

Notes on Phymatinae (Insecta: Heteroptera: Reduviidae). The genus *Oxythyreus* Westwood, 1841

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Key words: Insecta; Heteroptera; Reduviidae; Phymatinae; *Oxythyreus*; new species; new subspecies; South Africa; distribution; map.

Oxythyreus slateri spec. nov. and *O. cylindricornis schuhi* subspec. nov. are described from South Africa. Notes on the other species of the genus and a key to the species are added.

Introduction

Three specimens, one male and two females of the genus *Oxythyreus* Westwood, 1841 (Heteroptera: Reduviidae) from the American Museum of Natural History, collected in 1968 by Dr J.A. Slater, c.s. in South Africa are studied. They were attributed to *Oxythyreus cylindricornis* Westwood, 1841, and the male has been depicted by Slater (1982) and by Schuh & Slater (1995). By comparison with the (female) type specimen of Westwood's *Oxythyreus cylindricornis*, and Kormilev's description (in: Kormilev & van Doesburg, 1986: 123) of the attributed male of this species, we are convinced that this male specimen belongs to an undescribed species. It is here described and named after the great and amiable hemipterist Dr Jim Slater in recognition for his important contributions in entomology. The two female specimens are described as a subspecies of *Oxythyreus cylindricornis*. The type specimen of Westwood's *cylindricornis* has been studied and some details are described and depicted, just as the attributed male from Natal. In this paper, all measurements are given in mm.

Oxythyreus Westwood, 1841

Oxythyreus Westwood, 1841: 27 as a subgenus of *Macrocephalus* Swederus, 1797; Amyot et Serville, 1843: 291; Stål, 1876: 134; Handlirsch, 1897: 207; Kormilev, 1962: 2; Kormilev, 1984: 624; Kormilev & van Doesburg, 1986: 123; Kormilev, 1987: 159, 160; Froeschner & Kormilev, 1989: 15, 38; van Doesburg, 2004: 149, 155.

Type species (by monotypy): *Oxythyreus cylindricornis* Westwood, 1841b: 28 (erroneously in subgenus *Hemithyreus*, Westwood, nom. nud.).

Belonging to the Macrocephalini, teste its general properties and characterized by the strongly reduced scutellum, which is acutely triangular. Handlirsch (1897: 207, fig. 26) has given an extensive diagnosis of the genus.

Oxythyreus slateri spec. nov.
(figs 1-8, 12, 25, 33.1)

Reduviidae; Slater, 1982: 443, figure.

Oxythyreus cylindricornis; Schuh & Slater, 1995: 151, fig. 48.1.

Material.— Holotype, ♂ (AMNH), S AFRICA: Cape Prov. Hogsback, NE of Fort Beaufort, 16.ii.1968, J.A. & S. Slater, T. Schuh, M.H. Sweet.

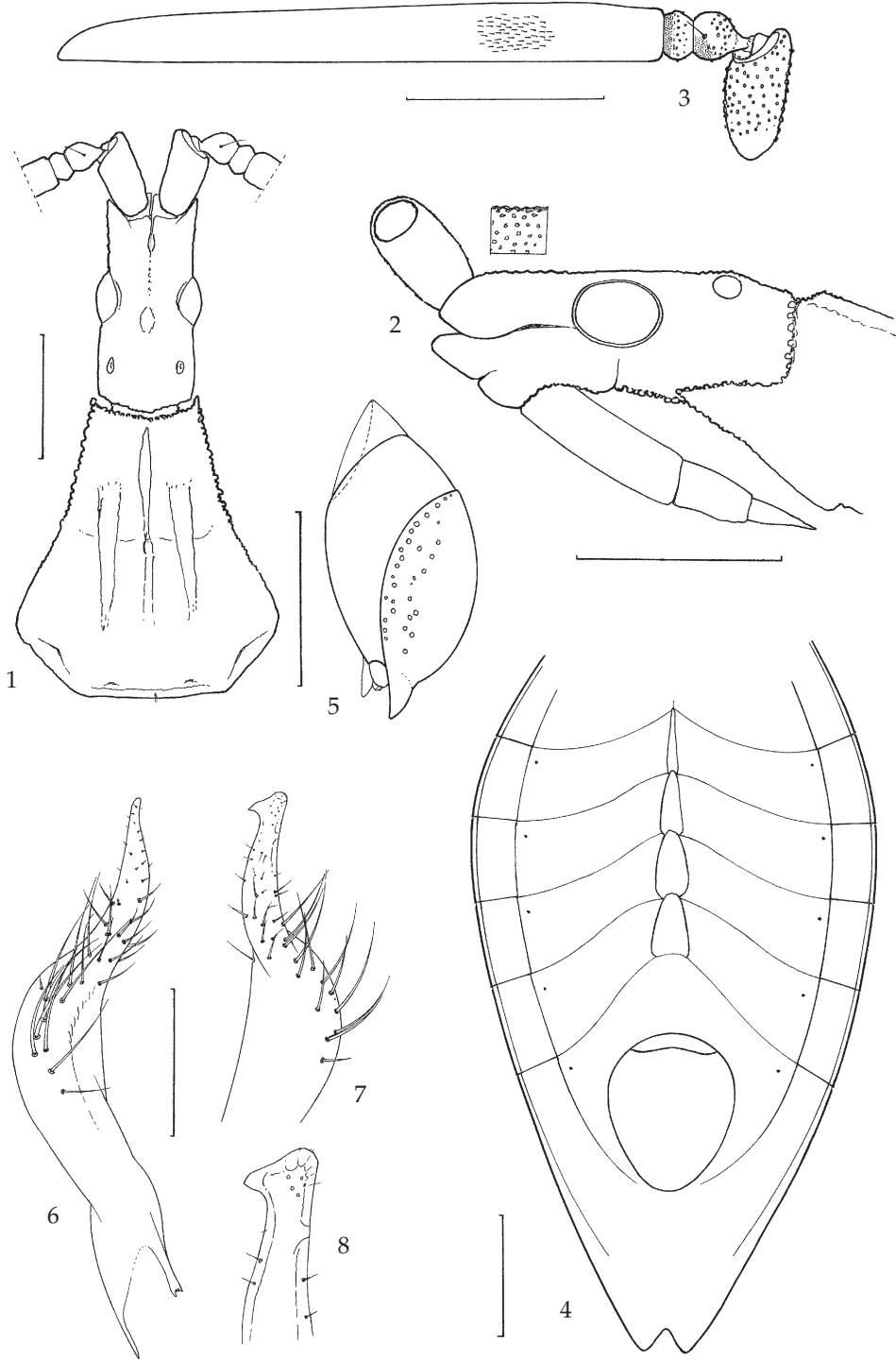
Etymology.— It is a pleasure to name this remarkable insect in honour of Dr J.A. (Jim) Slater for his important taxonomic work on Heteroptera, especially the Lygaeidae.

