dorsal view (fig. 20) 1.7 x as wide as long, very slightly wider than mesosoma, distinctly reticulate, most transversely so on occiput which has a weak carina in front. OOL about 0.7 diameter of lateral ocellus. Head in frontal view only slightly wider than high (14:13); antenna (fig. 21) with A1 0.9 x as long as height of head.

Mesosoma 1.7 x as long as wide, fully 1.2 x as high as wide. Sides of pronotum smooth except for being weakly reticulate-coriaceous in upper anterior corner. Mesoscutum faintly reticulate-coriaceous, with sparse hairs; notauli faintly indicated for most of their length, fading out anteriorly; mid lobe posteriorly slightly prolonged, rather narrow, at sides with very few long hairs. Mesopleuron smooth, with a couple of distinct longitudinal striae just below tegula. Scutellum (fig. 22) sculptured and hairy as mesoscutum, in posterior half semitransparently light brownish, with medium long spine. Metapleuron smooth, only with pilosity in about posterior third. Propodeal carinae dark, low, parallel, slightly separated.

Fore wing very slightly longer than body, 2.7 x as long as wide, clear, with fine and dense microtrichia; marginal cilia 0.3 width of wing. Hind wing 8.8 x as long as wide; marginal cilia 1.1 width of wing.

Metasoma (fig. 23) hardly longer than mesosoma, fully as wide as this. T1 with two slightly converging longitudinal carinae, smooth between them, pubescent at sides. T2 smooth, basally with two small tufts of pubescence. T3-T6 with faint traces of reticulation and with numerous very fine hairs.

A distinct Afrotropical species on account of nearly complete, strongly converging notauli. Similar to Palaearctic *L. ozines* (WALKER, 1835) but differs e.g. in structure of scutellum, cf. VLUG (1985).

## Leptacis exigua sp. nov. (figs 24-27)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.95 mm. Black, T1 reddish brown; A1-A6, mandibles and legs yellowish. Head from above (fig. 24) 1.8 x as wide as long, very slightly wider than mesosoma; occiput distinctly transversely reticulate-coriaceous, with a low and weak hyperoccipital carina; vertex and frons rather finely but sharply reticulate, at most slightly transversely so. OOL equal to ocellar diameter. Head in frontal view 1.1 x as wide as high; antenna

(fig. 25) with A1 0.9 x as long as height of head.

Mesosoma 1.7 x as long as wide, 1.2 x as high as wide. Sides of pronotum with only very slight rugosity in upper anterior corner, rest smooth. Mesoscutum weakly coriaceous, smoother along middle, rather dense and evenly hairy, without notauli; hind margin almost straight, with about five long hairs at each side. Mesopleuron smooth. Scutellum (fig. 26) smooth, rather densely hairy, with a semitransparently brownish, thick and slightly downcurved spine. Metapleuron smooth, only with pilosity in posterior third. Propodeal carinae low, brownish, slightly separated.

Fore wing fully as long as body, 2.9 x as long as wide, almost clear, with fine and dense microtrichia; marginal cilia about one-third the width of wing. Hind wing 8.4 x as long as wide; marginal cilia fully as long as wing width.

Metasoma (fig. 27) slightly shorter than mesosoma, hardly as wide as this. T1 with two parallel longitudinal carinae, anteriorly somewhat swollen, laterally with pubescence. T2 with two small tufts of pubescence basally, smooth. T3-T6 with slight rugosity posteriorly, hardly hairy.

Runs to *L. porthos* MASNER, 1960 in MASNER's (1960) key, but with much less raised occipital carina, and with much thicker scutellar spine which is very characteristic in shape among African *Leptacis*, in this respect probably most similar to *L. aramis* MASNER, 1960 which, however, differs from *L. exigua* in many other respects, cf. MASNER (1960).

#### Leptacis fusiformis sp. nov. (figs 28-31)

Holotype female, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

Paratype: 12, same data as holotype but VII.-VIII.1995.

♀: Length 1.0 - 1.1 mm. Black, A1-A2 and legs yellowish; flagellum dark brown towards apex; T1 and lateral margin of metasoma brownish.

Head from above (fig. 28) 1.7 x as wide as long, 1.1 x as wide as mesosoma, sharply reticulate, hardly transversely so, without hyperoccipital carina. OOL equal to ocellar diameter. Head in frontal view 1.2 x as wide as high; antenna (fig. 29) with A1 hardly shorter than height of head.

Mesosoma 1.7 x as long as wide, 1.25 x as high as wide. Sides of pronotum smooth, only with reticulation in upper anterior corner. Mesoscutum finely and rather uniformly reticulate-coriaceous, sparsely hairy, without notauli; hind margin almost straight, only with a very small prolongation medially; scuto-scutellar grooves with long and dense hairs. Mesopleuron smooth. Scutellum (fig. 30) smoother than mesoscutum, laterally rather densely hairy, with a semitransparent, lamella-like spine. Metapleuron smooth and bare, only with pilosity at posterior margin. Propodeal carinae semitransparent, close together.

Fore wing almost as long as body, 2.8 x as long as wide, almost clear, with unusually strong and rather dense microtrichia; marginal cilia 0.3 width of wing. Hind wing 9.4 x as long as wide; marginal cilia 1.2 width of wing.

Metasoma (fig. 31) very slightly longer than head and mesosoma combined. T1 with two short, converging carinae, hairy at sides. T2 with two short, pubescent basal foveae, rest of tergite as well as following tergites smooth and bare, T6 fully as long as wide.

This species has even more pointed T6 than *L. katanga* MASNER, 1960 from Congo; it is more similar in this regard to Central American *L. yoroensis* BUHL, 2001 but with different antennal and scutellar structure. Cf. MASNER (1960) and BUHL (2001a).

