

Revision of the genus *Pomphus* MARSHALL, 1919
(Coleoptera: Curculionidae: Brachyderinae)

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ABSTRACT. *P. denticollis* MARSHALL, 1919 and *P. kirschi* (FAUST, 1885) are redescribed and figured; lectotypes are designated and identification key is provided. *P. stappersi* (HUSTACHE, 1924) is transferred to the genus *Bradybamon* MARSHALL, 1919, and *P. acuticollis* MARSHALL, 1923 (with designation of lectotype) - to *Protostrophus* MARSHALL, 1919. A new name *Protostrophus bernardi* is proposed for *P. acuticollis* (MARSHALL, 1923), not *P. acuticollis* (MARSHALL, 1906).

Key words: Entomology, Coleoptera, Curculionidae, taxonomy, revision, Afrotropical Region.

INTRODUCTION

The genus *Pomphus* was erected by MARSHALL (1919), who designated *Strophosomus kirschi* FAUST, 1885 (terra typica: Tanzania, Nyassa lake) as its type species. In the same paper MARSHALL described another species, *P. denticollis* (terra typica: Beira, Portuguese E Africa), and several years later (MARSHALL, 1923) one more species, *P. acuticollis* (terra typica: Incanine and Inyaka, Delagoa Bay, also in Portuguese E Africa). HUSTACHE (1924) described *Strophosomus stappersi* from Belgian Congo, and EMDEN and EMDEN (1939) transferred it to the genus *Pomphus* Mshl. An analysis of characters of the above mentioned taxa led me to a conclusion that the genus *Pomphus* in the sense adopted by those authors is polyphyletic. Besides *P. kirschi* (FST.), the type species, the genus should include only *P. denticollis* MSHL., whereas *P. stappersi* (HUST.) should be transferred to the genus *Bradybamon* MARSHALL, 1939 (*Blosyrini*), and *P. acuticollis* MSHL. - to the genus *Protostrophus* MARSHALL, 1919 (*Cneorrhinini*).

The material examined is deposited in the following collections (curator names in parentheses):

BMNH - British Museum Natural History, London, England (C. H. C. LYAL).
 MRAC - Musée Royal d'Afrique Centrale, Tervuren, Belgium (H. M. ANDRÉ);
 SMTD - Staatliche Museum für Tierkunde Dresden, Germany (R. KRAUSE);
 ZMHU - Zoologisches Museum, Humboldt Universität, Germany (F. HIEKE);

Pomphus MARSHALL, 1919

Pomphus MARSHALL, 1919: 2, 7-8; EMDEN, 1936: 220; 1944: 567; EMDEN and EMDEN, 1939: 249.

Type species: *Strophosomus kirschi* FAUST, 1885 (by original designation)

Body length 3.60-4.90 mm, width 2.17-2.97 mm; stout, oval or pear-shaped (fig. 15), delicately convex, brown or brown-black, covered with tightly adhering scales forming a more or less distinct pattern on elytra and pronotum, and with erect scales (fig. 8, 9). Rostrum separated from the head by a distinct, bent transverse groove, with paramedian furrows and a short median costa; frons with a median furrow and paramedian furrows (figs 1, 16). Eyes strongly protruding (figs 1, 15, 16). Antennae thin, short (figs 12, 20). Pronotum broad, its base longer than the greatest pronotum length. Pronotum sometimes constricted behind its anterior margin or anterior to the base, anterior and posterior angles produced laterally or not produced. Elytra oval, rows narrow with fine punctures, intervals somewhat convex, with erect scales. Corbel enclosed, tarsi rather long, narrow (figs 3, 4, 21, 22), claws connate.

