

A review of the Afrotropical Buprestinae with the description of a new tribe, genera and species (Coleoptera: Buprestidae)

by

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A new tribe, Thomassetiini, is described for four Afrotropical buprestine genera, *Thomassetia*, *Jakoveleviola*, *Augrabies*, **gen. nov.** and *Senegalisia*, **gen. nov.** *Aristosoma* is placed in the Buprestini with *A. caffrum* proposed as a new junior synonym of *A. suturale*. *Jakoveleviola* and *Thomassetia* are revised with *A. crassum* and *A. anniae* transferred to *Thomassetia*. *Augrabies* is described for *A. schotiaphaga*, **sp. nov.** from the northern Cape Province. *Senegalisia* is described for *Anthaxia semireticulata* (= *A. rotundicollis*) from Senegal. Keys are provided for the tribes of Afrotropical Buprestinae, the genera of Thomassetiini and the species of *Jakoveleviola* and *Thomassetia*. Lectotypes are designated for *J. strandi* and *T. anniae*. The authorship of *Aristosoma* is reattributed to Saunders. The genera of Afrotropical Buprestinae are discussed within the defined tribal system. All new taxa are by the senior author.

INTRODUCTION

The classification of the genera and species composing the Afrotropical element of the nominate subfamily of the Buprestidae is in a very confused state. The Buprestinae Lacordaire were traditionally divided into four tribes, Buprestini, Dicercini Kerremans, Melanophilini Bedel and Anthaxiini Gory and Laporte (see Nelson 1981 for North America, Bílý 1982 for Northern Europe and Bellamy 1986a for Australia). The Bubastini Obenberger (1920, 1930) is composed of eight genera from Australia, Africa and the Palaearctic Region. Within the last 40 years, four additional monotypic tribes have been erected, Kisthanobiini Schaefer (1949) for *Kisanthobia* Marseul from the Palaearctic Region, Trigonogenini Cobos (1956) for *Trigonogenium* Gemminger and Harold from Chile, Coomaniellini Bílý (1974) for *Coomaniella* Bourgoïn from the Oriental region and Agaeocerini Nelson (1981) for *Agaeocera* Waterhouse from the New World. Recently, Bellamy (1986a) used Stigmoderini Lacordaire (Stigmoderites) following Cobos (1980) in no longer recognizing this taxon at the subfamily level.

The Afrotropical species of Buprestinae are currently classified within ten genera, *Strandiola* Obenberger, *Bubastoides* Kerremans, *Anthaxia* Eschscholtz, *Melanophila* Eschscholtz, *Chalogenia* Thomson, *Aristosoma* Saunders (see discussion below), *Thomassetia* Théry, *Jakoveleviola* Obenberger, *Brachelytrium* Obenberger and *Brachanthaxia* Théry.

This work attempts to define more closely the tribal and generic taxa of the

Afrotropical Buprestinae. We hope that these definitions provide more homogeneous groupings and, at the same time, will suggest additional areas needing re-evaluation.

Unless otherwise noted, measurement ranges given represent maximum length and width. Acronyms for collections are as follows.

- AFNP – Augrabies Falls National Park collection.
- AMGS – Albany Museum, Grahamstown, South Africa.
- BMNH – British Museum (Natural History), London, England.
- CLBC – C. L. Bellamy collection, this address.
- DSVC – D. S. Verity collection, Los Angeles, California, U.S.A.
- MNHN – Museum National d'Histoire Naturelle, Paris, France.
- MTCJ – M. Toyama collection, Nishinomyia, Japan.
- NCPS – National Collection of Insects, Pretoria, South Africa.
- NHBS – Naturhistorisches Museum, Basel, Switzerland.
- NMBH – National Museum, Budapest, Hungary.
- NMBS – National Museum, Bloemfontein, South Africa.
- NMPC – National Museum, Prague, Czechoslovakia.
- SAMS – South African Museum, Cape Town, South Africa.
- TMPS – Transvaal Museum, Pretoria, South Africa.