#### Leptacis pallidispina sp. nov. (figs 32-35)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.90 mm. Dark brown, metasoma light brown; A1-A6 and legs pale yellowish, A7-A10 slightly darkened.

Head from above (fig. 32) 1.8 x as wide as long, very slightly wider than mesosoma. Occiput and vertex perfectly and broadly rounded, without hyperoccipital carina, distinctly transversely reticulate-coriaceous; from almost smooth, with faint traces of reticulation. OOL hardly longer than half the diameter of lateral ocellus. Head in frontal view one and a third times as wide as high; antenna (fig. 33) with A1 shorter than height of head (10:11).

Mesosoma 1.4 x as long as wide, as wide as high. Sides of pronotum smooth except for faint longitudinal microsculpture along anterior margin. Mesoscutum slightly flattened, laterally with few hairs, rest bare, finely reticulate-coriaceous, postero-medially smooth, without notauli; hind margin medially with a small, triangular prolongation, laterally with numerous hairs above scuto-scutellar grooves. Mesopleuron smooth. Scutellum (fig. 34) almost smooth, densely and evenly hairy, with a pale, almost entirely transparent upturned spine. Metapleuron smooth, only with pubescence along posterior margin. Propodeal carinae rather high, semitransparent, fused.

Fore wing 1.1 x as long as body, 2.8 x as long as wide, faintly brownish and with fine and dense microtrichia; marginal cilia 0.3 width of wing. Hind wing 9.8 x as long as wide; marginal cilia 1.2 width of wing.

Metasoma (fig. 35) 0.8 x as long as head and mesosoma combined, 0.9 x as wide as mesosoma. T1 with two longitudinal converging carinae, between them almost smooth, laterally pubescent. T2 basally with two tufts of pubescence, smooth as the following tergites, these with a few fine hairs.

A distinct *Leptacis*-species on account of structure of scutellar spine. Also aberrant on account of slightly flattened mesoscutum.

## Leptacis pilosa sp. nov. (figs 36-39)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), VII.-VIII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.95 mm. Black, A1 and legs light brownish-yellow, A2-A10, mandibles and scutellar spine brown.

Head from above (fig. 36) 1.7 x as wide as long, as wide as mesosoma across tegulae, transversely reticulate, only faintly so on frons, without hyperoccipital carina but slightly angled. OOL hardly as long as diameter of lateral ocellus. Head in frontal view wider than high (8:7), antenna (fig. 37) with A1 fully 0.9 x as long as height of head; hairs of flagellum unusually long and dense.

Mesosoma 1.5 x as long as wide, almost 1.2 x as high as wide. Sides of pronotum fine-

ly reticulate in anterior half in upper 0.4, and in lower 0.25. Mesoscutum finely and uniformly reticulate-coriaceous, smoother postero-medially, sparsely and evenly hairy, without notauli; hind margin almost straight, with about six long hairs above each scutoscutellar groove. Mesopleuron smooth. Scutellum (fig. 38) with faint sculpture, along sides densely hairy. Posterior 0.4 of scutellum and the short and blunt spine semitransparently brown. Metapleuron smooth, only in posterior 0.4 with pilosity. Propodeal carinae rather short, low and dark, well separated.

Fore wing 2.7 x as long as wide, almost clear, with fine and dense microtrichia; marginal cilia fully one-third the width of wing. Hind wing 9.6 x as long as wide; marginal cilia 1.2 x width of wing.

Metasoma (fig. 39) hardly as long as head and mesosoma combined (13:14), 0.9 x as wide as mesosoma. T1 hairy, with two longitudinal carinae. T2 smooth, with dense pubescence basally. Apical tergites with few hairs, T3-T5 each with a transverse stripe of microsculpture, T6 finely sculptured all over.

Very similar to *L. terricola* MASNER, 1960 in unusual shape of antenna, but with much longer flagellar pubescence than this species, cf. MASNER (1960). Differs from *L. longiciliata* BUHL, 2003 e.g. in having less elongate wings and more slender flagellum, cf. BUHL (2003b).

#### Leptacis soederlundi sp. nov. (figs 40-43)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), VII.-VIII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.2 mm. Light brown, mesosoma slightly darker brown; antennae and legs yellowish, flagellum towards apex, and apex of hind femora and of hind tibia, darkened.

Head from above (fig. 40) 1.8 x as wide as long, 1.1 x as wide as mesosoma; occiput finely and slightly transversely reticulate, hyperoccipital carina sharp; vertex and frons with more faint, transverse reticulation. OOL slightly shorter than diameter of lateral ocellus. Head in frontal view almost 1.2 x as wide as high; antenna (fig. 41) with A1 as long as height of head.

Mesosoma 1.9 x as long as wide, 1.25 x as high as wide. Sides of pronotum smooth. Mesoscutum almost smooth but densely covered by fine hairs except laterally; notauli absent; hind margin straight, with dense hairs above scuto-scutellar grooves. Mesopleuron smooth. Scutellum (fig. 42) sculptured and hairy as mesoscutum, with a narrow, semitransparent spine with a lamella below. Metapleuron smooth and bare, only with pilosity along posterior margin. Propodeal carinae long, high and semitransparent, fused except posteriorly.

Fore wing nearly 1.2 x as long as body, 3.5 x as long as wide, almost clear but with fine and dense microtrichia; marginal cilia 0.3 width of wing. Hind wing 8.7 x as long as wide; marginal cilia 0.8 width of wing.

