

Revision of the African species of *Sponsor* Castelnau & Gory (Coleoptera: Buprestidae: Polycestinae: Ptosimini)

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The African species of *Sponsor* are keyed, illustrated and described. Four species are redescribed, and one new species (*S. somaliensis* **spec. nov.**) is described. On hand of the new material it is argued that *Stenianthe* Fairmaire should be retained as a subgenus of *Sponsor*, but that *Neoptosima* Théry should be synonymised with *Sponsor* **s. str.**

INTRODUCTION

To date only four *Sponsor* species have been described from the African continent, three by Théry (1930) and one by Lesné (1937). Three of these were placed in *Sponsor* (s. str.), and one in *Sponsor* (*Stenianthe*). All four species were described on single specimens.

Recently several long series of *Sponsor* from Somalia and Kenya were sent to us by Mr. H. Mühle and Dr. C.L. Bellamy from their private collections, and these turned out to include several of the previously described species, as well as one new species. Additionally we found a specimen from Transvaal, which turned out to be yet another new species. This latter species represents a transition between *Sponsor* s. str. and *Sponsor* (*Neoptosima*), a subgenus not yet recorded from the African continent. Its transitional features make *S. (Neoptosima)* untenable as subgenus, just corroborating doubts already expressed by Descarpentries (1965) and Cobos (1980) on the merit of this subgenus. (Because the condition of the single specimen of this latter new species was extremely poor, we decided not to describe it formally at this stage.)

The species of *Sponsor*, which are well represented on Madagascar and the islands east of Africa, were intensively studied by Lesné (1923, 1937) and Descarpentries (1965). The two unique representatives of the Polycetesini and Acherusini in Africa are treated by Cobos (1980). Holm (1982) revised the African Polycestini, and with the present revision of African Ptosimini, the taxonomy of the whole subfamily Polycestinae on the continent is brought up to date.

Bibliography of original descriptions and those not quoted in the Coleopterorum Catalogus (Obenberger, 1926) is given for genera. Abbreviations of type depositories are explained in the acknowledgements.

SYSTEMATICS

***Sponsor* Castelnau & Gory**

Sponsor Castelnau & Gory, 1839: 1; Obenberger 1926: 48; Théry 1930: 587; Lesné 1937: 111; Descarpentries 1965: 2; Cobos 1980: 46.

Type species: *S. convexus* Castelnau & Gory (by monotypy).

Neoptosima Théry, 1905: 152; Obenberger 1926: 49; Lesné 1937: 165.

Sponsor (*Neoptosima*) Théry 1930: 590; Descarpentries 1965: 3; Cobos 1980: 48
syn. nov.

Type species: *S. pinguis* Guérin (by subsequent designation: Cobos, 1980).

A generic definition is given by Cobos 1980: 48. Both Descarpentries (1965) and Cobos (1980) mention that the pointed pygidium of *Neoptosima* is a weak character as it varies in degree of expression. The other two characters mentioned by Cobos (*loc. cit.*) for *Neoptosima* (sinuate epipleural ridge and granulose pronotal sculpture) are absent in the undescribed new species, which is in all respects a typical *Sponsor* s. str., except that it has the pointed pygidium of a *Neoptosima*. We therefore propose that *Neoptosima* should be synonymised with *Sponsor* s. str.

Key to the subgenera of *Sponsor* Castelnau & Gory

1. Dorsal surface of body asetose. Apex of elytral margin entire, not denticulate *Sponsor* (*Stenianthe*)
- Dorsal surface of body densely setose. Apex of elytral margin denticulate *Sponsor* (s. str.)