TAXONOMIC HISTORY

When Thunberg (1787) described *Buprestis aurata*, he was apparently not aware that the name was preoccupied by *B. aurata* Pallas, which was described in 1776 and is currently placed in *Eurythyrea* Lacordaire; Thunberg later (1789) described *B. suturalis*. Olivier (1790a & b) synonymized *aurata* Thunberg with *suturalis*, noting the pre-occupation by *aurata* Pallas. Herbst (1801) and Schönherr (1817) both listed *B. suturalis* and later Thunberg (1827) redescribed this taxon.

Chevrolat (1837) described *Anthaxia semireticulata*, and Gory and Laporte (1839) described *A. rotundicollis* and transferred *B. suturalis* to *Anthaxia*. Saunders (1871) listed *rotundicollis* as a synonym of *semireticulata* and transferred *semireticulata* to *Anilara* Thomson. Saunders also was the first to use the name *Aristosoma*, since in his catalogue (1871) he attributed the name to Laferte, while Thomson (1879) listed the name parenthetically as '(de Laferte, Mss.)', from a thesis that was never published. Until now, the authorship of *Aristosoma* has been attributed to Thomson (1879) since he was the first to provide a short description of the genus and, at the same time, also described a second species, *A. caffrum* (as *caffra*) (*sic*). However, it was Saunders (1871) who first published the name *Aristosoma*, validating it by including a known species, *B. suturalis* and its synonym, *aurata* Thunberg.

Waterhouse (1887) described *Aristosoma crassum*, and Kerremans (1892) resurrected *aurata* Thunberg and made *suturalis* the junior synonym. Kerremans (1893), in his key to the buprestid tribes and genera, used *Aristosoma* and later (Kerremans 1903) he re-instated *A. suturalis* with *A. aurata* as its synonym.

Obenberger (1924) erected the genus *Jakovleviella* for a new species, *J. oresibata* and in a later work (Obenberger 1928), described *Aristosoma anniae*. Théry (1928) described a new subgenus and species, *Thomassetia natalensis*, under the genus *Philanthaxia* Deyrolle and stated that *Anilara* '*subrotundicollis*' also belonged to this new subgenus. Here he clearly made a mistake, since there was no such species in *Anilara*; he was undoubtedly referring to *Anilara semireticulata*. Obenberger (1930), in his catalogue, was

the first to emend the endings of the species placed in the neuter genus *Aristosoma*, listing *A. auratum* and *A. suturale* as synonyms of *A. crassum*.

Obenberger (1931a) claimed that *P. (T.) natalensis* was a synonym of *A. anniae*; later (Obenberger 1931b) he described *J. strandi*. Théry (1931) elevated *Thomassetia* to generic rank, listed the differences between *A. anniae* and *T. natalensis*, and also downgraded *A. caffra* to a subspecies of *A. suturalis*. Obenberger (1936), ignoring his own previous synonymy of *Thomassetia*, described a new species, *T. strandi*. Théry (1936) stated that *strandi* Obenberger was a synonym of *natalensis* Théry. Obenberger (1941) re-elevated *A. caffrum* by describing a new subspecies, *A. caffrum oblitteratum*.

Key to the tribes of Afrotropical Buprestinae

- | | |
|--|---------------------------|
| 1 First abdominal sternite prolonged laterally at base to at least partially cover the metepimeron (Fig. 1) | 4 |
| — Metepimeron not covered (Fig. 2) | 2 |
| 2 Wing with closed anal cell (2d–2dA) (Fig. 3) | 3 |
| — Wing without closed anal cell (Figs 4–6) | Thomassetiini, trib. nov. |
| 3 Anteclypeus partially visible (Fig. 7); body strongly flattened | Buprestini |
| — Anteclypeus not visible (Fig. 8); body subcylindrical | Bubastini |
| 4. Base of pronotum feebly bisinuate (Fig. 9); lateroapical portion of abdominal tergites usually visible from above; punctuation granular or reticulate | Anthaxiini |
| — Base of pronotum strongly bisinuate (Fig. 10); abdomen completely hidden by elytra from above; punctuation simple | Melanophilini |

Tribe Melanophilini Bedel

Type-genus: *Melanophila* Eschscholtz.