Metasoma (fig. 43) 0.9 x as long as head and mesosoma combined, slightly wider than mesosoma. T1 swollen anteriorly, rest with two longitudinal carinae, smooth and bare between them, hairy at sides; T2 hairy at base, smooth; T3-T6 almost smooth and bare.

Named after the collector.

Runs to L. porthos MASNER, 1960 in MASNER's (1960) key, but with much different antennal structure.

#### Leptacis tenuis sp. nov. (figs 44-47)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), IX.-X.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.85 mm. Dark brown with black head, T1 reddish brown; A1-A6 and legs yellowish.

Head from above (fig. 44) 1.8 x as wide as long, 1.1 x as wide as mesosoma; occiput faintly transversely reticulate, hyperoccipital carina low but distinct; vertex and frons faintly reticulate, not transversely so. OOL equal to ocellar diameter. Head in frontal view 1.2 x as wide as high; antenna (fig. 45) with A1 0.8 x as long as height of head.

Mesosoma 1.5 x as long as wide, nearly 1.2 x as high as wide. Sides of pronotum smooth. Mesoscutum finely and weakly reticulate-coriaceous, smoother postero-medially, moderately and evenly hairy, without notauli; hind margin slightly convex, at each side with about four long hairs. Mesopleuron smooth, with a few longitudinal striae in upper 0.3. Scutellum (fig. 46) smooth, moderately hairy, with a rather thin, semitransparent spine reaching end of T1. Metapleuron smooth, with pilosity in less than posterior half. Propodeal carinae fused, low, semitransparent.

Fore wing about as long as body, 2.9 x as long as wide, almost clear, with fine and dense microtrichia; marginal cilia almost 0.4 width of wing. Hind wing 7.8 x as long as wide; marginal cilia hardly shorter than wing width.

Metasoma (fig. 47) very slightly longer than mesosoma, as wide as this. T1 smooth, pubescent at sides, with two slightly converging longitudinal carinae, in anterior half also with a medial carina. T2 with two small tufts of pubesence basally. T3-T6 with faint rugosity posteriorly, hardly hairy.

Runs to *L. dux* MASNER, 1960 from Congo in MASNER's (1960) key, but with much less raised occipital carina and brighter coloured, cf. also MASNER (1960).

#### Platygaster cuspidata sp. nov. (figs 48-51)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), VII.-VIII.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.4 mm. Black, antennae and legs dark brown; all trochanters, both ends of fore tibia, base of mid and hind tibiae, and segments 1-4 of all tarsi yellowish brown.

Head from above (fig. 48) 2.3 x as wide as long, slightly more than 1.1 x as wide as mesosoma; occiput distinctly transversely striated on a smooth background; vertex finely reticulate-coriaceous; from smooth. OOL = LOL. Head in frontal view one and a third times as wide as high; antenna (fig. 49) with A1 slightly shorter than height of head (27:29), preapical antennal segments each about twice as long as wide.

Mesosoma 1.5 x as long as wide, very slightly higher than wide. Sides of pronotum smooth. Mesoscutum smooth, with sparse hairs, without notauli; hind margin medially distinctly and broadly prolonged above anterior margin of scutellum; wide scuto-scutellar grooves covered by moderately dense long hairs. Mesopleuron smooth. Scutellum (fig. 50) smooth, sparsely hairy, evenly convex. Metapleuron with pilosity all over. Propodeal carinae short, parallel, distinctly transverse area between them smooth and shiny.

Fore wing reaching middle of T6, 2.4 x as long as wide, almost clear with somewhat long and moderately dense microtrichia; marginal cilia short. Hind wing 5.0 x as long as

wide, with two hamuli; marginal cilia fully 0.2 width of wing.

Metasoma (fig. 51) 1.4 x as long as head and mesosoma combined, 0.8 x as wide as mesosoma. T1 densely and uniformly crenulated and with two slightly stronger longitudinal carinae. T2 weakly striated in basal foveae to 0.4 of length, medially to one-eighth of length. T3-T6 smooth, each with a few rather superficially implanted hairs laterally. Sternite 2 without hump.

Most similar to South African *P. flagellata* BUHL, 2003, but with more transverse head and more pointed metasoma, cf. also BUHL (2003a).

#### Platygaster malaisei sp. nov. (figs 52-55)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), IX.-X.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.2 mm. Head and mesosoma dark brown, metasoma reddish brown; A1-A5 and legs more or less yellowish brown, A6-A10 and last segment of tarsi dark brown.

Head from above (fig. 52) 2.2 x as wide as long, 1.2 x as wide as mesosoma; occiput finely and densely transversely striated; vertex weakly reticulate; from with faint fan-like sculpture, smooth medially. OOL:LOL = 6:5. Head in frontal view 1.4 x as wide as high; antenna (fig. 53) with A1 0.8 x as long as height of head, preapical segments each as wide as long.

Mesosoma 1.4 x as long as wide, 1.1 x as high as wide. Sides of pronotum smooth. Mesoscutum smooth, only with slight rugosity at imaginary anterior ends of notauli, a band of hairs where each of these shold have been, notauli only indicated in extreme posterior part; disc bare medially, hairy laterally; mid lobe posteriorly broad, slightly prolonged to base of scutellum; scuto-scutellar grooves wide, with sparse long hairs. Mesopleuron smooth. Scutellum (fig. 54) smooth, evenly convex, with sparse hairs. Matapleuron with pilosity all over. Propodeal carinae slightly diverging, area between them smooth and shiny.

Fore wing slightly more than 0.8 x as long as body, 2.2 x as long as wide, faintly brownish, with short and rather dense microtrichia; marginal cilia short. Hind wing 5.0 x as long as wide, with two hamuli; marginal cilia 0.2 width of wing.

