

On the genus *Blosyrosoma* Voss, 1962
(Coleoptera: Curculionidae: Brachyderinae)

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ABSTRACT. *Blosyrosoma longipilis* Voss, 1962 is re-described and figured. *B. punctigerum* Voss, 1962 is its synonym.

Key words: Entomology, taxonomy, revision, new synonymy, Coleoptera, Curculionidae.

INTRODUCTION

When erecting the genus *Blosyrosoma*, Voss (1962) described two species from Tanzania: *B. longipilis* from Mt. Meru, Olkokola (type species) and *B. punctigerum* from Katesh, S slope of Mt. Hanang. The latter was based on one teneral female. Examining variation in several dozen specimens from Tanzania, Kenia and Uganda reveals that *B. punctigerum* should be regarded only as a geographic form of *B. longipilis*.

I have examined material from the following institutions (curators' names in parentheses):

HNHM - Hungarian Natural History Museum, Budapest, Hungary (O. MERKL);
JK - own collection;

LU - Zoological Museum, Lund University, Lund, Sweden (R. DANIELSSON);

MRAC - Museum Royal d'Afrique Centrale, Tervuren, Belgium (H. M. ANDRÉ);

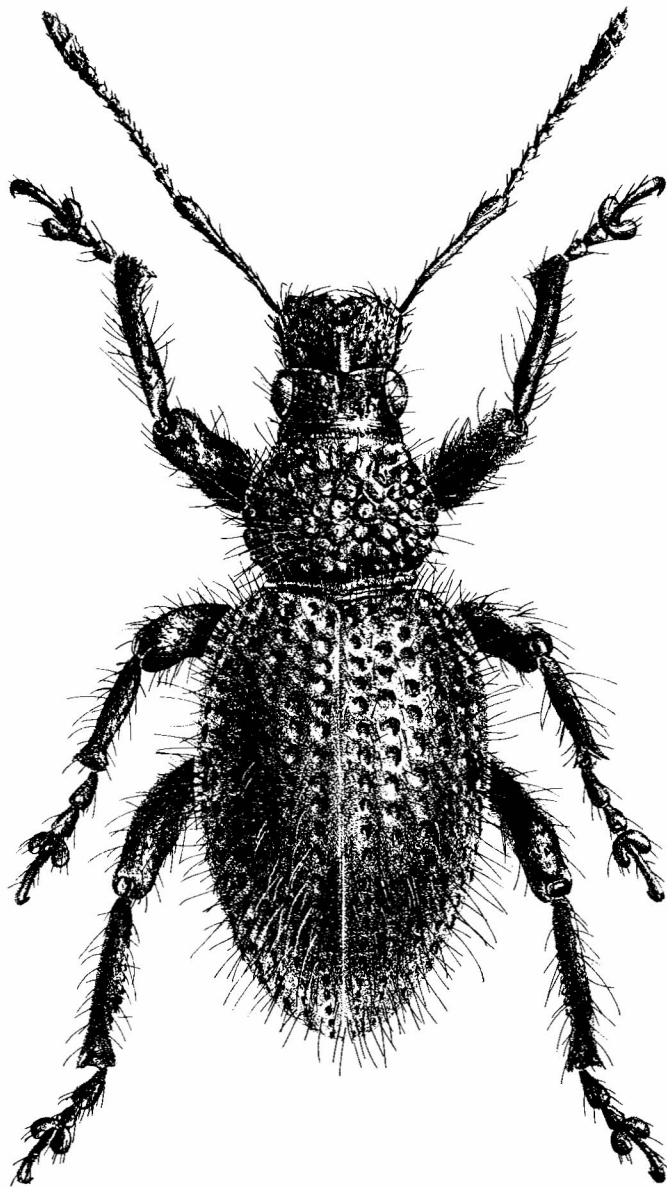
ZMC - Zoologisk Muscum, Copenhagen, Denmark (O. MARTIN);

ZMHU - Zoologisches Museum, Humboldt Universität, Berlin, Germany
(F. HIEKE).