The Melanophilini is represented in Africa by two genera, *Melanophila* and *Chalcogenia* Thomson. *Melanophila* is represented by only one species in southern Africa, *M. nigrita* (F), which was discussed recently by Holm and Bellamy (1985).

Chalcogenia, which has 21 described African species (Obenberger 1930), seems to be exclusively associated with *Acacia* and is in need of revision.

Tribe Anthaxiini Gory & Laporte

Type-genus: *Anthaxia* Eschscholtz.

The Anthaxiini is represented by three genera in the Afrotropical region, *Brachelytrium* Obenberger, *Brachanthaxia* Théry and the large, widely distributed *Anthaxia*.

Brachanthaxia is represented by a single species, *B. gemmata* (Gory & Laporte) and was described by Théry (1930b).

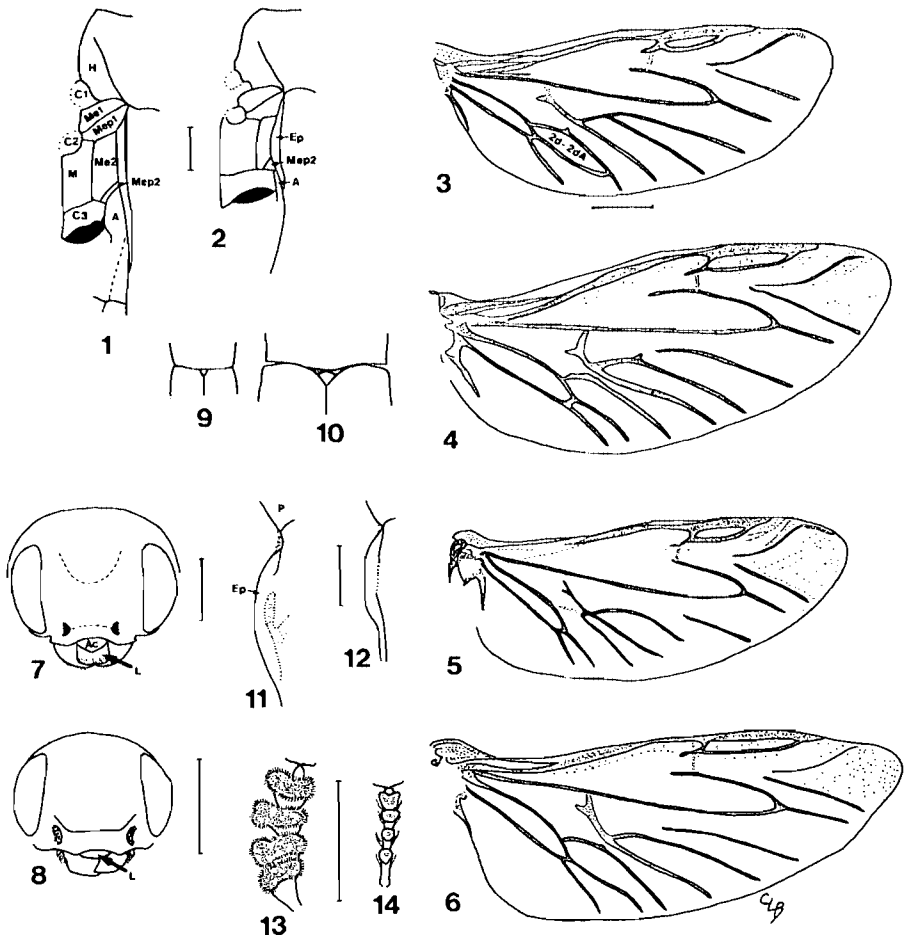
Brachelytrium is a small genus in southern Africa, with only two described species; however, in our collections, there are several new species which will be described in a revision currently in preparation.