Holotype, ♂, length 10 mm, body slender, fusiform, pronotum longer than wide, ratio 8:7, width of abdomen 3.3 mm, brown with yellow and a dark head; integument of whole body, except membrane of fore wing, finely semi matt shagreened, microgranulose.

Head (figs 1, 2).— Long, slender, 2.4 times longer than broad, semi cylindrical, with parallel sides, eyes rather flat, situated in middle of sides, ocelli small, synthlipsis almost as wide as that of the eyes; juga large, embracing laterally the antennal bases and basal part of the first antennal segments as long as the side of the head anterior of eyes, round, thick, ventral surface flattened, its apex obliquely truncate, its diameter half of length; second segment almost as wide as long, its base somewhat flattened, third segment much shorter than wide, bead-like, fourth very long, 3 mm, slender, almost 11 times its diameter, feebly fusiform, surface smooth, covered with very short, very fine dark setae; ratio of antennal parts: 14:6:3:60; antennae with one trichobothrium apically on second segment (pedicel) (fig. 3), like in all Phymatinae (Wygodzinsky & Lodhi, 1989; type I of Zrzavý, 1990); genae and bucculae meeting each other in front of rostral base; ventral aspect of head with lateral longitudinal high crests, anteriorly joining the gulae; free rims of crests set with blunt teeth or granulae; ventral distance between eyes, 0.47 mm; rostrum rather slender, cylindrical, first segment 3.4 times longer than wide, tapering from Ø 0.26 to 0.24 mm, second from 0.24 to 0.17 mm, Ø of third about 0.1 mm. Upper side of head blackish, anteriorly gradually turning to brown, neck pale yellow, posterior part with light brown medial spot, ocelli yellow, sides, including tylus, juga, genae and gula yellowish rose-coloured, eyes and ventral aspect including rostrum, pale yellow; antennae brown, fourth segment pale brown, setae black, head and first three antennal segments strewn with white granulae.

Thorax.— Pronotum (fig. 1) longer (medially) than wide, ratio 8:7, anterior border concave, anterior angles acute, anteriorly directed, lateral margins feebly concave, diverging backward to rounded lateral angles, converging postero-lateral margins hardly emarginate, sharply ending in the slightly convex posterior margin, borders around acute, in the mid-line a fine longitudinal furrow disappearing near the hind border; pronotal carinae well developed, arising from posterior part of fore lobe, tapering posteriorly, running

Figs 1-8, *Oxythyreus slateri* spec. nov., ♂ holotype. 1, head and pronotum, dorsal aspect; 2, head from aside; 3, left antenna; 4, abdomen, ventral aspect; 5, pygophore, right lateral aspect. 6-8, right paramere. 6, 7, dorsal and ventral aspect respectively, bar represents 0.2 mm; 8, apex of paramere enlarged. Other bars represent 1 mm. ►



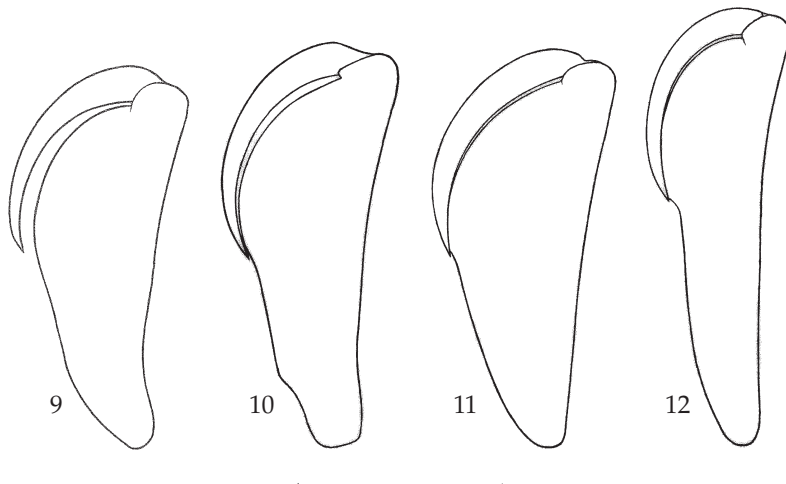
parallel backward and disappearing on posterior part of hind lobe; colour of lateral margins of fore lobe, hind lobe and sides, soft yellowish rose-coloured, anterior lobe brown with blackish patches; posterior lobe strongly punctate, surface, sides and borders of pronotum set with white or hyaline granules, borders of anterior lobe strongly serrate by greater granules; lateral prosternal corners strongly granulate; pleural sides light yellowish rose-coloured, epicoxal lobe and anterior prosternal projections yellowish white, the latter ventrally rounded.