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I am grateful to all the curators who kindly made their materials available for studies; especially to Dr. H. M. ANDRÉ and Dr. F. HIEKE for their kind help during my

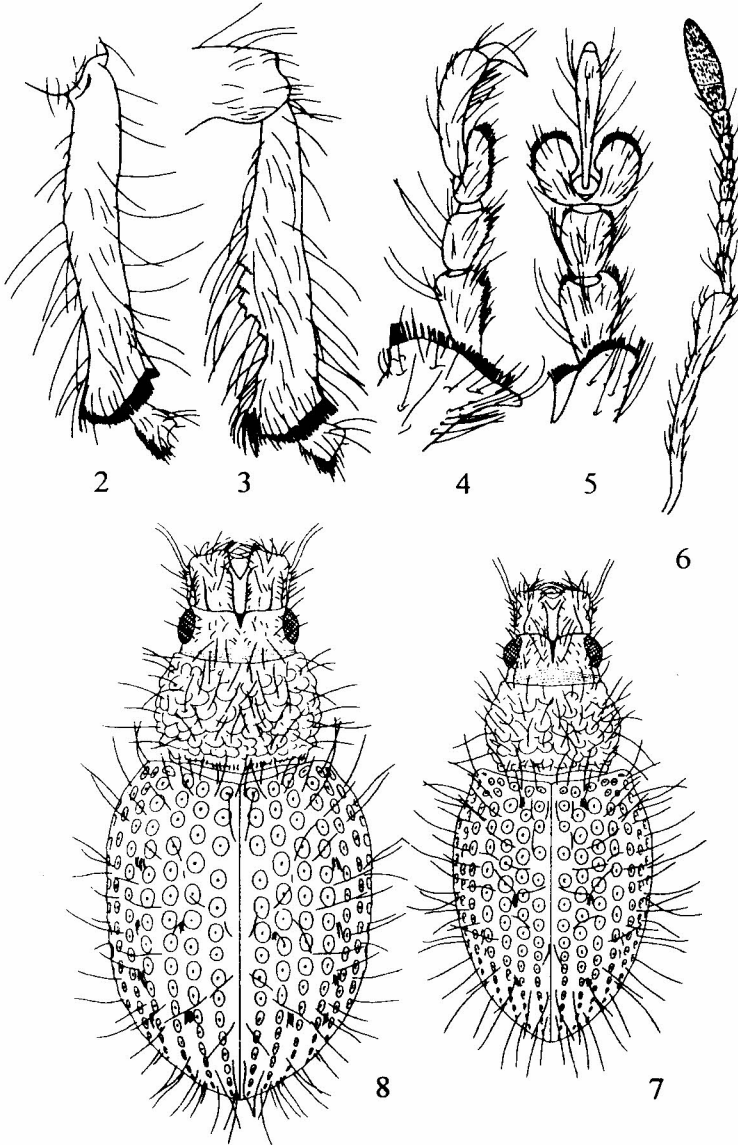
stay in Tervuren and Berlin, respectively. I am also indebted to Dr. B. M. POKRYSZKO (Natural History Museum, Wrocław) who translated this paper into English.



1. *Blosyrosoma longipilis*, male (Diani Beach)

Blosyrosoma Voss, 1962

Blosyrosoma Voss 1962: 304-305. Type species: *Blosyrosoma longipilis*, original designation.



2-8. *Blosyrosoma longipilis*: 2 - female hind tibia (Kalinzu Fst.), 3 - male hind tibia (Kampala, Muyenga), 4, 5 - fore tarsus, male (Kibateni), 6 - antenna (Kampala, Muyenga), 7, 8 - body in dorsal view: 7 - male (Arusha - Yu), 8 - female (Arusha)

Body elongatedly oval, black or brown-black, with a microsculpture and strong opalescent sheen. On entire body very long, erect white setae, and short more or less oblique setae; no adherent scales. Head separated from rostrum by a transverse groove; on rostrum median costa; on frons median furrow; below the eye an additional furrow connected with antennal scrobe (fig. 10). Antennae very long, slender, scape distinctly exceeding anterior margin of pronotum, club spindle-shaped. Scutellum absent. Sexually dimorphic: males distinctly more slender, with a deep incision on hind tibiae (figs 2, 3).

Members of the remaining genera of the tribe *Blosyrini* are characterized by a stout body, more or less covered with adherent scales; erect scales are short and present only in some species of the genera *Blosyrodes* JEKEL, 1875, *Bradybamon* MARSHALL, 1919 and *Dactylotus* SCHÖNHERR, 1847. Antennae are short, their scape not reaching anterior margin of pronotum. The presence of the additional groove below the ventral margin of eye, and sexually dimorphic characters, comparable to those in *Blosyrosoma*, in other members of the tribe are not known to me.