Anthaxia is a large genus, widely distributed throughout most of the world and was recently discussed by Bellamy (1986b). The species of *Anthaxia* found in the Afrotropical Region are in need of a thorough re-evaluation.

Tribe Bubastini Obenberger

Type-genus: *Bubastes* Laporte & Gory

The Afrotropical Bubastini is composed of two genera, *Strandiola* Obenberger



Figs 1-14, Buprestinae, key morphological features. Figs 1, 2, lateral view of thoracic sterna, Fig. 1, *Chalcogenia sulcipennis* (Gory); Fig. 2, *Aristosoma suturale* (Thunberg); Figs 3-6, wing venation, Fig. 3, *A. suturale*, Fig. 4, *Thomassetia crassa* (Waterhouse), Fig. 5, *Augrabies schotiaphaga*, **gen. et sp. nov.**, Fig. 6, *Jakovleviola oresibata* Obenberger; Figs 7, 8, frontal view of head, Fig. 7, *A. suturale*, Fig. 8, *Eurypilus caudatus* Théry; Figs 9, 10, pronotal base, Fig. 9, *Anthaxia dispar* Kerremans, Fig. 10, *C. sulcipennis*; Figs 11, 12, epipleuron, lateral view, Fig. 11, *T. crassa*, Fig. 12, *J. strandi*; Figs 13, 14, tarsus, ventral view, Fig. 13, *T. crassa*, female, Fig. 14, *A. schotiaphaga*; A = lateral projection of abdominal sternite 1, Ac = anteclypeus, C1 = procoxa, C2 = mesocoxa, C3 = metacoxal plate, Ep = epipleuron, H = hypomerion, L = labrum, M = metasternum, Me1 = mesepisternum, Me2 = metepisternum, Mep1 = mesepimeron, Mep2 = metepimeron, P = pronotum, 2d-2dA = closed anal cell (scale bars = 1,0 mm).

and *Bubastoides* Kerremans, found in the north-eastern portion of the region. Théry (1930a) discussed, redescribed and figured *B. argodi* Kerremans. We have not been able to examine examples of these taxa and use an Australian species for illustration (Fig. 8).

Tribe Buprestini Lacordaire

Type-genus: *Buprestis* Linnaeus.

The Buprestini is represented by only one Afrotropical genus, *Aristosoma*. The placement of *Aristosoma* in this tribe is based mainly on the wing venation, which fits the tribal pattern and shows similarity to that of *Trigonogenium* from Chile, in that both genera have a very similar configuration of both the radiomedial cross-vein and the anal veins. Since both taxa are the sole members of their respective tribes within their zoogeographical regions and occur at the southern extremes of two different continents, it is possible that they are relict sister taxa.

Genus *Aristosoma* Saunders

Aristosoma Saunders, 1871: 50; Thomson 1879: 24; Kerremans 1892: 115; 1893: 110; 1903: 152; Obenberger 1930: 422; Théry 1931: 109.

Type-species: *Buprestis suturalis* Thunberg (by synonymy and subsequent monotypy).

Diagnosis

Small, less than 13.0 mm long; elongate oval; flattened above and below; entire body punctate; underside setose, nitid.

Redescription

Head: convex; frons slightly produced between eyes; frontovertex with round depression; eyes small, not touching pronotum laterally. **Antennae:** short, not reaching elytra when laid along side, serrate from segment 4.

Pronotum: regularly convex; wider than head, widest at base; 2 deep longitudinal depressions laterally from apical $\frac{1}{3}$ to basal $\frac{1}{3}$, one on either side; disc with mid-line impunctate; anterior margin bisinuate; lateral margins arcuate, weakly carinate on underside; basal margin bisinuate; scutellum small.

Elytra: as wide as pronotum at base; irregularly convex; basal margin elevated with elevated spurs produced posteriorly to beyond scutellum; 2 longitudinal mediolateral depressions from basal $\frac{1}{3}$ to apical $\frac{2}{3}$; elytral suture elevated; costae irregular, rugose; lateral margins subparallel from base to apical $\frac{1}{3}$, attenuate from apical $\frac{1}{3}$ to apex, apices serrate, separately rounded.