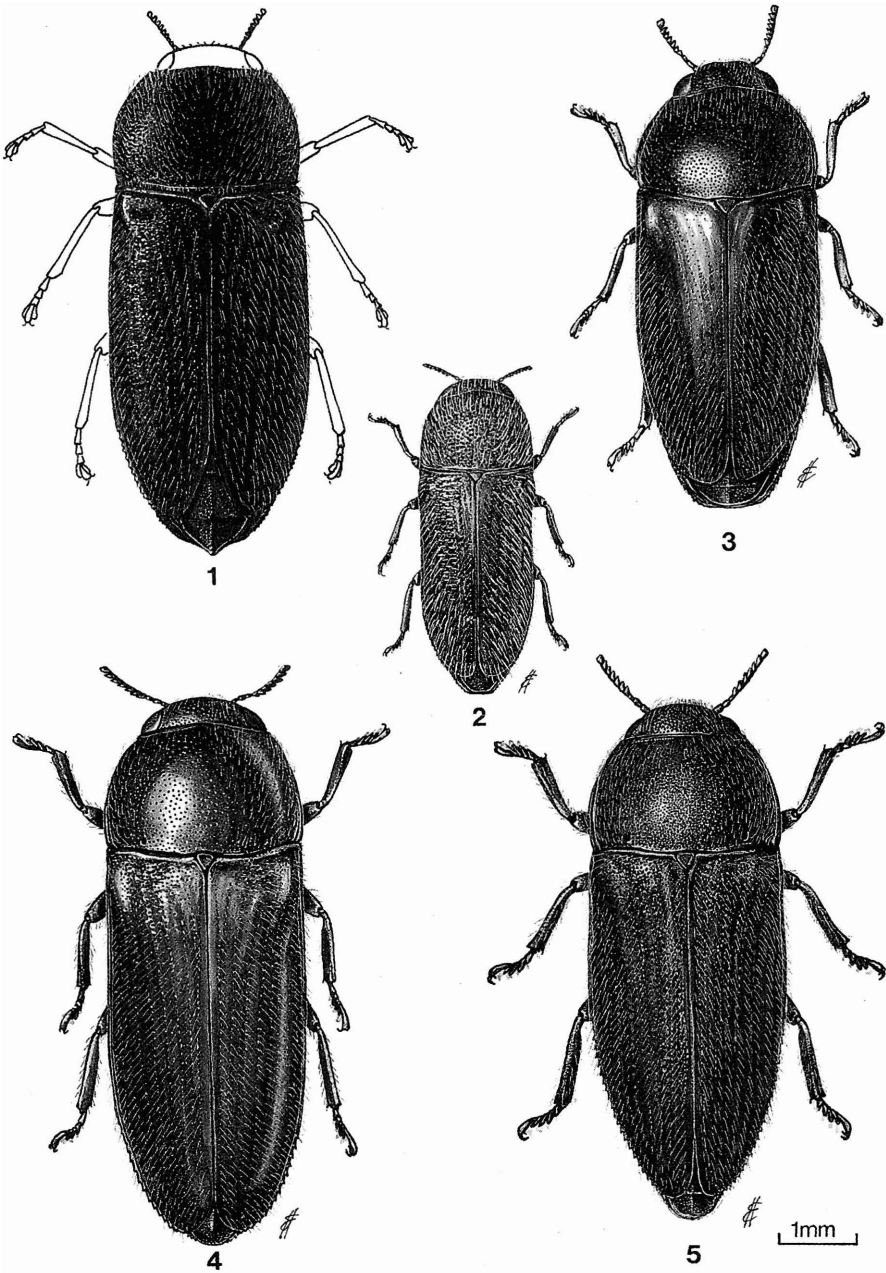
Sponsor* (*Sponsor*) Castelnau & GoryDiagnosis*