Considering the above characters (except those of the dorsal side of head), *Blosyrosoma* occupies an isolated position in the tribe *Blosyrini*. Suggestions of VOSS (1962) regarding the closest relationships of *Blosyrosoma* with the oriental genus *Blosyrodes* JEKEL require a revision.

Blosyrosoma longipilis Voss, 1962

Blosyrosoma longipilis Voss, 1962: 305-306, fig.6. Type locality: Tanzania, Mt. Meru, Olkokola.

Holotype: MRAC; 2 paratypes Zoological Museum of Hamburg University (see also remarks).

Blosyrosoma punctigerum Voss, 1962: 307. Type locality: Tanzania, Katesh, S slope of Mt. Hanang.

Holotype: MRAC. *Syn. n.*

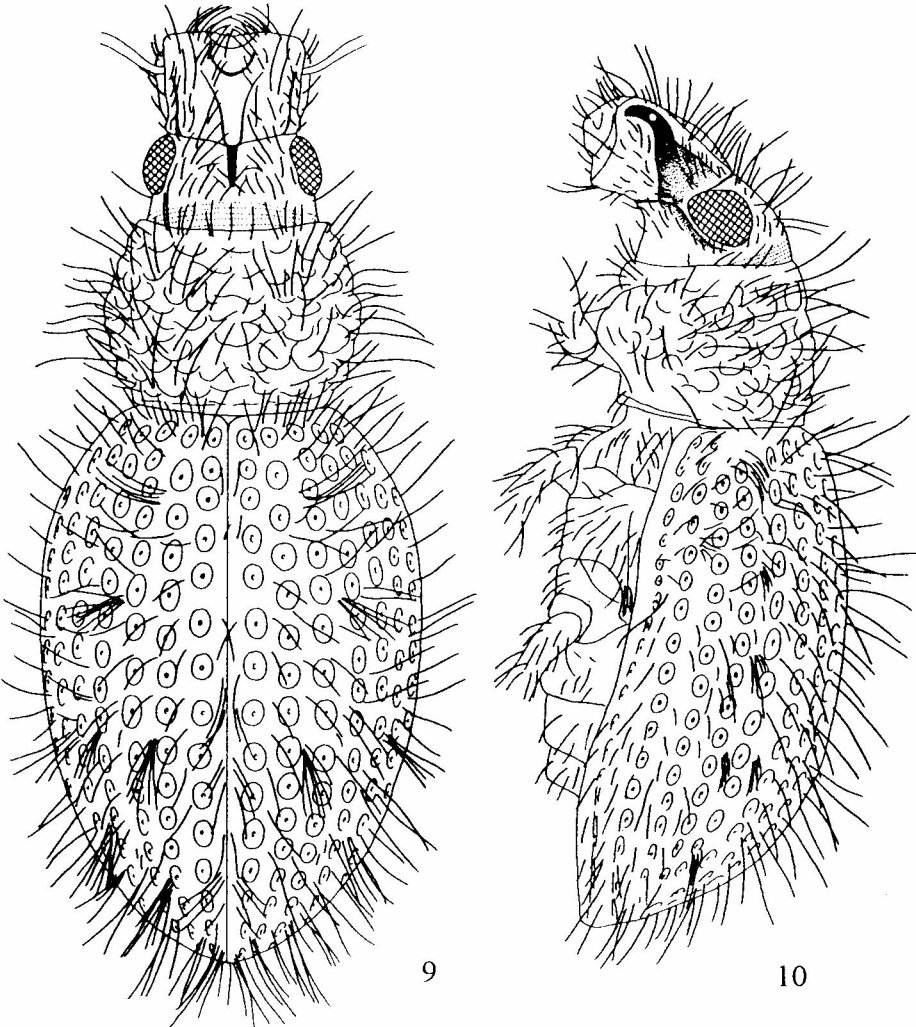
DESCRIPTION

Body length: males 4.70-6.20 mm, females 5.20-7.00 mm; breadth: males 2.25-2.75 mm, females 2.70-3.25 mm.

Body shape and degree of setation extremely variable. Body from oval to elongate, more or less convex, with opalescent metallic sheen, irregular microsculpture and strong puncturation. All body more or less thickly covered with very long, white setae (figs 1, 7-10).