Scutellum triangular, two times as long as wide at base, apex acute, reaching almost level of posterior margins of fourth abdominal laterotergites, base a little raised centrally and keeled along midline; sides straight, narrowly edged, raised and finely serrate by microscopic granules, surface deeply and densely punctate, dirty yellow, inner side of raised margins anteriorly dark brown; sides of meso and metathorax with a blackish longitudinal streak, broad posteriorly, evanescent anteriorly, parts above faintly rose-coloured, underneath pale yellow as the whole ventral surface including epicoxal lobes; mesosternum long, parallel and centrally longitudinally sharply crested; poststernum very small.

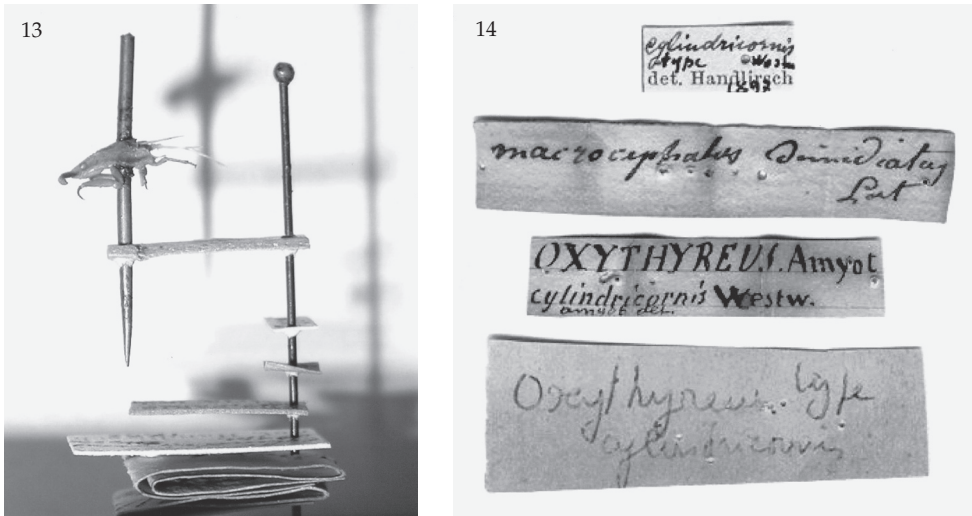
Wings.— Hemelytrae slender, not attaining apex of abdomen, elytral part normally developed, brown, veins smooth, surface between veins densely and finely punctate, membranes long, dark brown, hyaline.

Legs.— Femora of fore legs (fig. 12) slender, longer than coxae (35:22), apically moderately broadened, the sharp, curved edge is set with a double row of about sixty black teeth each (micro pegs); upper side brown to blackish brown, ventrally, base and apex remain yellowish; mid- and hind legs of normal shape, of same colour, posterior side of tibiae faintly rose-coloured, tarsi light brown, claws black tipped.

Abdomen (fig. 4).— flat, oblong oval, two times as long as wide, widest well anteriorly of middle, at fourth connexivum, from there weakly curved to bilobed apex; laterotergites smoothly matt, intersegmental sutures dorsally hardly visible, lateral



Figs 9-12, femora of *Oxythyreus* species. 9, *O. cylindricornis* holotype ♀; 10, *O. cylindricornis*, ♂ from Natal; 11, *O. cylindricornis schuhi* subsp. nov.; 12, *O. slateri* spec. nov. Bar represents 1 mm.



Figs 13-14, *Oxythyreus cylindricornis* Westwood, ♀ holotype. 13, photograph of pinned holotype, explanation in text; 14, facsimile of the labels.

margins faintly serrately bordered, pale yellow; tergites dark rose-coloured, end of abdomen dorsally dark red with a yellow median line; ventral surface rose-coloured with lateral parts broadly pale yellow; sternite III keeled centrally, sternites IV-VI with white spade-shaped central sclerites, VII anteriorly of pygophore white, visible posterior part of VIII crescent shaped; exposed part of pygophore (fig. 5) in ventral view, egg shaped oval, longer than broad, ratio 15:11, sub-posteriorly with a transverse furrow; laterally indistinctly bordered and sub laterally scattered with some granulae, pale yellow; parameres (figs 6-8) long, slender, spool shaped, screw-bent, richly anterodorsally setose, apically flattened and minutely hooked; end of abdomen light rose-coloured, tips of end lobes brown, bare, semi glossy and weakly transversely wrinkled.

Measurements.— (In mm, l = length, r = rostrum, tl = total length, w = width). tl, 10.3; l/head, 1.86; w/head, 0.78; w/head over eyes 0.84, synthlipsis, 0.50; synthlipsis of ocelli, 0.48; l/pron, 2.4; w/pron, 2.1; l/scut, 2.4; w/scut, 1.2; l/wing, 6.35; w/wings, 2.3; fore femur, 2.1; l/abd, 6.6; w/abd, 3.3; l/ant 1, 0.67; l/ant 2, 0.3; l/ant 3, 0.15; l/ant 4, 3.0; l/r 1, 0.85; w/r 1, 0.25; l/r 2, 0.42; l/r 3, 0.3.

Distribution.— Only known from the type locality: S Africa: Cape Prov. Hogsback, NE of Fort Beaufort. The female is unknown.

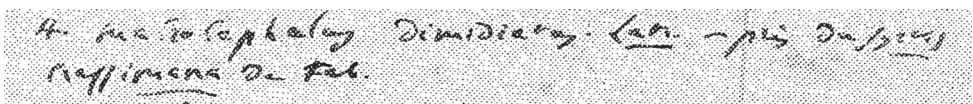


Fig. 15, facsimile of the handwriting of P.A. Latreille, extract from an undated manuscript catalogue (see text) preserved in the Museum of Paris. The text gives: "4. *Macrocephalus dimidiatus* Latr. — près du *Syrtis crassimana* de Fab."