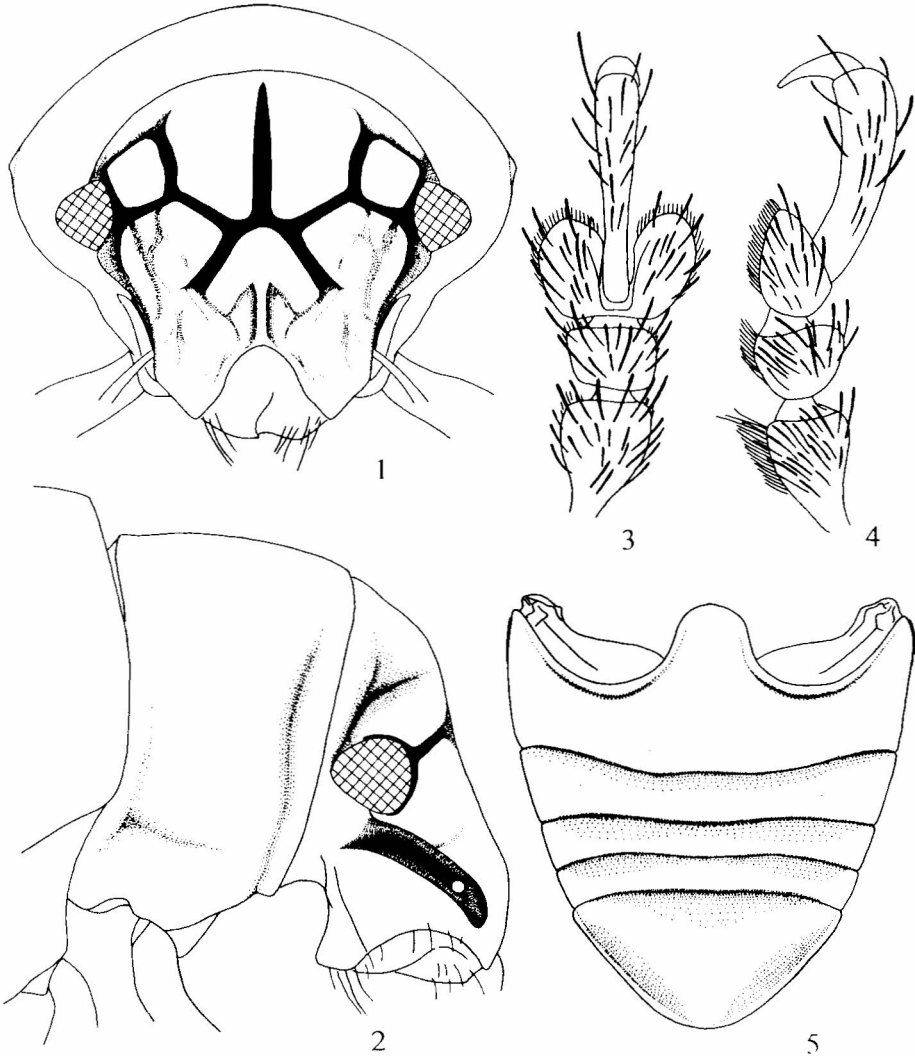
Species of the genus *Pomphus* MSHL. (*P. kirschi* and *P. denticollis*) are the closest to the members of the genus *Bradybamon* MSHL. (*Blosyrini* sensu EMDEN and EMDEN, 1939), from which they differ in the absence of spines on the tibiae (in all species of *Bradybamon* apices of tibiae have distinct spines), strongly convex eyes (in *Bradybamon* delicately convex), rostrum distinctly narrowed (in *Bradybamon* almost parallelsided).

KEY FOR SPECIES IDENTIFICATION

1. Pronotum strongly constricted behind the anterior margin and anterior to the base; its anterior and posterior angles produced laterally (figs 14, 15). Paramedian furrow on the rostrum reaches almost the rostrum apex (fig. 16).
 *denticollis* MSHL.
- , Pronotum delicately constricted behind its anterior margin, no trace of constriction at the base; anterior angles delicately laterally produced, posterior angles

rounded (fig. 13). Paramedian furrow on the rostrum does not reach half rostrum length (fig. 1).

..... *kirschi* (Fst.)



1-5. *Pomphus kirschi*: 1, 2 - head, 3 - fore tarsus in dorsal view, 4 - fore tarsus in lateral view, 5 - abdominal sternites

***Pomphus kirschi* (FAUST, 1885)**

(Figs 1-13)

Strophosomus (Neliocarus) Kirschi FAUST, 1885: 89-90.*Pomphus kirschi*: MARSHALL, 1919: 8; EMDEN and EMDEN, 1939: 249.