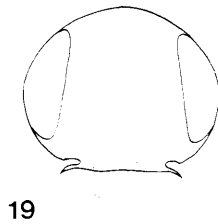
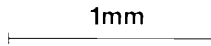
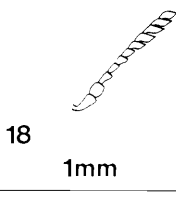
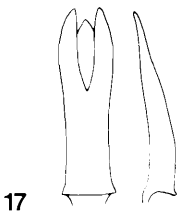
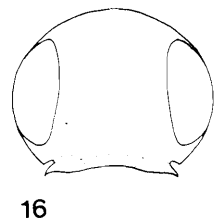
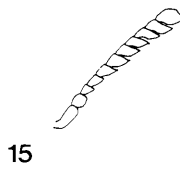
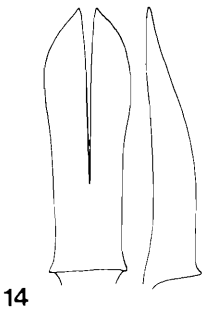
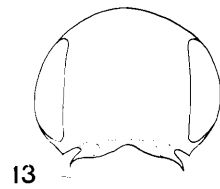
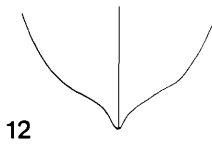
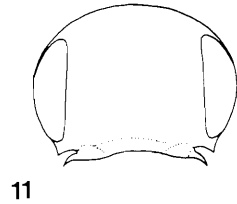
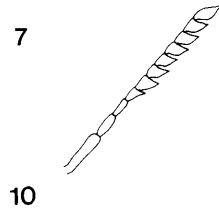
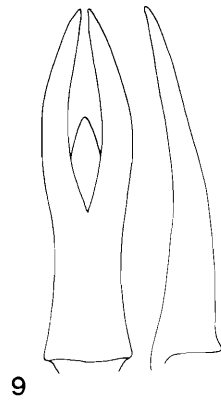
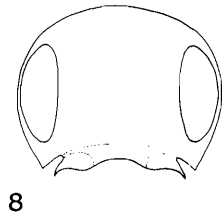
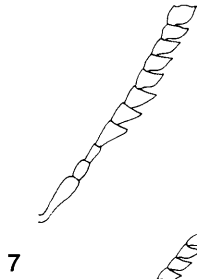
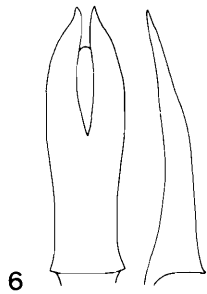
Body elongated, posteriorly attenuated; pronotum simply rounded, broad, convex; elytra separately rounded and denticulate at apex; pronotum and elytra puncturated, punctures arranged in stria on elytra; epipleural suture carinate; dorsum densely setose; anterior prosternal margin convexly rounded; pygidial apex rounded to pointed, epistome wide, scutellum roundly triangular, as wide as long (except in *S. (S.) burgeoni*; *vide p.6*)

Key to the African species of *Sponsor* s. str.

1. Setae on dorsum very long, virtually obscuring dorsal surface. Body narrow (length : width 1:0,36) *S. (S.) somaliensis* **spec. nov.**
- Setae short, not obscuring dorsal surface. Body robust (length : width 1:0,36) 2
2. Lateral pronotal carina visible from above 3
- Lateral pronotal carina not visible from above 4
3. Lateral pronotal carina narrow (Fig. 4). Elytra long in relation to pronotum (1:0,32), common apex pointed (Fig. 4). Protibia spatulate. First three antennal segments elongated (Fig. 10). Black with short, straight, glossy golden setae *S. (S.) burgeoni* Lesné

Figs 1–5. Dorsal aspects of *Sponsor* (*Sponsor*) spp. Fig. 1. Undescribed *Sponsor* (*S.*) sp. (outlined appendages missing from specimen); Fig. 2. *S. (S.) somaliensis* **spec. nov.**; Fig. 3. *S. (S.) dissimilis* Théry; Fig. 4. *S. (S.) burgeoni* Lesné; Fig. 5. *S. (S.) raffrayi* Théry.





- Lateral pronotal carina broad (Fig. 3). Elytra-pronotum length ratio 1:0.43, apex truncated, exposing pygidium (Fig. 3). Protibia slender. First three antennal segments short (Fig. 15). Black with short, straight, white setae. *S. (S.) dissimilis* Théry
- 4. Outline smoothly torpedo-shaped, elytral apex pointed (Fig. 5). Pronotum not broader than elytral base, very convex. Pygidial apex not sharply pointed. *S. (S.) raffrayi* Théry
- Outline not evenly torpedo-shaped (Fig. 1). Pronotum broader than elytral base, widest anterior of base, moderately convex with strongly arched sides. Pygidium with sharply pointed apex (Fig. 12) *undescribed S. (S.) sp.*