Head and rostrum irregularly, rather strongly punctured. Rostrum as long as its tip is broad, slightly dilated from the base towards the tip, its upper surface somewhat convex. Head slightly dilated behind the eyes; frons almost flat. Eyes large, moderately and somewhat eccentrically convex. Head and rostrum separated by a transverse groove, as a rule shallow and very narrow, almost straight or sinusoid, or else in the form of a widely open "U". Median costa on rostrum high, narrow or wide, before the antennal bases branched in two straight or arcuately posterad bent diverging costae. On frons median furrow running from the transverse groove to the level of posterior eye margin; the furrow deep and wide near the transverse groove, posterad becoming gradually narrower and shallower. Antennal

scrobe strongly bent, its lower margin reaching the ventral side of rostrum. Below the eye a distinct smooth, shallow groove (to accomodate the scape?), its upper margin running from the posterior eye margin and reaching the lower margin of antennal scrobe at half rostrum height (fig. 10). Lower margin of the groove less distinct, passing with no sharp border into antennal scrobe. Antennae long and slender, scape S-like bent, its tip somewhat dilated. Funicular segment 1 the longest, 2 shorter by $1/3$ than 1, the remaining considerably shorter than 2 but longer than wide. Club long, spindle-shaped, as long as the last three funicular segments (fig. 6).



9, 10. *Blosyrosoma longipilis*: 9 - body in dorsal view, male (Kibateni), 10 - body in lateral view, male (Muyenga)

Pronotum broader than long (breadth/length ratio: males 1.24-1.62, females 1.23-1.68), dorsally slightly convex, on sides distinctly rounded; anterior and posterior margins somewhat arcuate, sometimes anterior and posterior angles laterally produced. Pronotum base margined on whole length, behind anterior margin sometimes pronotum slightly constricted. On dorsal surface and sides of pronotum coarse, irregular granulation, the grains somewhat flattened or distinctly convex, as a rule with centrally situated puncture. Grains in anterior part sometimes fuse forming an irregular costa that does not reach the anterior margin of pronotum.

Elytra oval or more or less elongatedly oval, in males 1.41-1.62, in females 1.25-1.52 longer than wide, somewhat convex. Breadth of elytral base equal to that of pronotum base and then sides of elytra regularly dilated posterad or regularly rounded, or elytral base distinctly wider than pronotum base and then anterior angles of elytra distinctly obliquely produced latero-anterad. Foveae in rows round or oval, their diameter decreasing towards the elytral apex. Intervals on top of elytra from 0.3 to 0.5 fovea diameter. Intervals more or less irregular, narrower by half than, or as wide as rows. On intervals distinct punctures, but sparser arranged than foveae in rows. Microsculpture as a rule more delicate than on head, sometimes distinct, irregularly reticulate, with distinct notches or wrinkles.

Legs long, rather slender. Fore tibiae straight or bent inwards just before the apices. Apex of fore tibiae weakly dilated outwards, inwards prolonged into a fairly long thorn. Hind tibiae in female with inner margin straight, with a row of fine granules, in male distinctly dilated to $2/3$ length, before the apex strongly incised, with a more or less regular denticulation (figs 2, 3). Tarsi long and thin (figs 4, 5).

VARIABILITY

In its distribution area the species forms an array of morphologically different populations (fig. 19), the differences in the structure of aedeagus and spermatheca being, however, slight, within the intraspecific variability range (figs. 11-18).

a/ mountainous region of northern Tanzania (Mt. Meru, Arusha, Moshi):