DIAGNOSIS

Similar to *P. denticollis* MSHL. from which it differs in the strong constriction of pronotum behind the anterior margin and anterior to the base, and in the rounded posterior angles of pronotum (in *P. denticollis* posterior angles produced laterally, figs 13, 14), in the shorter paramedian furrow on the rostrum (not reaching half rostrum length; in *P. denticollis* reaching nearly to the apex (figs 1, 16), longer elytra, slimmer legs and less protruding eyes.

DESCRIPTION

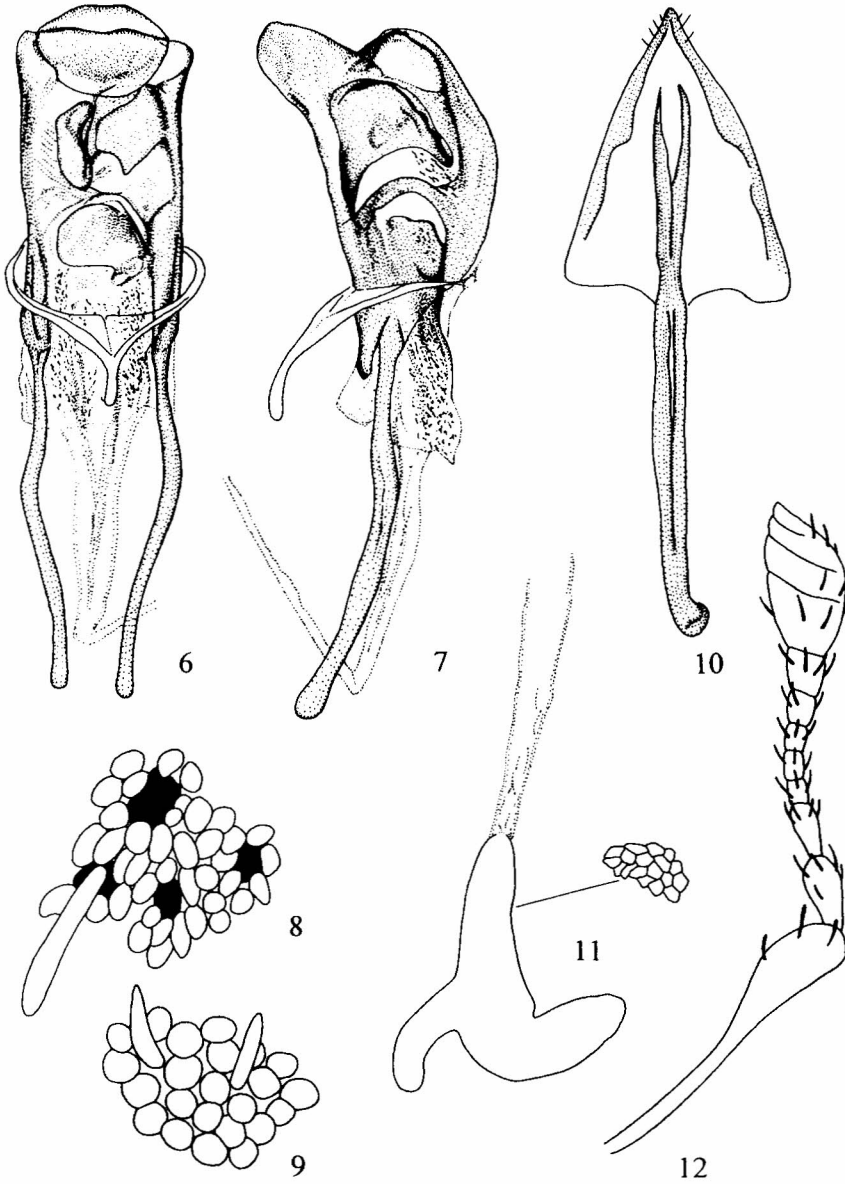
Body length (m): 3.60-3.95 mm, width (m): 2.17-2.20 mm.

Body length (f): 4.10-4.40 mm, width (f): 2.40-2.70 mm.

Body stout, oval, brown, densely covered with adhering and erect scales. Adhering scales on elytra grey-yellow, drop-shaped, rounded at the base and tapered at the apex, tile-like overlapping. On pronotum and head scales of similar shape but somewhat broader, on the apex of rostrum becoming sparser, finer, almost round, not touching each other. Tibiae and femora with adhering scales like on elytra; erect scales on head, pronotum and elytral intervals in regular rows, lighter than adhering scales (on elytra light on light and dark on dark background), straight or somewhat bent, tapered on the tip, long, on elytra 6-7x, on pronotum and head 4x longer than the adhering scales (figs 8, 9).