Metasoma (fig. 55) as long as head and mesosoma combined, slightly narrower than this. T1 evenly crenulated. T2 slightly striated in basal foveae to about half of length, medially to less than 0.2 of length. T3-T6 smooth; T3-T4 each with a medially interrupted transverse row of moderately deeply implanted hairs, T5 with a rather complete such row, T6 with some scattered hairs.

Named after the inventor of the trap in which the new species was caught, the Swedish entomologist René MALAISE.

P. malaisei has less elongate preapical antennal segments than the Platygaster-species described by SUNDHOLM (1970). It is most similar to P. nigeriana BUHL, 2004, but differs from this species e.g. in shape of head, sculpture of occiput, in having less hairy scutoscutellar grooves, longer T3-T6, and P. nigeriana has notauli completely lacking, cf. also BUHL (2004a).

#### Platygaster platyptera sp. nov. (figs 56-59)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.4 mm. Black, antennae and legs dark brown; trochanters, base of tibiae, and segments 1-4 of tarsi light brown.

Head from above (fig. 56) 2.3 x as wide as long, 1.25 x as wide as mesosoma. Occiput evenly rounded, densely and rather strongly transversely striated; vertex finely reticulate-coriaceous, not transversely so; frons with faint fan-like sculpture, smooth medially. OOL and LOL about equal. Head in frontal view one and a third times as wide as high; antenna (fig. 57) with A1 0.8 x as long as height of head, preapical segments each 1.1 x as long as wide.

Mesosoma 1.5 x as long as wide, fully 1.1 x as high as wide. Sides of pronotum smooth except for a small spot of rugosity anteriorly. Mesoscutum sparsely hairy, reticulate-coriaceous, in posterior half longitudinally and slightly roughly so, most of lateral lobes smooth, admedian lines indicated as foveolate lines in more than anterior third; notauli indicated in posterior 0.6; mid lobe posteriorly somewhat blunt and slightly prolonged to base of scutellum; scuto-scutellar grooves wide, triangular, each with about four long hairs. Mesopleuron smooth except for a few faint wrinkles below tegula. Scutellum (fig. 58) smooth, medially almost bare, laterally moderately hairy, evenly convex. Metapleuron with pilosity all over. Propodeal carinae parallel, area between them distinctly transverse, smooth and shiny.

Fore wing 2.1 x as long as wide, 0.8 x as long as body, with weak brownish tint and rather dense microtrichia; marginal cilia distinctly less than 0.1 width of wing. Hind wing 4.6 x as long as wide, with two hamuli; marginal cilia 0.2 width of wing.

Metasoma (fig. 59) hardly as long as head and mesosoma combined (19:20), slightly narrower than mesosoma. T1 rather evenly crenulated. T2 striated in basal foveae to 0.7 of length, medially to hardly half of length, rest of tergite as well as the following tergites smooth except for very faint reticulation along hind margin on T2-T5; T3-T6 each with a more or less complete transverse row of rather superficially implanted hairs.

Differently sculptured than South African *P. matuschanskavaskyi* BUHL, 2003, cf. also BUHL (2003a). *P. platyptera* differs from the similar *P. kenyana* BUHL, 2004 most obviously in shape of head and scutellum, cf. also BUHL (2004a).

## Platygaster pubiventris sp. nov. (figs 60-64)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

Paratypes: 299, same data as holotype; 1910, same data but VII.-VIII.1995.

9: Length 1.1 - 1.2 mm. Black, A1-A3 and legs light brownish yellow, A2 partly darkened; coxae medium brown, A4-A10 and last segment of tarsi slightly darker brown.

Head from above (fig. 60) 1.9 x as wide as long, 1.1 x as wide as mesosoma; occiput slightly margined in front, distinctly, finely and densely transversely striated, in about posterior half smooth; vertex mostly smooth, with spots of faint reticulation; frons smooth, in lower half with very faint fan-like microsculpture. OOL and LOL about equal. Head in frontal view 1.2 x as wide as high; antenna (fig. 61) with A1 0.9 x as long as height of

head.

Mesosoma 1.5 x as long as wide, 1.1 x as high as wide. Sides of pronotum smooth, only with a very small spot of reticulation anteriorly. Mesoscutum completely smooth, with very sparse hairs, without notauli; hind margin medially with a distinct, slightly blunt prolongation to base of scutellum; rather wide scuto-scutellar grooves covered by dense hairs. Mesopleuron smooth. Scutellum (fig. 62) smooth, moderately hairy, posteriorly slightly pointed in dorsal view, in lateral view with a low, angular prolongation. Metapleuron with pilosity all over. Propodeal carinae parallel, slightly transverse area between them smooth and shiny.

Fore wing fully 0.8 x as long as body, 2.3 x as long as wide, with faint brownish tint, microtrichia dense and moderately long; marginal cilia at their longest 0.1 width of wing. Hind wing 5.2 x as long as wide, with two hamuli; marginal cilia 0.3 width of wing.

Metasoma (fig. 63) hardly 0.9 x as long as head and mesosoma combined, hardly as wide as mesosoma. T1 rather evenly crenulated. T2 striated in basal foveae to half of length, medially to 0.2 of length, rest of tergite as well as following tergites smooth. T3 with 4 rather superficially implanted hairs at each side, T4 and T5 each with 4-5 such hairs at each side; T6 with a transverse row of 6 hairs medially.

♂: Length 0.80 mm. Antenna (fig. 64) with flagellar pubesence two-thirds the width of segments.

A distinct African species on account of shape of scutellum. Similar to *P. subplana* sp. nov. described below, but with differently shaped low scutellum, smoother head and mesoscutum, lacking notauli, and with more hairy apical tergites.