***Sponsor (Sponsor) somaliensis* spec. nov.** (Figs 2; 18–19)

Description

Length 4 mm, width 1.45 mm. Body narrow and cylindrical; black with very long erect setae, which results in a dull, grey appearance; setae covering whole dorsum. **Head:** punctuation coarse, uneven; epistome short, almost straight, sharply separated from head by a narrow groove (Fig. 19). **Pronotum:** narrow, sides forming a continuation of parallel elytral sides; lateral carina reduced, not visible from above; disc not perfectly convex but anteriorly slightly elevated, sides sloping down from the middle, and thus flattened posteriorly; punctuation coarse, very uneven on sides. **Elytra:** narrow, long in relation to pronotum (1:0.4); sides parallel and apically rather sharply pointed; slightly broader at base; flattened dorsally. **Pygidium:** rounded. **Underside:** second, third and fourth sternites with a transverse, translucent extension of the posterior margin. **Appendages:** femora projecting beyond margin in dorsal view. Tibiae rather broad, tarsi long. Antennae with first segment conspicuously larger than rest, short, thick, club-shaped; second oval, as thick as the first; third and fourth very small; fifth round; sixth triangular; remainder dentate, becoming bigger and more transverse distally (Fig. 18).

Notes

This species from Somalia is markedly different from the other four African *Sponsor* s. str. species. It is smaller and more slender, and the setae are remarkably long. Whereas the males of the other species have a rounded median translucent posterior extension of the second abdominal sternite, this species is exceptional in having a very short translucent extension across the whole width of the last three abdominal sternites. (The type specimen has lost its setae in patches, and appears more glabrous than an unrubbed specimen probably would.) Only the single type specimen is known.

MATERIAL EXAMINED: Holotype (male): Somalia, Mogadiscio, Afgoi, XI. 1985, Mourglia (TMSA).

***Sponsor (Sponsor) burgeoni* Lesné** (Figs 4; 9–11)

***Sponsor (Sponsor) burgeoni* Lesné, 1937** (Théry *in litt.*): 122, 141; Burgeon, 1941: 137.

Figs 6–19. Details of *Sponsor (Sponsor)* spp. (aedeagal outlines in dorsal and left lateral view; head capsule in frontal view with mouthparts omitted, not to scale). Figs 6–8: *S. (S.) raffrayi* Théry. 6: aedeagus; 7: right antenna; 8: head. Figs 9–11: *S. (S.) burgeoni* Lesné. 9: aedeagus; 10: right antenna; 11: head. Figs 12–14: *undescribed S. (S.) sp.* 12: pygidium; 13: head; 14: aedeagus. Figs 15–17: *S. (S.) dissimilis* Théry. 15: right antenna; 16: head; 17: aedeagus. Figs 18–19: *S. (S.) somaliensis* **spec. nov.** 18: right antenna; 19: head.

Redescription:

Length 6,5 mm. Body parallel sided, pronotum broader than the rest of body. **Elytra:** very long with apex moderately pointed. Black with short, glossy, golden setae. **Head:** punctations large on frons, finer on top; epistome long, laterally slightly downturned, orientated forward and separated from frons by a wide depression (Fig. 11). **Pronotum:** regularly convex, broadest anterior of base; with sides regularly rounded; with lateral carina not visible from above; with setae finer than on elytra; punctuation very fine on disc. **Scutellum:** triangular, longer than wide. **Elytra:** very long in relation to pronotum (1:0,32), with sides parallel and apex moderately pointed; with punctuation fine dorsally, slightly coarser on sides; sutural interstice elevated to form a slight median ridge in posterior half; sculpture uneven at base between humeral calli. **Pygidium:** pointed, but with a rounded apex. **Underside:** with a broad, round, translucent median extension of the second sternite, about one quarter of width of latter. **Appendages:** protibia spatulate, mesofemur reaching epipleural carina; antennae short, with first segment long, club-shaped, second oval, as thick as first, third small, short, 4-10 dentate, becoming progressively larger and more transversely extended, last segment large, round, distally pointed (Fig. 10). **Aedeagus:** Fig. 9.