Head separated from rostrum by an irregular, narrow and deep transverse groove. The furrow in its middle on a short distance perpendicular to the long body axis, further on sides bent posterad, anterior to the eyes again perpendicular to the long axis. In midline of rostrum, in its apical part, a narrow and rather low median costa. Deep, anterad divergent paramedian furrows run from the base to half length of rostrum; from half length to somewhat before the antennal base paramedian furrow is shallow, parallel to the lateral margin of rostrum. Frons nearly flat with a long, narrow and rather deep median furrow, and shallower paramedian furrows, situated closer to the inner margin of eyes than to the median furrow. Sides of head behind eyes emarginate. Rostrum narrowed anterad; strongest narrowed from the base to half length. Eyes strongly unevenly convex, lower eye margin straight. Antennal scrobe invisible in top view; in side view narrow, slightly bent (figs 1, 2).

Pronotum 1.72-1.87 times wider than long, the broadest slightly anterior to half length, on sides more or less strongly constricted, posterior margin only delicately bordered, posterior angles rounded. Anterior angles produced laterally. Anterior margin of pronotum emarginate in the middle. Pronotum delicately, longitudinally convex, with narrow median furrow (fig. 13).



6-12. *Pomphus kirschi*: 6, 7 - male genitalia, 8 - scales of elytra, 9 - scales of pronotum, 10 - sternite VIII, female, 11 - spermatheca, 12 - antenna

Elytra elongatedly oval, 1.23-1.25 times longer than wide, the broadest in middle, poorly convex. Base of elytra constricted, anterior angles poorly obliquely produced anterad. Elytral rows irregularly punctured, as a rule in one row two lines of punctures; not concave, distances between punctures in rows equal to 1-2 puncture diameter, distances between two lines of punctures in a row equal to c. 0.6-0.7 puncture diameter. Punctures at the base of elytra strongly concave. First interval from the base strongly convex.

No scutellum.

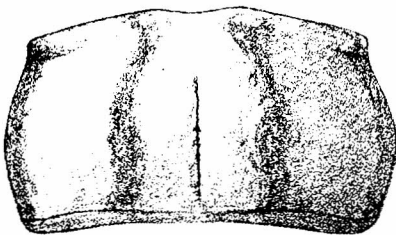
Legs not very long, slim. Fore tibiae somewhat bent inwards. Apices of tibiae truncate outwards, inwards broadened and produced into a fine spine. Tarsi as in figs. 3, 4.

Genitalia as in figs 6, 7, 10, 11.

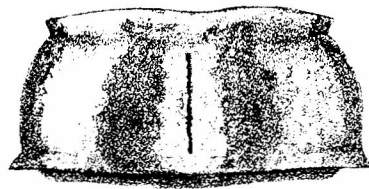
MATERIAL EXAMINED

Lectotype (present designation): "golden square"; "Nyassa S. KIRSCH" [handwritten black ink, white background]; "Coll. J. FAUST Ankauf 1900" [black print on blue background]; "Typus" [black print on red background]; "Staatl. Museum für Tierkunde Dresden" [black print on white background]; Lectotypus, *Strophosomus (Neliocarus) Kirschi* FST. 1885, des. J. KANIA 94" [my label]; "*Pomphus kirschi* (FST., 1885) det. J. KANIA 94" [female, genitalia in glycerin], (SMTD).

Paralectotypes: 2 paralectotypes with original labels as in holotype, plus my labels [one female, genitalia in glycerin, another - sex not determined]; 2 paralectotypes "Nyassa S. KIRSCH" [both handwritten by me, black ink on white background]; "Paralectotype, *Strophosomus (Neliocarus) Kirschi* FST., 1885, des. J. KANIA 94" [my label]; "*Pomphus kirschi* (FST., 1885) det. J. KANIA 94; [male and female, genitalia in glycerin], (SMTD). "Nyassa" [handwritten, black ink on white background]; "*Neliocarus, Kirschi* FST." [as above]; "75423" [black print on white background]; "Type" [black print on white background]; "*Pomphus, Kirschi* (FST.), E. HAAF det., 1961" [name and "61" handwritten, blue ink, the rest black print on white background], 4 (ZMHU).