## Platygaster subplana sp. nov. (figs 65-68)

Holotype female, South Africa, Cape Province, Tsitsikama Coastal National Park (34° 02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

Paratypes: 19, same data as holotype; 19, same data but XI.-XII.1995.

9: Length 1.1 - 1.2 mm. Black, propodeum and T1 reddish-brown; A1-A2 and legs yellow, flagellum becoming dark brown towards apex.

Head from above (fig. 65) 2.0 x as wide as long, almost 1.2 x as wide as mesosoma; occiput distinctly, finely and densely transversely striated, becoming smooth behind eyes; vertex faintly reticulate, smooth medially; frons with faint fan-like microsculpture. OOL and LOL about equal. Head in frontal view 1.25 x as wide as high; antenna (fig. 66) with A1 0.9 x as long as height of head.

Mesosoma nearly 1.6 x as long as wide, very slightly higher than wide (19:18). Sides of pronotum smooth except for a spot of rugosity in upper anterior corner. Mesoscutum slightly reticulate-coriaceous in anterior third, rest smooth, with sparse hairs; notauli weakly indicated in slightly less than posterior half; mid lobe behind rather broad, prolonged to base of scutellum; scuto-scutellar grooves with long and dense hairs. Mesopleuron smooth. Scutellum (fig. 67) medially almost smooth and bare, laterally densely hairy and sculptured, almost flattened above, posteriorly rather abruptly cut off. Metapleuron with pilosity all over. Propodeal carinae in dorsal view strong, very slightly diverging, area between them about as long as wide, smooth and shiny.

Fore wing 0.8 x as long as body, 2.3 x as long as wide, clear, with rather long and moderately dense microtrichia; marginal cilia 0.1 width of wing. Hind wing 5.1 x as long

as wide, with two hamuli; marginal cilia one-third the width of wing.

Metasoma (fig. 68) 0.9 x as long as head and mesosoma combined, as wide as mesosoma. T1 crenulated (with about six weak longitudinal carinae). T2 striated in basal foveae to half of length, medially only with a carina which is shorter than T1. T3-T5 smooth, T6 only with faint traces of microsculpture. T3-T4 each with two rather superficially implanted hairs at each side, T5 with three such hairs at each side, T6 medially with a transverse row of four hairs.

A distinct African species on account of shape of scutellum.

#### Platygaster tsitsikamensis sp. nov. (figs 69-72)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.1 mm. Blackish, metasoma brown, T1 lightest; A1-A5 and legs pale yellow, last segment of tarsi darker.

Head from above (fig. 69) 1.9 x as wide as long, very slightly wider than mesosoma, smooth, only medially on occiput with some irregular transverse wrinkles. OOL:LOL = 6:5. Head in frontal view 1.3 x as wide as high; antenna (fig. 70) with A1 0.85 x as long as height of head, preapical flagellar segments slightly transverse.

Mesosoma 1.2 x as long as wide, hardly as high as wide. Sides of pronotum smooth but with some hairs. Mesoscutum smooth with a few hairs laterally and along notauli, these indicated in less than posterior half; mid lobe posteriorly prolonged to base of scutellum, slightly blunt; scuto-scutellar grooves wide, with numerous hairs. Mesopleuron smooth. Scutellum (fig. 71) evenly convex, smooth, sparsely hairy. Metapleuron with pilosity all over. Propodeal carinae short, slightly transverse area between them smooth and shiny.

Fore wing 0.8 x as long as body, 2.1 x as long as wide, almost clear, with rather long and sparse microtrichia; marginal cilia at their longest hardly 0.1 width of wing. Hind wing 5.6 x as long as wide, with two hamuli; marginal cilia one-third the width of wing.

Metasoma (fig. 72) 0.9 x as long as head and mesosoma combined, 0.8 x as wide as mesosoma. T1 crenulated and with two weak longitudinal carinae. T2 weakly striated in basal foveae to hardly half of length, medially smooth. T3-T6 smooth, with superficially implanted hairs, T3-T4 only laterally, on T5 forming a transverse row.

Differs from *P. laticornis* BUHL, 2004 e.g. in sculpture of head and in colour, cf. BUHL (2004b); from other similar African *Platygaster*, e.g. *P. nigeriana* BUHL, 2004 and *P. warda* BUHL, 2004, in shape of preapical flagellar segments, cf. also BUHL (2004a).

## Synopeas capensis sp. nov. (figs 73-76)

Holotype: \$\,\$ South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), IX.-X.1995, Malaise trap, Michael SÖDERLUND leg.

9: Length 1.2 mm. Black, A1-A2 and legs except coxae yellowish; thickened part of hind femur and of hind tibia, and last segment of all tarsi, somewhat darkened; A3-A10 dark brown.

Head from above (fig. 73) 2.0 x as wide as long, 1.4 x as wide as mesosoma; occiput transversely reticulate-coriaceous, with a weak hyperoccipital carina in front; vertex and frons distinctly but finely reticulate-coriaceous, only transversely so just above antennae.

OOL equal to ocellar diameter. Head in frontal view 1.25 x as wide as high; antenna (fig. 74) with A1 0.8 x as long as height of head.

Mesosoma 2.0 x as long as wide, 1.3 x as high as wide. Sides of pronotum reticulate in anterior half, rest smooth. Mesoscutum smooth, finely reticulate-coriaceous along anterior and lateral margins and where notauli should have been, these weakly indicated posteriorly in 0.4 of length; disc moderately and evenly hairy; mid lobe posteriorly slightly blunt, prolonged to base of scutellum, black, not swollen; scuto-scutellar grooves each with 3-4 long hairs. Mesopleuron smooth. Scutellum (fig. 75) smooth, moderately hairy, with a small dark tooth with a semitransparent lamella below. Metapleuron smooth and bare in anterior half, rest with pilosity. Propodeal carinae dark, slightly separated, posteriorly diverging, in lateral view straight.