Notes.— *Oxythyreus slateri* is easily recognizable from the other *Oxythyreus* species by the extremely slender appearance of the male and the narrow pronotum with the strongly rounded hind corners. Comparing this pronotum with that of the holotype of *O. cylindricornis* (fig. 17), or even with the illustrations given by Westwood (fig. 16, 7) and Handlirsch (1897, Taf. VI, Fig. 6), although of the opposite sex, reveals immediately that we have to do with a different species; the parameres are different too: longer and more richly setose. The locality label of the specimen gives: "Hogsback, NW of Fort Beaufort", which must be an error, as Hogsback lies NE of Fort Beaufort. The original colour of the specimen could have been green or greenish, as Dr Slater mentioned *in litteris*, having only a vague remembrance of it. The figure used for both publications cited above under synonymy, was drawn from this specimen by Ms Mary Jane Spring.

Oxythyreus cylindricornis Westwood, 1841
(figs 9, 13-19, 26, 33.2)

Macrocephalus (Oxythyreus) cylindricornis Westwood, 1841a: 28, Tab. 2, figs 7-7c.

Oxythyreus cylindricornis; Amyot et Serville, 1843: 291; Stål, 1876: 134; Handlirsch, 1897: 208, Taf. VI, Fig. 6; Kormilev & van Doesburg, 1986: 123, figs 10, 11 (first description of the male); Froeschner & Kormilev, 1989: 38 (list, key to species as *Oxythyreus cylindricornis*); van Doesburg, 2004: 149, 155 (list).

Material.— Holotype of *Oxythyreus cylindricornis*, ♀ (MNHN), labelled (fig. 14): Type/ ♀ / MUS. PARIS PATRIA INC./ *cylindricornis* type Westw. det. Handlirsch 1897/ *macrocephalus dimidiatus* Lat/ *OXYTHYREUS* Amyot *cylindricornis* Westw. amyot det. / *Oxythyreus cylindricornis* type/. 1 ♂ (NMSA, ♂ 1), South Africa: Natal, Cathedral Peak, Arensig Mt., Swept in Sourveld, 11.i.[19]84, P.E. Reavell/ 1465 m/ *Oxythyreus cylindricornis* det Kormilev, 1986. [Drakensberg Area]; 2 ♂♂ (NMSA, ♂2&3), Cathedral Peak, 14-16.xii.1985/ *Oxythreus cylindricus* det. P. Reavell/ NMSA HEM 013004 and 013005.

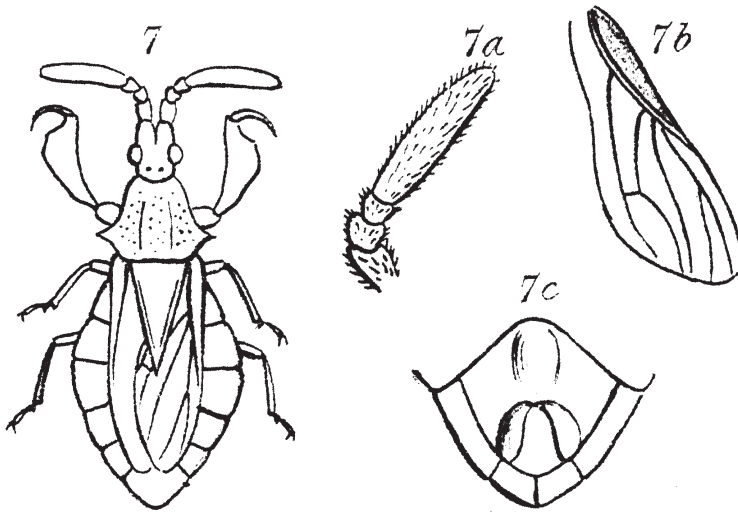
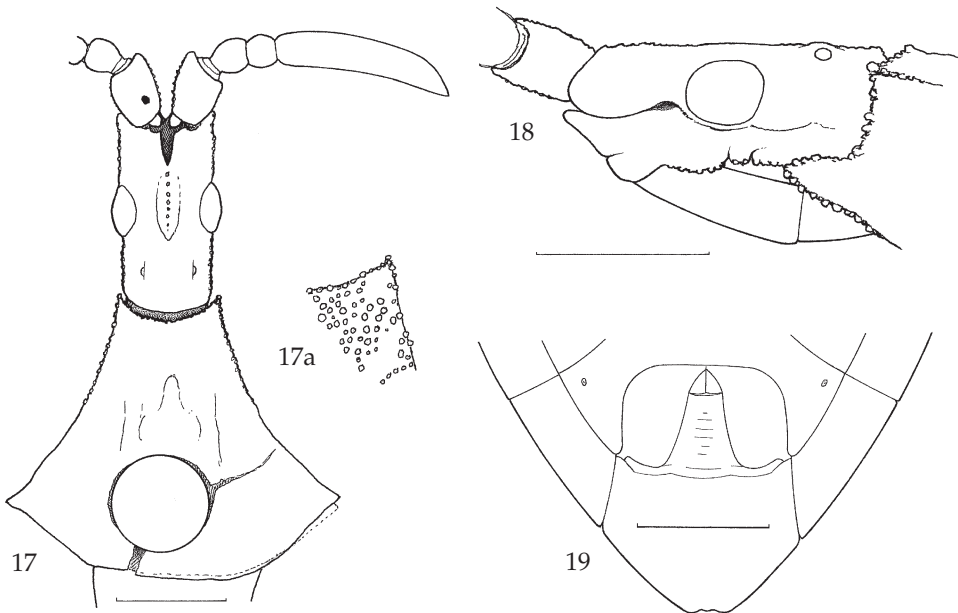


Fig. 16, *Oxythyreus cylindricornis* Westwood, ♀ holotype, enlarged facsimile of original figures by Westwood, 1841a, Tab. 2, figs 7-7c. 7, habitus, dorsal aspect, 7a, antenna, 7b, right fore wing, 7c, extremity of the female abdomen, ventral aspect.