13

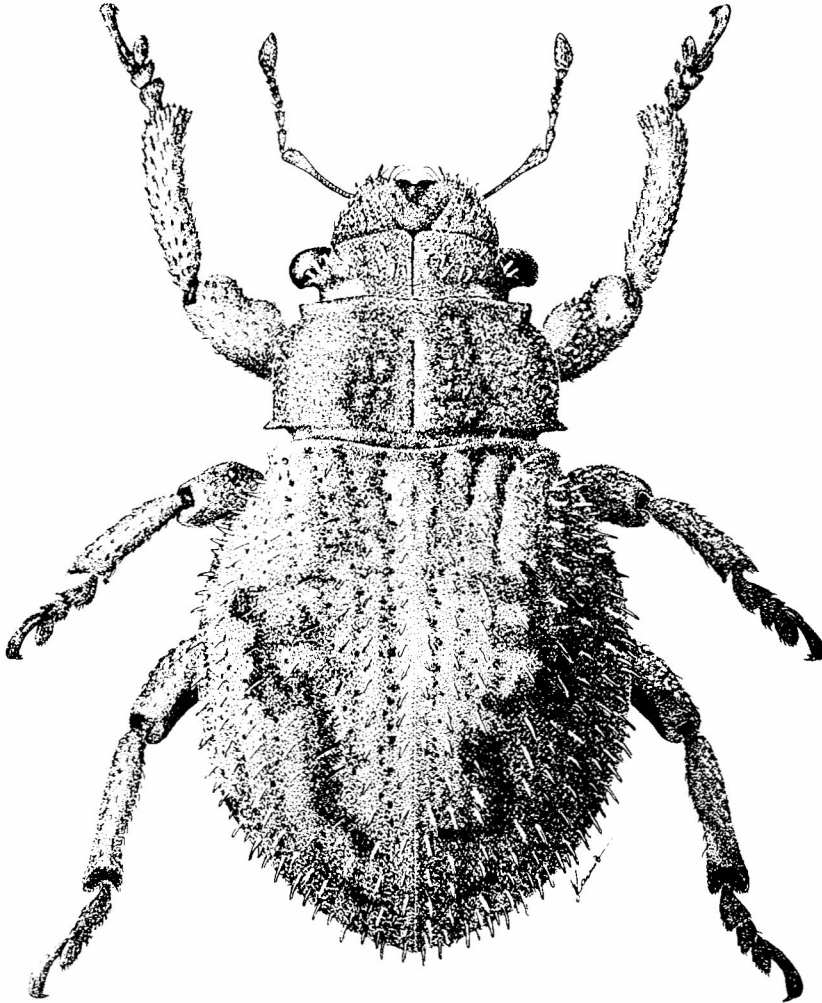


14

13. *Pomphus kirschi*; 14. *Pomphus denticollis*: 13, 14 - pronotum

OTHER MATERIAL

Tanzania: Nyassa, 2487, 15, (SMTD); Nyassa, 2487, *Neliocarus Kirschii* [sic] FAUST, 4, (SMTD); Nyassa, 4850, 1, (SMTD); Nyassa, 24, (SMTD); Nyassa, *Pomphus Kirschi*, 4, (SMTD); Nyassa - S., 1, (SMTD); 2487, 5, (SMTD); 2487, Nyassa 2487, *Pomphus Kirschi* FST., 1, (SMTD).



15. *Pomphus denticollis*, female

Pomphus denticollis MARSHALL, 1919

(Figs 14-22)

Pomphus denticollis MARSHALL, 1919: 8-9; EMDEN and EMDEN, 1939: 249.

DIAGNOSIS

See diagnosis of *P. kirschi* (FST.)

DESCRIPTION

Body length (f): 4.90 mm, breadth (f): 2.97 mm.