Fore wing 0.8 x as long as body, 2.5 x as long as wide, faintly yellowish, with fine and dense microtrichia; marginal cilia 0.05 width of wing. Hind wing 5.0 x as long as wide; marginal cilia 0.3 width of wing.

Metasoma (fig. 76) 1.1 x as long as head and mesosoma combined, as wide as mesosoma, 1.25 x as wide as high. T2 smooth. T3-T5 reticulate except along anterior and hind margins, T6 reticulate except along anterior margin. Apical tergites with few superficially implanted hairs which on T5 form a transverse row.

Generally similar to the Palaearctic S. myles (WALKER, 1835) but with different antennal structure and more pointed metasoma, cf. VLUG (1985).

#### Synopeas procerus sp. nov. (figs. 77-82)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), VII.-VIII.1995, Malaise trap, Michael SÖDERLUND leg.

Paratypes: 19 200, same data as holotype but XI.-XII.1995.

9: Length 1.4 - 1.5 mm. Black, A1 and legs including coxae light reddish brown, thickened part of hind femur and of hind tibia slightly darkened; A2-A6 dark reddish brown, A7-A10 and last segment of tarsi dark brown.

Head from above (fig. 77) 2.4 x as wide as long, 1.2 x as wide as mesosoma, finely and almost uniformly reticulate-coriaceous, with a few transverse wrinkles behind ocelli and just above antennae; occiput smoothly rounded without hyperoccipital carina. OOL = 1.3 ocellar diameter; LOL = 2 OOL. Head in frontal view 1.25 x as wide as high; antenna (fig. 78) with A1 0.8 x as long as height of head.

Mesosoma 1.5 x as long as wide, 1.2 x as high as wide. Sides of pronotum finely reticulate except along narrow hind margin and in lower 0.4. Mesoscutum uniformly sculptured as head, moderately and evenly hairy, hind margin medially strongly swollen and brownish, at sides with long and dense white hairs. Mesopleuron smooth. Scutellum (fig. 79) strongly raised from below posterior margin of mesoscutum, smooth and bare antero-medially, rest covered by dense, white hairs; posteriorly with a narrow, semi-transparent lamella along entire height, ending in a tiny tooth on top. Metapleuron smooth and bare in anterior and upper third, rest with white pilosity. Propodeal carinae low, dark and fused.

Fore wing  $0.9 \times 10^{-2} \times 10^{-2}$ 

Metasoma (figs 80-81) as long as head and mesosoma combined, as wide as mesosoma, 1.1 x as wide as high. T2 smooth. T3-T5 each with a transverse stripe of rough reticulation, T6 with such sculpture all over; apical tergites with some very fine hairs.

σ': Length 1.3 mm. Antenna (fig. 82) with flagellar pubescence as long as width of segments. Metasoma 0.9 x as long as head and mesosoma combined.

In shape of scutellum this species approaches Palaearctic S. dentiscutum (SZABÓ, 1981) and S. subtilis BUHL (2004), and South African S. tuberosus SUNDHOLM, 1970, but the first mentioned has metasoma higher than wide, the second has head less transverse, and the third has fore wing with marginal cilia and differs from S. procerus in colour, cf. also SUNDHOLM (1970) and BUHL (2000, 2004c). Perhaps most similar to S. procerus in shape of scutellum is S. talhouki VLUG, 1976 from Lebanon, but this species has e.g. female metasoma distinctly more pointed than S. procerus, cf. VLUG (1976).

#### Synopeas soederlundi sp. nov. (figs 83-86)

Holotype: \$\, South Africa, Cape Province, Tsitsikama Coastal National Park (34°02'S, 23°53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

9: Length 0.95 mm. Black; basal half of A1 yellowish brown, darker towards apex; A2-A6 medium brown, A7-A10 dark brown; all coxae black; most of fore leg yellowish brown, femur slightly darkened towards base; mid and hind legs dark brown, basal half of tibiae yellowish brown; all tarsi yellowish brown with last segment dark.

Head from above (fig. 83) 1.8 x as wide as long, fully 1.1 x as wide as mesosoma, finely and distinctly reticulate-coriaceous, more transversely so above antennal insertions; hyperoccipital carina only weakly indicated. OOL equal to ocellar diameter. Head in frontal view 1.2 x as wide as high; antenna (fig. 84) with A1 slightly more than 0.8 x as long as height of head.

Mesosoma hardly 1.5 x as long as wide, nearly 1.2 x as high as wide. Sides of pronotum finely reticulate in upper half, smooth along posterior half of upper margin, along broad hind margin, and below. Mesoscutum finer reticulate-coriaceous than head, smoother postero-medially, moderately and evenly hairy, mid lobe distinctly and slightly bluntly pointed to base of scutellum, prolongation dark, not swollen; scuto-scutellar grooves with long and dense hairs. Mesopleuron smooth. Scutellum (fig. 85) densely hairy except postero-medially, in dorsal view slightly pointed posteriorly. Metapleuron with pilosity except along narrow anterior margin. Propodeal carinae dark and fused.

Fore wing 0.9 x as long as body, 2.5 x as long as wide, clear, with fine and dense microtrichia, without marginal cilia. Hind wing 5.7 x as long as wide; marginal cilia 0.4 width of wing.