Notes

This species is characterised by its very long elytra (Fig. 4). The carinate sutural costa in the posterior half of the elytra is also present in *S. raffrayi*, which also has rather long but posteriorly more pointed elytra, (Fig. 5).

MATERIAL EXAMINED: ZAIRE: Holotype: Haut-Uele, Moku Moto, 3.IV.1927, L. Burgeon (MRAC).

Sponsor (Sponsor) dissimilis Théry (Figs 3, 15-17)

Sponsor (Sponsor) dissimilis Théry, 1930: 587; Lesné, 1937: 122, 143.

Redescription

Length 4,5-7 mm. Body broad, moderately convex. Elytral apex round, not pointed. Black with short, straight, shiny, white setae arranged in neat rows (Fig. 3). **Head:** with coarse punctures on frons, larger on top; epistome straight, moderately long, separated from head by a shallow depression (Fig. 16). **Pronotum:** broad, moderately convex, slightly broader than base of elytra; lateral carina broad, visible from above; punctuation fine on top, coarser on the sides; setae thinner, more densely spaced and curved than on elytra; posterior margin more angled towards middle than in other species. **Elytra:** moderately long in relation to pronotum (1:0,43), apex round, not strongly pointed; short, leaving a relatively large part of the abdomen exposed; slightly widening at the base, with a slight transverse bulge; punctuation fine. **Pygidium:** round. **Underside:** male with a broad, round, translucent median extension of the posterior margin of second sternite, about one quarter of width of sternite. **Appendages:** tibiae and tarsi slender; mesofemur not reaching epipleural carina; antennae short, with first segment short, thick, club-shaped, second oval, thicker than first, third small, short, fourth slightly larger, 5-10 much larger and dentate, 6-10 transverse, last large and round (Fig. 15). **Aedeagus:** Fig. 17.

Notes

In the description (Théry 1930) the name of the species is twice misprinted: in the key it reads *disolsimilis* and in the description *dossimilis*. As the type label reads *dissimilis*, both should be regarded as *lapsi calami*.

MATERIAL EXAMINED (26 specimens): TANZANIA: Holotype: Zanzibar, Raffray (MNHN); Zanzibar, Raffray (TMSA); KENYA: Mombasa, Diani beach, SE 04 39 Ba, R. Mourglia (MNHN; TMSA); 20 km S. of Mombasa, Karl Krombein (MNHN); Tsavo Park, Kilaguni Lodge (TMSA).

Sponsor (Sponsor) raffrayi Théry (Figs 5; 6–8)

Sponsor (Sponsor) raffrayi Théry, 1930: 588; Lesné, 1937: 121, 137.

Redescription

Length 5.5–9 mm. Body long and smoothly torpedo-shaped, apex strongly pointed. Dark bronze with short, thick, curved, white setae. **Head:** strongly and densely punctated on frons, more finely above; eyes usually prominent; epistome long and separated from frons by a deep groove, directed forward, the sides curved downwards (Fig. 9). **Pronotum:** very convex, sides continuing outline of elytra and curving smoothly towards head; lateral carina narrow, not visible from above; punctuation fine, but marked and dense; setae longer, thinner and more curved than on elytra. **Elytra:** long in relation to pronotum (1:0.36); with sides parallel up to posterior third and then curving in smoothly to form a sharply pointed apex; sutural costa elevated slightly to form a median carina in posterior half; surface sloping down laterally in posterior half, resulting in a steep arch; punctuation fine and dense; base with a slight bulge across. **Pygidium:** roundedly pointed, sometimes with a longitudinal median ridge. **Under-side:** male with a very small translucent median extension of posterior margin of second sternite, about one-seventh width of sternite. **Appendages:** tarsi and tarsal pads broad and well developed; mesofemur reaching epipleural carina; antennae long, with first segment long and club-shaped, second oval, as thick as first, third very small, 4–10 large and strongly dentate, becoming progressively more transverse, last large and oval; dentated segments large and robust in relation to remainder (Fig. 7). **Aedeagus:** Fig. 6.