The female holotype of *Oxythyreus cylindricornis* Westwood, 1841, from the Paris museum was examined. The original description by Westwood is rather brief, but Handlirsch (1897: 208, Taf. VI, Fig. 6) gave a good redescription and a fine figure of the specimen. We describe and figure here only some additional details. Drawings are given of: upper and lateral aspect of head, right antenna and pronotum (figs 17, 18) and ventral aspect of the terminalia (fig. 19). The specimen is considerably mutilated and has been preserved on two pins (fig. 13). The first pin bears the pinned body without the abdomen on a card point. Besides the absence of the abdomen, from the wings only the damaged right fore wing and the right hind wing are intact, left fore wing is missing, the left hind wing, missing its basal part, is glued upside down on the card point; antennae and rostrum are completely intact; further are missing: tarsus of the right middle leg and the right hind leg. The second pin bears the abdomen and the right hind leg (without tarsus) glued on a card point.

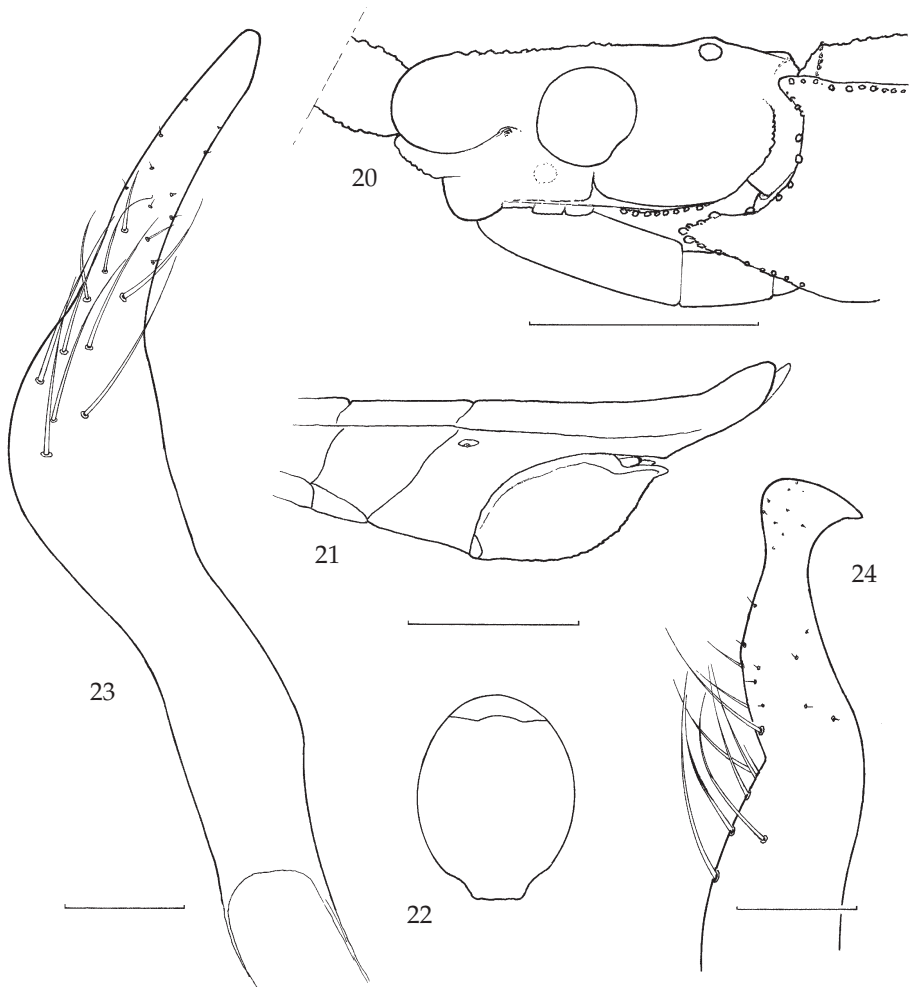
The figures given by Westwood (1841a: pl. 2, figs 7-7c) are here reproduced facsimile in fig. 16. In fig. 7 of this plate the general habitus is well presented. Fig. 7a gives a good outline of the antennal parts, but there is not such setation; instead, these parts are sprinkled with small granulation while only the apical fifth of the fourth segment is set with very fine, short adpressed black setae. In fig. 7 and 7b: the venation of the fore wing is badly presented. From the right fore wing of the type specimen only the anterior (costal!) half is present, but the still extant part of the corium resembles highly those of the fore wings of the males and the subspecies described below. Colour of the specimen is overall light dirty beige; evidently all colours are faded away.



Figs 17-19, *Oxythyreus cylindricornis* Westwood, ♀ holotype. 17, head and pronotum, dorsal aspect, 17a, right anterior corner of pronotum, enlarged to show the distribution of the granulation; 18, head, lateral aspect. 19, terminalia, ventral aspect. The bars represent 1 mm.

Measurements (in mm).— l/head, 1.8, w/head before and behind eyes, 0.84, through eyes, 0.95, synthlipsis, 0.53, width over ocelli, 0.55, synthlipsis of ocelli, 0.44, diameter of ocelli, 0.10-0.12; l/pron, 2.3-2.5, w/pron, 2.8; l/scut, 2.6; w/scut, 1.45; l/fore femur, 2.0; l/abd, 5.3, in median, 4.8; w/abd, 4.1; l/r 1, 1.0; w/r 1, 0.34; l/ant 1, 0.67; ant 2, 0.34; ant 3, 0.29; ant 4, 1.6.