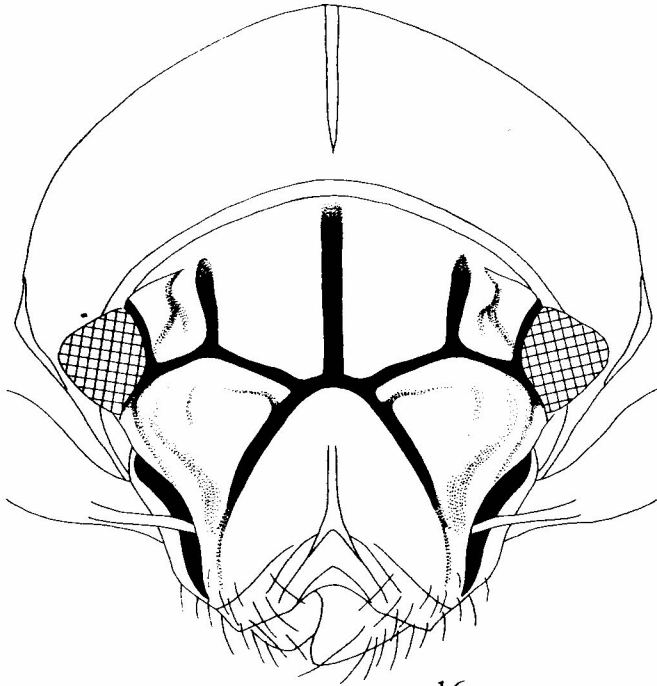
Body stout, pear-shaped (fig. 15), dark brown-black, completely covered with tightly adhering and erect scales.

Adhering scales oval, of light creamy and dark brown colour, on pronotum forming distinct streaks and on elytra a characteristic pattern. Erect scales long, 4-6 x longer than adhering scales, the longest on the elytral disc, the shortest at the apex of elytra, light on light and dark on dark background.

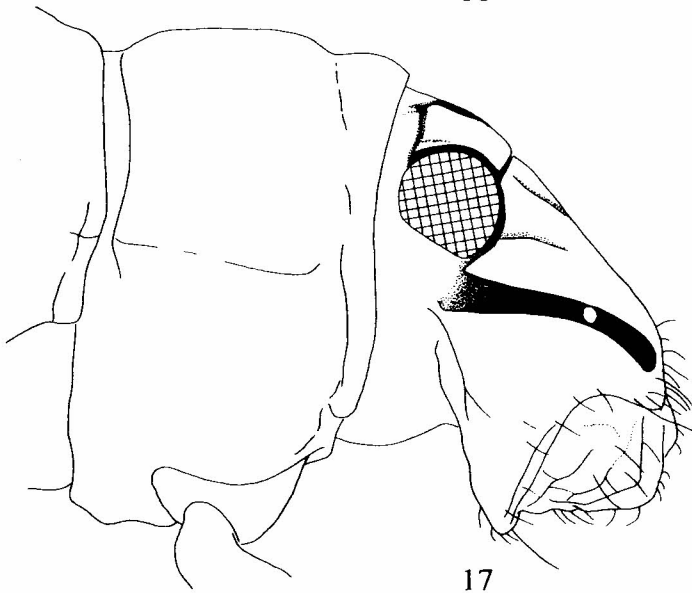
Rostrum narrowed anterad, separated from head by a distinct transverse, "bisinuate" groove, somewhat angled where it bends. Median furrow on frons runs from the transverse groove to anterior margin of pronotum. Paramedian furrow on frons, parallel to the long body axis, running from the bend of transverse groove to the point behind posterior eye margin; it separates the thickened part of frons close to inner eye margins from the rest of frons. Head strongly constricted only behind eyes. Eyes strongly, unevenly convex, lower eye margin straight. Paramedian furrow on rostrum in the shape of somewhat extended U, reaching almost the apex of rostrum. Rostrum apex with delicate median costa disappearing anterior to the transverse groove (fig. 16). Antennal scrobe between antennal bases and apex bent slightly downwards, from the base posterad straight and delicately widened (fig. 17). Antennae short, thin, scape on the top distinctly thickened. Flagellomeres with erect light scales and very sparse, fine, adhering scales (fig. 20).