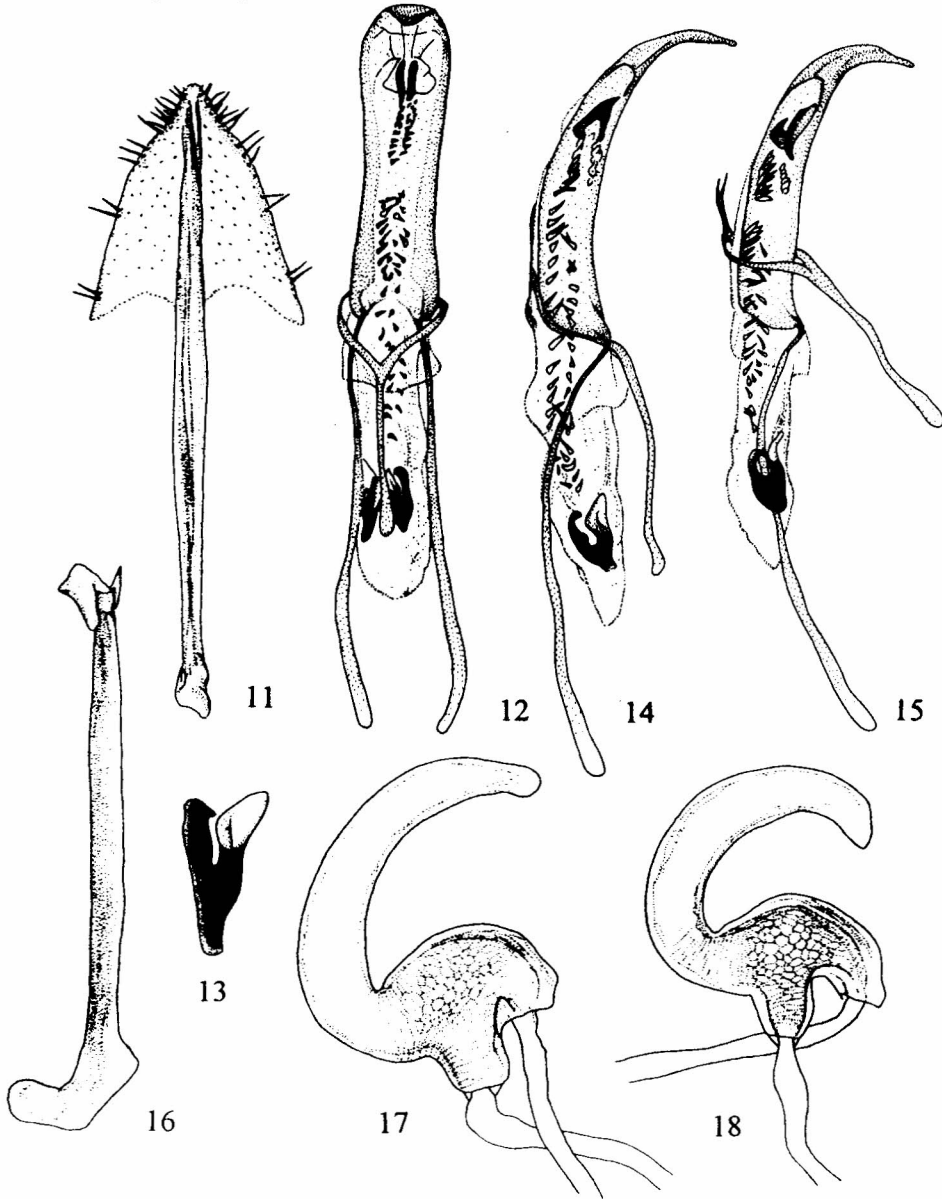
Males: body length 4.70-5.60 mm, breadth 2.25-2.75; pronotum breadth/length 1.35-1.62; elytra length/breadth 1.41-1.49.

Females: body length 5.20-6.00 mm, breadth 2.85-3.15; pronotum breadth/length 1.54-1.68; elytra length/breadth 1.25-1.30.

The population is characterized by a prevalence of black individuals, with a delicate microsculpture, sparse covering of long and short setae on intervals, setae being concentrated in a few tufts. Median costa on rostrum very wide; elytral base broader than the pronotum base; humeral angles of elytra produced; foveae in rows large. Males distinctly more slender (figs 7, 8), male hind tibia with a strong, almost smooth incision; dilated part of tibia with sharp fine denticles.

b/ lowland, wooded areas of eastern Kenia and Tanzania (from the region of Malindi to Sisima and Kibateni):

Males: body length 5.60-6.10 mm, breadth 2.60-2.75; pronotum breadth/length 1.24-1.36; elytra length/breadth 1.42-1.49.



11-18. *Bloosyrosoma longipilis*, 11 - sternite VIII, female (Mawaanga), 12-15 - male genitalia: 12 - aedeagus (Mt. Meru), 13 - sclerite of internal sac in lateral view (Mt. Meru), 14 - aedeagus (Muyenga), 15 - aedeagus (Diani Beach), 16 - spiculum gastrale (L. Sereri), 17, 18 - spermathecae: 17 - (Diani Beach), 18 - (Mt. Meru, Olkokola)

Females: body length 5.90-7.00 mm, breadth 2.90-3.25 mm; pronotum breadth/length 1.23-1.43; elytra length/breadth 1.32-1.41.