Notes.— The fact that the second label reads: "*macrocephalus dimidiatus* Lat" in Latreille's handwriting, indicates that he had already seen the specimen and even named it, although it seems that the description and this name never has been published. The name is also mentioned by Latreille (fig. 15) in an undated, written catalogue of the Paris collection titled: "Catalogue des Crustacés des Arachnides et des Insectes exposés dans les galeries du Muséum d'histoire naturelle de Paris. par P.A. Latreille": "4.



Figs 20-24, *Oxythyreus cylindricornis*, ♂ from Natal. 20, head, lateral aspect; 21, end of abdomen, lateral aspect; 22, pygophore, ventral aspect; 23, right paramere, dorsal aspect; 24, idem, apical part, ventral aspect.

macrocephalus dimidiatus Lat. près du *syrtis crassimanus* de Fab.” How the specimen came into the Paris collection is unknown. Westwood (1841: 27) states that he has seen the specimen “in the collection of the Jardin des Plantes”. Perhaps a clue could be found from the peculiar way in which the specimen was pinned. This was done with a cut off end of an exceptionally thick needle (0.86 mm!, see fig. 13) through the pronotum and pinned on a card point, carried by a second pin. It even seems that the (hot) pin was burned through the pronotum, considering the relative slight damage to the pronotum and the black discolouration (carbon?) of the integumentum in contact with the pin. Perhaps other examples of this peculiar way of preparing could be recognized in old collections, possibly giving an indication to its original collector. The use of hot needles in entomology was not uncommon, see Ver-Huell, 1842: 50 and Wilkinson, 1966: 143, 149, in which a French process for killing and preserving insects is quoted *in extenso*.

The damage of the wings could be attributed to Handlirsch, 1897, as he described the hind wing (p. 208).

The length of the specimen is given by Westwood as being 5½ lin. If a foot is 0.3047 m, a line is 1/144 foot, = 2.12 mm, length of the ht should have been 11.66 mm which cannot be true; if we added l/head, 1.8 + l/pron, 2.3 + l/abd, 5.3 + not visible part between abdomen and posterior margin of pronotum, 0.25 (measured in subspecies), we find for the total length 9.65. Moreover, we compared the lengths of six different parts of the holotype of *cylindricornis* with the mean lengths of similar parts of the two specimens of the subsp. *schuhi*, viz. l/pr, w/pr, l/sc, l/ab, w/ab, l/ant4, and found the differences in lengths of the parts: 1.15, 1.1, 1.1, 1.06, 1.1, 1.06, mean, 1.11, or 1/0.9. The length of the type could have been 0.9x the lengths of *schuhi*, so between 9.3 and 10 mm, mean 9.65 mm. If we divide this by line = 2.12 mm, we got 4½. Conclusion: probably, Westwood made a mistake and wrote 5½ lin. instead of 4½ lin.

The attributed male was described and figured after a specimen from Natal, Drakensberg Area, Cathedral Peak (Kormilev & van Doesburg, 1986), from the collection of the Natal Museum. By courtesy of Dr Mike Mostovski, we were given the opportunity to study all three male specimens present in the collection, all from the Cathedral Peak, and highly identical, showing only minor local colour variations. The base and central part of the scutellum varies from almost pure black to dirty white. Some additional particulars are here given and illustrated (figs 10, 20-24). The parameres of male 1 were seriously damaged.

Measurements.— ♂1, tl, 9.5; l/pron, 2.2; w/pron, 3.3; w/abd, 3.7. ♂2, tl, 9.6; l/pron, 2.2; w/pron, 3.4; w/abd, 3.7. ♂3, tl, 9.5; l/pron, 2.3; w/pron, 3.4; w/abd, 3.7.

Oxythyreus cylindricornis schuhi subsp. nov.
(figs 11, 27, 29-32, 33.3)

Material.— Holotype, ♀ (AMNH) (fig. 27), S Africa: Cape Prov. Grootvadersbosch For. Res. [forest reserve] 14 mi [=22.5 km] N Heidelberg, 5.ii.1968, T. Schuh, J.A. & S. Slater, M. Sweet. Donation from J.A. Slater Collection. Paratype, ♀ (RMNH), same data as holotype.

Etymology.— This subspecies is named after Dr R.T. Schuh in honour of his important entomological contributions.



Fig. 25. *Oxythyreus slateri* spec. nov., ♂ holotype from Cape Prov., Hogsback; length 10 mm.



Fig. 26. *Oxythyreus cylindricornis* Westwood, ♂ from Natal; length 9.6 mm.



Fig. 27. *Oxythyreus cylindricornis schuhi* subsp. nov., ♀, holotype; length 10.25 mm.