Pronotum 2.02 times broader than long, the broadest at base, from the constriction to half length parallelsided, from half length to the constriction behind the anterior margin delicately rounded and narrowed. Anterior margin delicately emarginate in middle, pronotum behind anterior margin distinctly constricted, especially on sides; pronotum base bearing a distinct ledge on whole length. Anterior and posterior angles sharply produced laterally. On pronotum sides a sharp keel, running from the constriction behind the anterior margin to the constriction anterior to posterior margin, more or less at half pronotum height (figs 14, 15). Pronotal disc tuberculate to the lateral margins.

Elytra oval, rounded on sides, 1.13 times longer than wide, the broadest in half length, distinctly constricted behind the anterior margin. Anterior margin on sides sharply produced laterally (fig. 15). Punctures in rows irregular, especially on sides of elytra; elytral puncturation regular only at their apices. Punctures in rows bare, their length equal to 2-3 scale lengths. Intervals slightly convex.



16



17

16, 17. *Pomphus denticollis*: 16, 17 - head

Scutellum absent.

Legs thick, not very long, tarsi narrow (figs. 21, 22). Fore tarsi slightly bent outwards, on apices truncate outwards, inwards broadened, with erect setae. Inner margins of tibiae with black, sharp spines. Basal surface of hind tarsi with no scales, inner part of corbel covered with scales.

MATERIAL EXAMINED

Lectotype female (present designation): "Type, H. T." [black print, round white label with red border]; "Beira, A. SHEPPARD" 30. 11. 02" [black print on white background, date handwritten on the reverse]; "Port. E. Afr., 1918. 117" [handwritten on white background, locality and date separated with blue line]; "*Pomphus, denticollis*, TYPE. MSHL." [handwritten, black ink on white background], [genitalia in glycerin], (BMNH).

SPECIES EXCLUDED FROM THE GENUS *POMPHUS*

Protostrophus bernardi nom. nov.

Pomphus acuticollis MARSHALL, 1923: 531-532, not *P. acuticollis* (MARSHALL, 1906): 914-915.

ETYMOLOGY

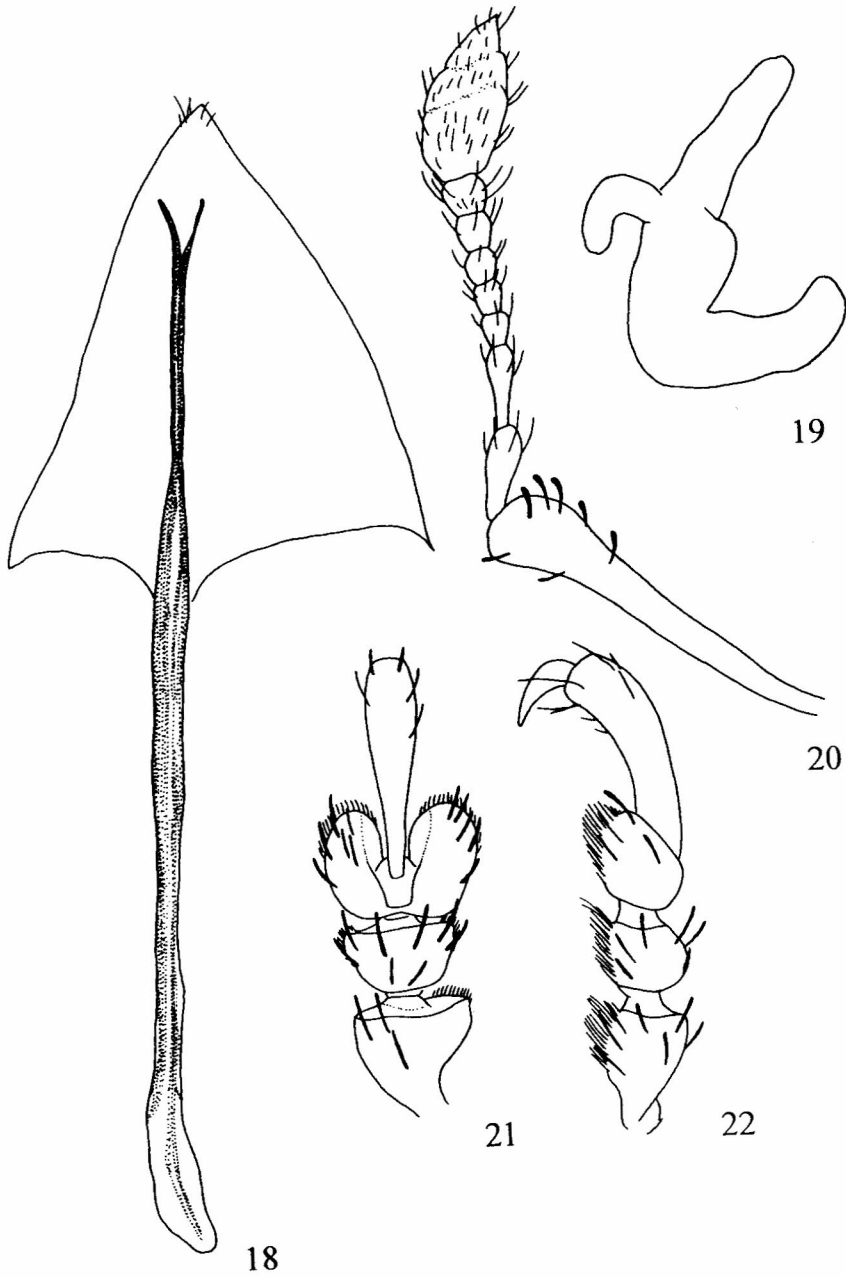
The name is dedicated to K. H. BERNARD who collected specimens of this species.