It is characterized by a black or dark brown body colour with a distinct microsculpture, bronze sheen and moderately thick body vestiture of long setae. Short setae are longer than in the above population and tend to be evenly distributed on whole elytra; rarely concentrated in tufts or distinct rows. Median costa on rostrum moderately wide. Width of elytral base and pronotum base equal, humeral angles of elytra somewhat rounded. Foveae in rows fairly large. Males slightly more slender, their hind tibiae as in males from the preceding population.

c/ upland areas of northern Tanzania (region of Sereri):

Males: body length 5.60-6.20 mm, breadth 2.25-2.75 mm; pronotum breadth/length 1.28-1.33; elytra length/breadth 1.60-1.62.

Females: body length 6.10-6.60 mm, breadth 3.00-3.25 mm; pronotum breadth/length 1.34-1.50; elytra length/breadth 1.42-1.52.

It is characterized by brown or dark brown body colour, distinct microsculpture and extremely thick body vestiture of long and short setae, the latter being evenly distributed on entire elytra and arranged in a few tufts around one or several long setae; they form also a few tufts on pronotum. Median costa on rostrum narrow. Elytral base equal to or somewhat broader than pronotum base. Humeral angles strongly rounded. Foveae in rows fine. Males distinctly more slender, their hind tibiae as in males of "a" population, but with finer, granule-like denticles.

d/ isolated locality in the north of Tanzania (Mt. Hanang):

Females: body length 5.50-5.80 mm, breadth 2.70-2.90 mm; pronotum breadth/length 1.40-1.42; elytra length/breadth 1.38-1.39.

It is characterized by black body colour (holotype of *B. punctigerum* is a teneral female of this population) with a distinct microsculpture and strong bronze sheen. Long setae rather sparse, short setae numerous with a tendency to arrange in numerous tufts on elytra and more or less distinct longitudinal bands on sides of pronotum. Median costa on rostrum moderately narrow. Base of elytra somewhat broader than base of pronotum, humeral angles strongly rounded. Foveae in rows fine. Only females were available.

e/ upland, wooded areas of the south of Uganda and north-eastern Tanzania (Biharamulo):

Males: body length 5.20-5.40 mm, breadth 2.50-2.55 mm; pronotum breadth/length 1.27-1.28; elytra length/breadth 1.41-1.44.

Females: body length 5.25-6.10 mm, breadth 2.75-3.05 mm; pronotum breadth/length 1.28-1.40; elytra length/breadth 1.28-1.33.

It is characterized by black body colour, except for more or less dark brown tibiae and antennae, stronger microsculpture and weaker sheen than in the preceding population and setae arranged in the same way as in the preceding population.

Median costa on rostrum narrow. Elytral base only slightly broader than pronotum base, humeral angles more or less strongly rounded. Foveae in rows distinctly larger than in the preceding population. Males considerably more slender, with an irregular incision of the apex of hind tibia and with distinct, sharp denticles on almost entire tibia length.

The occurrence of particular characters in the populations has a mosaic character which was probably influenced by genetic drift. For this reason I do not propose to divide this species into infraspecific taxa, treating the described variation as geographic variability associated with the insular character of the populations.

TYPE MATERIAL

Holotype of *B. longipilis*, female: "Holotypus" [black print on red background, black frame]; "COLL.MUS.CONGO, Tanganyika Terr.: Mt. Meru, Olkokola, versant N.O. 2800 m. 24-VI/1-VIII-57"; "Mission Zoolog. I.R.S.A.C. en Afrique Orientale (P. BASILELEWSKY et N. LELEUP)" [both labels black print on white]; "*Blosyrosoma longipilis* n. sp., [male symbol, asterisk] E. VOSS det., 1961" [name and part of date blue print, asterisk red-blue, the rest handwritten, black ink on white] (MRAC).

Holotype of *B. punctigerum*, female: "Holotypus" [black print on red, black frame]; "COLL.MUS.CONGO., Katesh Contref. S. du Mt. Hanang, 1850 m 18/31 V 1957"; "Mission Zoolog. I.R.S.A.C. en Afrique orientale (P. BASILELEWSKY et



19. *Blosyrosoma longipilis*, distribution (see also variability)

N. LELEUP" [both labels black print on white]; "*Blosyrosoma punctigerum* n. sp. [female symbol, asterisk] E. VOSS det., 1961" [name and part of date blue print, asterisk red, the rest handwritten, black ink on white] (MRAC).