Metasoma (fig. 86) hardly 0.9 x as long as head and mesosoma combined, 1.1 x as wide as mesosoma, one and a third times as wide as high. T2 smooth. T3-T5 each with a transverse reticulate-coriaceous stripe, T6 with such sculpture except along anterior margin. Apical tergites with fine hairs, forming a transverse row on T5.

Named after the collector.

Differs from South African S. bicolor SUNDHOLM, 1970 in colour and in structure and sculpture of head, cf. SUNDHOLM (1970). S. soederlundi has more transverse head than S. goengeti Buhl, 1997 from Uganda, and less distinct hyperoccipital carina than S. ibadanensis Buhl, 2004 from Nigeria, and it has shorter T3-T6 than both there species; S.

soederlundi has distinctly shorter and less pointed metasoma than South African S. royi Buhl, 2001. Cf. Buhl (1997, 2001b, 2004a).

#### Synopeas sundholmi sp. nov. (figs 87-90)

Holotype: \$, South Africa, Cape Province, Tsitsikama Coastal National Park (34\*02'S, 23\*53'E), I.1996, Malaise trap, Michael SÖDERLUND leg.

Paratype: 19, same data but XI.-XII.1995.

9: Length 0.95 - 1.00 mm. Black; A1-A6 and legs rather pale yellowish, A7-A10 dark brown.

Head from above (fig. 87) 2.0 x as wide as long, hardly 1.1 x as wide as mesosoma, finely and densely reticulate-coriaceous, more transversely so just above antennae; hyperoccipital carina only indicated medially. OOL equal to ocellar diameter. Head in frontal view 1.2 x as wide as high; antenna (fig. 88) with A1 0.9 x as long as height of head.

Mesosoma 1.5 x as long as wide, 1.1 x as high as wide. Sides of pronotum reticulate-coriaceous in upper half except along hind margin, smooth in lower half. Mesoscutum uniformly reticulate-coriaceous, finer than head, slightly smoother postero-medially, with sparse and evenly distributed hairs; notauli absent; hind margin hardly prolonged medially; scuto-scutellar grooves wide, triangular, each with about four long hairs. Mesopleuron smooth. Scutellum (fig. 89) almost smooth and bare along midline, rest with dense hairs, posteriorly with a semitransparent spine with a narrow lamella below. Metapleuron smooth and bare in anterior half, rest with pilosity. Propodeal carinae dark and fused.

Fore wing hardly shorter than body,  $2.5 ext{ x}$  as long as wide, almost clear, with fine and dense microtrichia and very short marginal cilia. Hind wing  $5.9 ext{ x}$  as long as wide; marginal cilia fully one-third the width of wing.

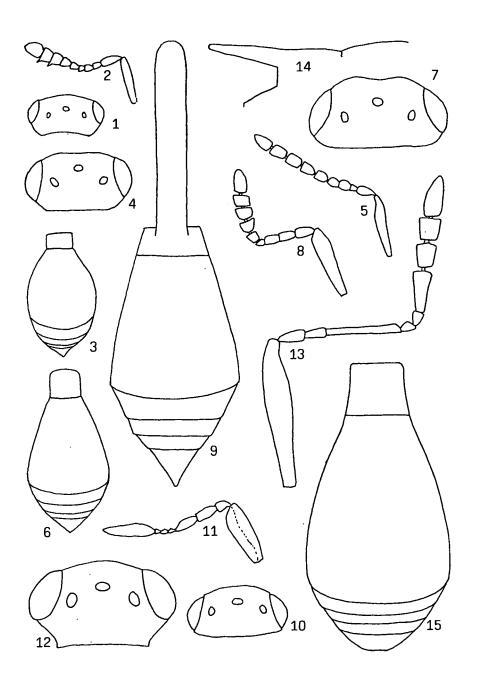
Metasoma (fig. 90) 0.8 x as long as head and mesosoma combined, hardly as wide as mesosoma, 1.5 x as wide as high. T2 smooth. Hind margins of T3-T5, and most of T6, with some very faint microsculpture. Apical tergites with a few fine hairs, forming a transverse row on T5.

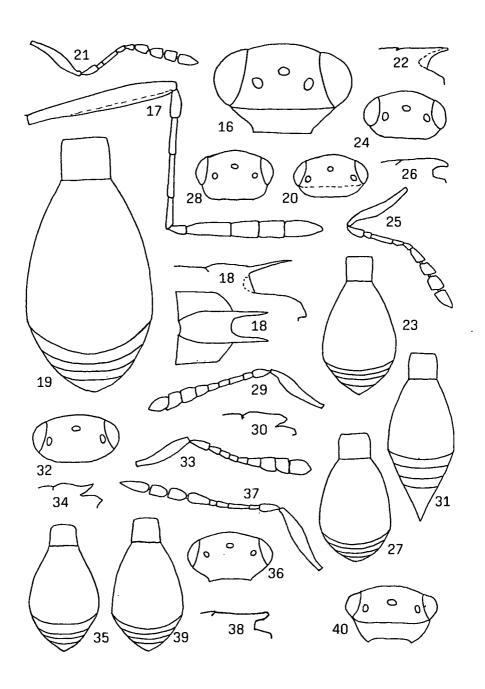
Named after the late excellent student of South African Proctotrupoidea, Arne SUND-HOLM.