MATERIAL EXAMINED

Lectotype female (present designation): "Type" [black print, round white label with red border]; "Delagoa B., Inyaka, Oct. 1912, K. H. BERNARD" [handwritten, black ink on white background]; "S. Africa." [black print on white background, below a blue line]; "*Pomphus, acuticollis*, TYPE MSHL." [handwritten, black ink on white background]; "Pres. by, Imp. Bur. Ent., Brit. Mus., 1923-253" [black on white]; "vidit, J. KANIA" [handwritten, black ink on white background], [genitalia in glycerin], (BMNH).

REMARKS

The species is characterized by a lack of paramedian furrows on frons (like in most members of the genus *Protostrophus*), characteristically, gently bent groove separating head and rostrum (like in the remaining *Protostrophus*; in *Pomphus* the groove is distinctly bent), flattened eyes, strongly emarginate posterad (like in most *Protostrophus*) which in members of the genus *Pomphus* are strongly convex and protruding, but not emarginate posterad. Thus *Pomphus acuticollis* MARSHALL, 1923 should be transferred to the genus *Protostrophus*. Because *Strophosoma acuticollis*



18-22. *Pomphus denticollis*: 18 - sternite VIII, female, 19 - spermatheca, 20 - antenna, 21 - fore tarsus in dorsal view, 22- fore tarsus in lateral view

MARSHALL, 1906 was transferred to the genus *Protostrophus* by MARSHALL (1919), the name *Protostrophus acuticollis* (MARSHALL, 1923) becomes a junior homonym and for this reason I propose a replacement name *P. bernardi* nom. nov. *P. bernardi* is no doubt a good species, not conspecific with any of those revised by SCHALKWYK (1968, 1972). It will be redescribed in a separate paper.

***Bradybamon stappersi* (HUSTACHE) comb. nov.**

Strophosomus Stappersi HUSTACHE, 1924: 43-44

Pomphus Stappersi HUSTACHE: EMDEN and EMDEN, 1939: 249.

MATERIAL EXAMINED

Zair: Kivu: Sanghe (Ruzizi), 1949, P., 554, P. LEFÈVRE, 1m, 1f, (compared with the type), (MRAC).

REMARKS

In its morphological structure (arrangement of furrows on frons and rostrum, eye structure, antennae, presence of spines on apices on all tibiae, scale covering of the body) and genitalia the species is close to the members of the genus *Bradybamon* MARSHALL, 1919. In MRAC there is one of the two specimens (male) mentioned in the original description, labelled "Holotype", and with genitalia prepared by me. Besides this specimen, in the collection examined in MRAC there are 25 specimens identified as *Pomphus stappersi* HUST. (det.?), of which actually only a few represent this species. The second specimen of the type series is probably in HUSTACHE's collection (Museum National d' Histoire Naturelle, Paris, France). At present I am preparing a revision of the genus *Bradybamon*, and the redescription of *B. stappersi* will be included in it.

ACKNOWLEDGEMENTS

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