MATERIAL EXAMINED (22 specimens): TANZANIA: Holotype: Zanzibar, Raffray (MNHN). KENYA: Mombasa, Diani Beach, SE 04 39 Ba, R. Mourglia (TMSA; MNHN).

Sponsor (Sponsor) undescribed species. (Figs 1; 12–14)*Notes*

The specimen was very brittle and damaged (probably found dead), with no appendages. The head and abdomen were additionally lost through an accident but were measured and drawn before. This specimen is undoubtedly a *Sponsor* (s. str.) and the first on record to have a pygidium ending in a sharp point; until now this character was only recorded in some species previously assigned to the subgenus *Neoptosima*.

The specimen from Transvaal, Republic of South Africa, is labelled "Tshokwane, 29.XII.1966, M.C. Ferreira, G.V. Ferreira" (TMSA).

Sponsor (Stenianthe) Fairmaire

Stenianthe Fairmaire, 1886: 38.

Sponsor (Stenianthe) Fairmaire: Théry 1930: 587–590; Obenberger 1926: 47 (= *Sponsor*); Lesné 1937: 111; Cobos 1980: 46.

Type species: *Stenianthe janthina* Fairmaire, (by monotypy)

Diagnosis

Body oval, depressed; pronotum not strongly convex, flattened laterally, widest at base; elytra roundedly attenuating from humeri to apex, the latter not separated and completely lacking denticles; pronotum and elytra with very fine and indistinct punctures, shiny, asetose; prosternum squarely truncated; pygidial apex rounded; epistome narrow.

Notes

The one African species of *Stenianthe* is so distinct from *Sponsor* s. str. that it might very well be argued to be a separate genus. While we have not seen all the Madagascan species, and as the several apparent apomorphs of *Stenianthe* are not matched by any obvious apomorphs in *Sponsor* s. str., we retain the subgeneric classification for the present. Lesné (1937) mentions a species he regards to be transitional between *Stenianthe* and *Sponsor*, but otherwise finds *Stenianthe* a very distinct and stable genus. Cobos (1980) gives it subgeneric status, and states that the persistent lack of dorsal setation makes this taxon easier to maintain than *Neoptosima*.

Sponsor (Stenianthe) lesnei Théry

Sponsor (S.) lesnei Théry, 1930: 587; Lesné 1937: 114, 129.

Redescription

Length 3–5 mm. Black. Dorsum completely asetose, very smooth, shiny. Shape smoothly oval, flattened on top and below. **Head:** depressed; epistome very narrow with antennal tubercles large and elongated towards epistome; punctuation delicate, strongly on frons, very faint dorsally. **Pronotum:** anteriorly narrow, widening gradually to the base, not very convex, flattened on sides; punctuation delicate. **Elytra:** with sides nowhere parallel, but regularly rounded to complete an oval shape with head and pronotum; sides flattened; apices jointly rounded with no gap between them; outer margins not denticulate, smooth; punctuation faint, delicate; striae fine, barely visible rows of punctures. **Underside:** prosternum truncated, posteriorly square. Mesosternum broad, with strong punctuation, fused with metasternum. Metasternum broad and flat. First and second sternites large and fused. Anterior edges of last three sternites with a shiny transverse ridge, without any setae. Male with a very small translucent extension of the second sternite, about one-twelfth of the width of the sternite. **Appendages:** Antennae

slender, with first and second segments elongated, third small, remaining segments dentate, 11th large and rounded.

Notes

The flattened body, oval shape, non-denticulate elytra with jointly rounded apices, complete absence of setae on dorsum and narrow epistome make this species very easy to distinguish from the *Sponsor* (s. str.) of the African fauna.

MATERIAL EXAMINED: (8 specimens) TANZANIA: Holotype (male): Zanzibar, Raffray (MNHN). KENYA: Mombasa, Diani Beach, SE 04 39 Ba, R. Mourglia (TMSA; MNHN).

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