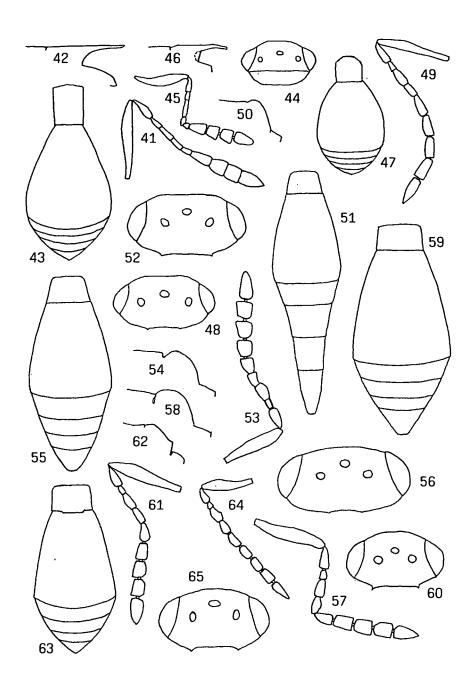
Distinct among African species on account of shape of scutellum.

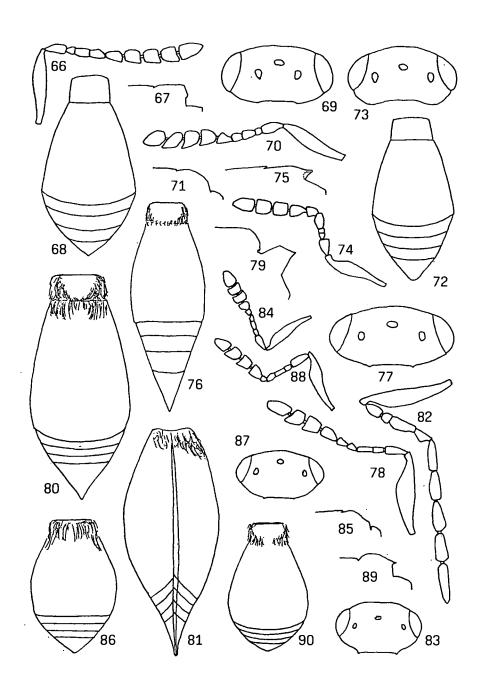
#### Legends to Figures 1-90

- 1-3 Aceroteta africana sp. nov. female: 1 head, 2 antenna, 3 metasoma.
- 4-6 Euxestonotus pilipterus sp. nov. female: 4 head, 3 antenna, 6 metasoma.
- 7-9 Inostemma soederlundi sp. nov. female: 7 head, 8 antenna, 9 metasoma.
- 10-11 Iphitrachelus danielssoni sp. nov. female: 10 head, 11 antenna.
- 12-15 Leptacis acanthia sp. nov. female: 12 head, 13 antenna, 14 scutellum, 15 metasoma.
- 16-19 *Leptacis bispinosa* sp. nov. female: 16 head, 17 antenna, 18 scutellum lateral and dorsal view, 19 metasoma.
- 20-23 Leptacis disticha sp. nov. female: 20 head, 21 antenna, 22 scutellum, 23 metasoma.
- 24-27 Leptacis exigua sp. nov. female: 24 head, 25 antenna, 26 scutellum, 27 metasoma.
- 28-31 Leptacis fusiformis sp. nov. female: 28 head, 29 antenna, 30 scutellum, 31 metasoma.
- 32-35 Leptacis pallidispina sp. nov. female: 32 head, 33 antenna, 34 scutellum, 35 metasoma.
- 36-39 Leptacis pilosa sp. nov. female: 36 head, 37 antenna, 38 scutellum, 39 metasoma.
- 40-43 Leptacis soederlundi sp. nov. female: 40 head, 41 antenna, 42 scutellum, 43 metasoma.
- 44-47 Leptacis tenuis sp. nov. female: 44 head, 45 antenna, 46 scutellum, 47 metasoma.
- 48-51 *Platygaster cuspidata* sp. nov. female: 48 head, 49 antenna, 50 scutellum, 51 metasoma.
- 52-55 *Platygaster malaisei* sp. nov. female: 52 head, 53 antenna, 54 scutellum, 55 metasoma.
- 56-59 Platygaster platyptera sp. nov. female: 56 head, 57 antenna, 58 scutellum, 59 metasoma.
- 60-64 *Platygaster pubiventris* sp. nov., 60-63 female: 60 head, 61 antenna, 62 scutellum, 63 metasoma; 64 male: antenna.
- 65-68 *Platygaster subplana* sp. nov. female: 65 head, 66 antenna, 67 scutellum, 68 metasoma.
- 69-72 Platygaster tsitsikamensis sp. nov. female: 69 head, 70 antenna, 71 scutellum, 72 metasoma.
- 73-76: Synopeas capensis sp. nov. female: 73 head, 74 antenna, 75 scutellum, 76 metasoma.
- 77-82 Synopeas procerus sp. nov., 77-81 female: 77 head, 78 antenna, 79 scutellum, 80 metasoma dorsal view, 81 metasoma lateral view; 82 male: antenna.
- 83-86 Synopeas soederlundi sp. nov. female: 83 head, 84 antenna, 85 scutellum, 86 metasoma
- 87-90 Synopeas sundholmi sp. nov. female: 87 head, 88 antenna, 89 scutellum, 90 metasoma.









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#### Author's address:

Peter Neerup BUHL Troldhøivei 3 DK-3310 Ølsted Denmark

e-mail: pnbuhl@zmuc.ku.dk

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Maximilian SCHWARZ, Konsulent für Wissenschaft der O.Ö. Landesregierung, Eibenweg 6, A-4052 Ansfelden, e-mail: maxschwarz@tele2.at Redaktion: Erich DILLER (ZSM), Münchhausenstrasse 21, D-81247 München, Tel.(089)8107-251

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e-mail: erich.diller@zsm.mwn.de oder: wolfgang.schacht@zsm.mwn.de

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