OTHER MATERIAL

KENYA: Gede, 20 km südl. v. Malindi, Sekundärwald, 17 VIII 1983, leg. H. J. BREMER, 1 (HNHM); Diani Beach, 04°19'S, 39°34'E, 25 XI 1975, leg. H. GØNGET, 4 (2 JK, 2 ZMC); Kikambala, 3 XII 73, Å. H., 1 (LU).

TANZANIA: Sisima, 27 IX 1904, leg. KARASEK, 1, (ZMHU); Sisima, 1904, leg. KARASEK, 1 (ZMHU); Kibateni, 10 VIII 1904, leg. KARASEK, 2 (JK, ZMHU); Arusha - Ju, leg. KATONA, X 1905, 1, (HNHM), XI 1905, 1, (JK), XII 1905, 1, (JK); Tanganyika Terr.: Oldonyo Sambu, 15 km. N. Arusha, cratère, 1850 m 22-IV-1957, Mission Zoolog. I.R.S.A.C. en Afrique orientale (P. BASILELEWSKY et N. LELEUP), *Blosyrosoma* [sic] *longipilis* E. VOSS det. 1961 "Paratypus", 1 (MRAC); 1.5 miles to Lake Sereri, E shore, 3150 feet, 11-27 VIII 1965, coll. Dr. J. SZUNYOGHY, 7 (5 HNHM, 2 JK); Inter Voi et Moshi, leg. KATONA, 1 (HNHM); Mt. Meru, W slope Olkokola, 8700 feet, 18-22 VII 1965, coll. Dr. J. SZUNYOGHY, 1 (HNHM); Mt. Meru, Krafer, 2500 m, 28 II 1982, unter verrottendem Holz, leg. H. J. BREMER, 1 (HNHM); Katesh, S of Mt. Hanang, 5900 feet, 26 VI-1 VII 1965, coll. Dr. J. SZUNYOGHY, 1 (HNHM); Biharamulo, 1200m, 15 XII 1974, leg. I. JAKOBSEN, 1 (ZMC).

UGANDA: Ankole Dist, Kalinzu Forest, 6-16 II 1973, leg. H. GØNGET, *Protostrophus* sp., det. LOUW, 1981, 1 (ZMC); Kalinzu Fst., Mpungu 1300-1350 m, 31°4'E, 0°20-21'S, Jun. 1972, leg. H. GØNGET, 1 (ZMC); Mujenje, VIII 1913, leg. KATONA, 1 (JK); Mawaanga near Kampala, 20 I 1973, leg. H. GØNGET, 1 (JK); Kampala, Muyenga Hill, 21 III 1973, leg. H. GØNGET, 1 (JK); Kampala, Muyenga, II 1973, leg. H. GØNGET, 2 (ZMC).

REMARKS

In his original description VOSS (1962) designated as holotype of *B. longipilis* specimen from Mt. Meru, Olkokola in Tanzania, and identified its sex as male, but in fact it is a female. The other specimen of *B. longipilis* from the MRAC collection with VOSS' determination label and a label "Paratypus" probably does not belong with the type series, since it comes from Oldonyo Sambu in Tanzania, and in the original description all the specimens of the type series should have the same labels as the holotype. Thus paratypes are probably in VOSS' collection. I had no opportunity to examine the two paratypes of *B. longipilis*, listed by WEIDNER (1976) as a part of VOSS' collection deposited in the Zoological Museum of the Hamburg University.

REFERENCES

- VOSS, E., 1962. Mission zoologique de l'I.R.S.A.C. en Afrique orientale. (P. BASILEWSKY et N. LELEUP, 1957). LXXVIII. - *Coleoptera Curculionidae*. I. (171. Beitrag zur Kenntnis der Curculioniden). Ann. Mus. Roy. Afr. Centr. Serie in 8°, Zool., 110: 271-336.
- WEIDNER, H., 1976. Die entomologischen Sammlungen des Zoologischen Instituts und des Zoologischen Museums der Universität Hamburg. IX. *Insecta* VI. Mitt. Hamburg. Zool. Mus. Inst. 73: 87-264.