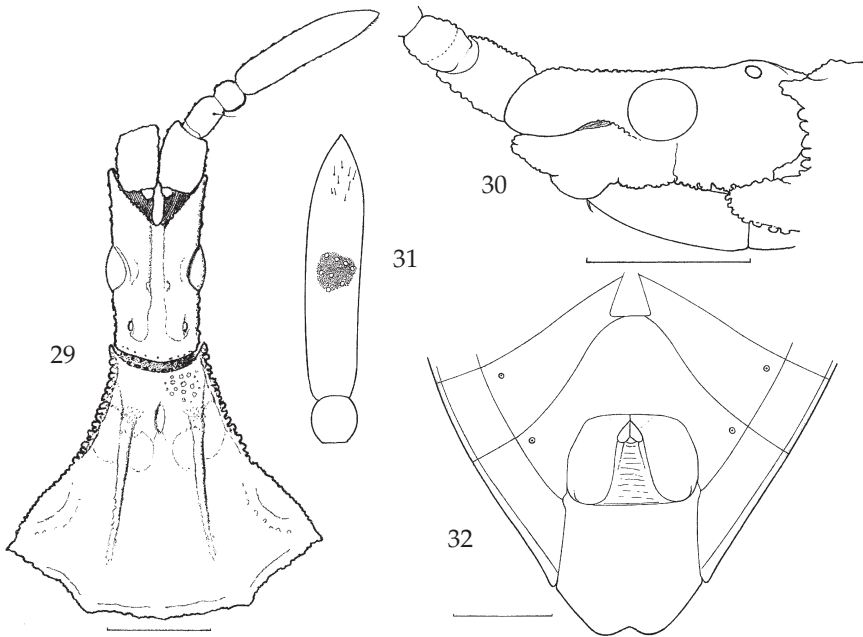


Fig. 28. *Oxythyreus ruckesi* Kormilev, 1962, ♂ holotype, length 12.2 mm.

Female.— Length 10.25-10.8 mm, closely related to *O. cylindricornis*; differs mainly by the size, form of the head, pronotum, scutellum; colour brown with white scutellum and pale yellow abdomen, ventral aspect and legs.

Head (figs 29, 30).— Twice as long as broad, anterior part a little broader than posterior part, eyes flatly curved, in middle of sides of head, synthlipsis of eyes longer than that of ocelli (5:4); dorsal aspect light brown, scattered with small granuli, sides a little darker, the small raised wall medially of each ocelli red; genal lobes blackish brown, anterior edge narrowly black; sides of head granulate, ventrally edged and set with a row of white granuli; anterior parts of head including first antennal segment as in *slateri*; second segment longer than third which is as long as wide, last antennal segment (fig. 31) longer than the first three together (3:4), heavily built, slightly club shaped, blackish brown with a light reddish tapering apex, dark part chagreened and set with many flat brown granules, light part more smooth, with short stiff black setae; rostrum heavy, first segment 2.5 times longer than wide (0.4 mm) yellowish white.

Thorax.— Pronotum (fig. 29) broader than long (7:6), anterior edge deeply concave, anterior angles acute by granules and anteriorly directed, sides diverging backwards, slightly concave and lowered in middle part, last traject to the lateral angles faintly convexly curved, lateral angles about right angled, postero-lateral margin first faintly rounded then slightly excavated to the posterior angles which are rounded and set with some granules; posterior border smooth, slightly convex; anterior and lateral borders granu-



Figs 29-32. *Oxythyreus cylindricornis schuhi* subsp. nov., ♀ holotype. 29, head and pronotum, dorsal aspect; 30, head, lateral aspect; 31, left third and fourth antennal segments, dorsal aspect; 32, abdominal terminalia, ventral aspect. Bars represent 1 mm.

late, submarginal sulcate; anterior part convex, indistinctly medially longitudinally sulcate with a pit just behind middle; surface smooth, scattered with small granuli, reddish; pronotal carinae rather robust, slightly divergent, evanescent at middle of each convex part of posterior half of pronotum, divided by a longitudinal sulcus; posterior part strongly and roughly punctured, brown, blackish in the punctures and near the lateral angles; sides: pleuron reddish, epicoxal lobes white, anterior prosternal prolonged and tapering into a tip surrounded by granuli; posterior part with the same sculpturing as the upper side; mesosternum long, medially longitudinally keeled, anteriorly inflated.

Scutellum.— Two and a half times longer than wide at base, triangular, sharply pointed, reaching middle of fifth abdominal segment, sides thickly beaded (0.19 mm) being thinner towards apex and faintly serrate, near base with a central elevation, very finely keeled along midline, surface densely punctate, colour including the margins white.

Wings.— Hemelytrae as in *O. slateri* but broader, more reddish.

Legs.— Femora of fore legs (fig. 11) are broader than in the nominal form.

Abdomen.— Oval, longer than wide, ratio 4:3, widest at fourth segment, tergites rose-coloured, anteriorly darkened, middle parts of sternites tinged reddish, apical segment red mottled with blackish patches, median narrow band yellow; laterotergites broad, remotely strewn with fine granules, lateral margins narrow, densely granulate, between the segments with small indentations, boundaries delicate, posterior tips of seventh laterotergites red; last segment (fig. 32) large, flat, centrally indistinctly longitudinally carinate, apically shallowly excavated; eighth gonocoxites large, oval, obliquely wrinkled and remotely granulate, anterior third part smooth, narrowed and inflated at end and touching each other; spiraculæ VIII could not be located; ninth gonocoxites small, smooth, strongly inflated; colour: pale yellow,

Measurements.— Holotype ♀ (AMNH), tl, 10.25; l/w, 6.4; l/abd, 5.9; l/scut, 2.86; l/pron, 2.54; l/head (side), 1.67; w/pron, 3.0; w/scut, 1.55; w/w, 2.64; fore femur, 2.0; w/abd, 4.5; w/head, 0.84; over eyes, 0.95; l/ant 1, 0.72; l/ant 2, 0.32; l/ant 3, 0.24; l/ant 4, 1.6;

Paratype ♀ (RMNH), tl, 10.8; l/head, 1.75; l/abd, 6.2; l/scut, 2.94; l/pron, 2.65; w/head, 0.85; synthl, 0.62; synthl/oc, 0.48; w/pron, 3.1; w/scut, 1.7; w/shoulder, 2.7; w/abd, 4.77; l/ant 1, 0.74; ant 2, 0.36; ant 3, 0.24; ant 4, 1.72.

Notes.— Males unknown; the differences with the nominal form are: habitus is larger, ocelli relatively close together, see further the key.

Grootvadersbosch National Reserve, 250 HA, is situated in the Langeberg, 22 km NW from Heidelberg.

Oxythyreus ruckesi Kormilev, 1962
(fig. 28)

Oxythyreus ruckesi Kormilev, 1962: 3, figs 1-7; Froeschner & Kormilev, 1989: 38 (list, key to species as *Oxythyreus ruckesi*; van Doesburg, 2004: 149, 155, 156, fig. 7, "6".

Material.— 1 ♂ holotype (AMNH), South Africa (De Vlyder). Further locality not known.

Notes.— We received the privilege to study the type specimen of *Oxythyreus ruckesi* from the AMNH. Its pygophore had been replaced neatly by Kormilev, but unfortunately by a (water) insoluble glue, something resembling nail polish. It is visible that

one of the parameres had been removed from the pygophore. The depiction of the paramere in Kormilev’s paper is rather simple; further it is obvious that he put the paramere afterwards on a small point under the specimen; however, we found that only some remains of glue are left. As we are very reluctant to (mal)treat the specimen with solvents, we abandoned the attempt to release the pygophore. Fortunately there are sufficient characteristics left over to distinguish this species from the other species.

The female is unknown.

Horn & Kahle (1936: 292) mention about G. De Vylder: “Ausbeuten aus Damara- und Namaqua-Land 1876 u. 1909 an Naturhist. Mus., Stockholm.” Damara, Central African Republic: 4°57’N-18°42’E; Namacua, Mozambique: 15°59’S-36°50’E.

Key to the species of the genus *Oxythyreus*

- 1. Pronotum longer than wide, posterior angles rounded *O. slateri* spec. nov.
- Pronotum wider than long, posterior angles sharply produced 2
- 2. Abdomen cordate, its apex medially deeply excavated, length 12 mm *O. ruckesi* Kormilev
- Abdomen ovate, its apex at most shallowly concave, at most 11 mm; (*O. cylindricornis* Westwood) 3
- 3. Total length less than 10 mm, granulation on pronotum fine (0.04-0.05 mm), lateral margins of fore part finely serrate by the granulation, posterior part densely and finely punctate *O. cylindricornis cylindricornis* Westwood
- Total length 10-11 mm, granulation on pronotum bigger (0.06-0.08 mm), lateral margins of fore part coarsely serrate by the granulation, posterior part less densely and deeply punctate *O. cylindricornis schuhi* subspec. nov.

List of localities

Cathedral Peak, Drakensberge, Kwazulu-Natal, 1465 m	28°55’S-29°08’E
Heidelberg, Western Cape Prov., S. Africa	34°05’S-20°57’E
22.5 km N of Heidelberg	33°53’S-20°57’E
Hogsback, Eastern Cape Prov., S. Africa	32°34’S-26°56’E

Map

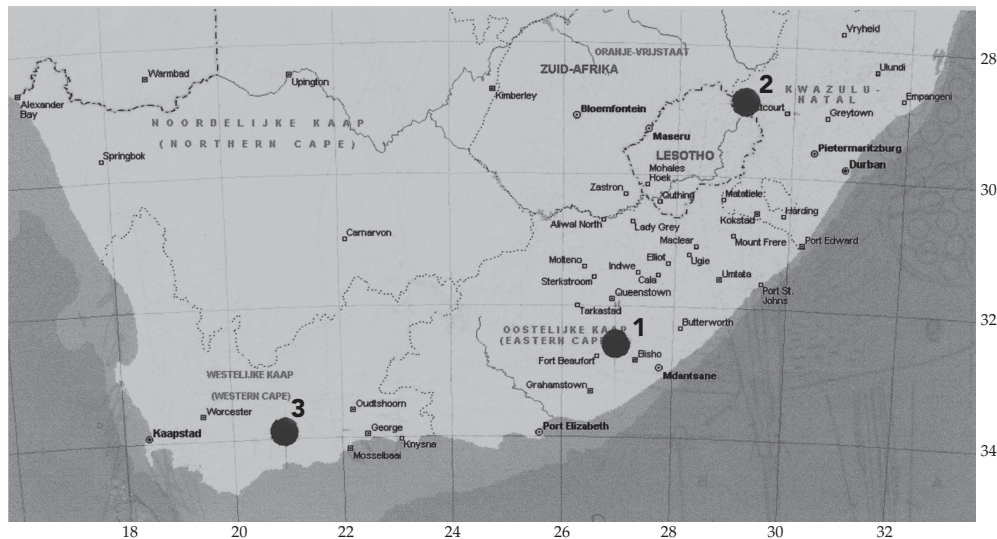


Fig. 33. Map of South Africa showing the collecting localities of: 1. *Oxythyreus slateri* spec. nov., (Cape Prov., Hogsback); 2. *O. cylindricornis* Westwood, (Drakensberge, Natal); 3. *O. cylindricornis schuhi* sub-spec. nov. (22.5 km N of Heidelberg).

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List of depositories

- AMGS Albany Museum, Grahamstown, Eastern Cape, South Africa.
- AMNH America Museum of Natural History, New York, U.S.A.
- MNHN Muséum National d'Histoire Naturelle, Paris, France.
- NEV Nederlandse Entomologische Vereniging, Amsterdam.
- NMSA Natal Museum, Pietermaritzburg, Kwazulu-Natal, South Africa.
- RMNH Nationaal Natuurhistorisch Museum (Naturalis), Leiden, Netherlands.
- SAMC South African Museum, Cape Town, Western Cape, South Africa.
- TMSA Transvaal Museum, Pretoria, South Africa.
- UPSA University of Pretoria, Department of Zoology and Entomology, South Africa.
- ZMAN Zoologisch Museum, Universiteit van Amsterdam, Netherlands.

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