Underside: prosternum convex, apex of process trilobed with broad, subtruncate median lobe, attenuate lateral lobes; abdominal sternites 1 + 2 longer than 3 + 4 + 5; suture between 1 and 2 visible but only feebly indicated.

Legs: femora fusiform; tibiae narrow, elongate; tarsal segment 1 longer than 2, 1-4 wider distally, pulvilli present; 5 narrow, with simple claws.

Wing venation: as in Fig. 3; with closed anal cell (2d-2dA).

Aristosoma suturale (Thunberg), Figs 2, 3, 7, 15 & 20.

Buprestis aurata Thunberg, 1787: 52 (nom. preocc.).

Buprestis suturalis Thunberg, 1789: 94; Olivier 1790a: 70; 1790b: 115; Herbst 1801: 232; Schönherr 1817: 263.

- Anthaxia suturalis*, Gory & Laporte 1839: 4.
Aristosoma suturalis (*sic*), Saunders 1871: 50; Thomson 1879: 24; Kerremans 1892: 115; 1903: 152.
Aristosoma caffra (*sic*), Thomson 1879: 25 **syn. nov.**
Aristosoma aurata (*sic*), Kerremans 1892: 115; 1903: 152.
Aristosoma caffrum, Obenberger 1930: 422.
Aristosoma suturale, Obenberger 1930: 422; Théry 1931: 112.
Aristosoma auratum, Obenberger 1930: 422.
Aristosoma suturale caffrum, Théry 1931: 112.
Aristosoma caffrum oblitteratum Obenberger, 1941: 8 **syn. nov.**

Diagnosis

Small, 6,6–12,9 × 2,7–5,4 mm; flattened above and below; elongate ovoid; both dorsal and ventral surfaces punctate; underside setose; two dichromatic morphs: one with dorsum greenish golden with cupreous elytral suture and one with dorsum cupreous with dark brunneous elytral suture, both with underside cupreous.

Redescription

Head: convex; frons produced between eyes; frontovertex with round depression; interior margins of eyes subparallel; frontoclypeus constricted between antennal insertions, distal margin not carinate; labrum bilobed with dense erect setae. *Antennae*: with segment 1 equal in length to 2 + 3; 3 equal to 4; 4–11 serrate, punctate, setose.

Pronotum: wider than head, width 1,8 × length, widest at base; regularly convex; 2 deep lateral depressions from apical $\frac{1}{3}$ becoming shallower at basal $\frac{1}{3}$, one on either side; nitid impunctate mid-line; anterior margin feebly bisinuate; lateral margins continuous with hypomeron in apical $\frac{1}{3}$, becoming increasingly carinate to base, regularly arcuate; basal margin bisinuate, broad subtruncate median lobe; scutellum subtriangular to cordate, broadest at base, longer than wide.

Elytra: as wide as pronotum at base, widest at apical $\frac{1}{3}$; irregularly convex; disc longitudinally carinate; basal margin broadly elevated, extending posteriorly to level of apex of scutellum; humeri swollen; 2 prominent longitudinal mediolateral depressions extending from below humeri to apical $\frac{1}{3}$, one on each side; suture elevated; striae in external $\frac{1}{2}$ convergent in basal $\frac{1}{3}$, those near suture parallel to apex; costate interstriae regular, reguose, irregularly punctate; epipleural lobe broad; lateral margins sinuate, widening to apical $\frac{1}{3}$, attenuate to separately rounded apices, serrate margin visible when viewed from side, rounded at apex.

Underside: prosternum convex; process trilobed with attenuate lateral lobes and subtruncate median lobe; hypomeron subtriangular; suture between sternite 1 and 2 feebly visible medially; sternite 1 + 2 longer than 3 + 4 + 5; basal margin of 2–4 sinuate; 5 strongly arcuate apically, weakly concave; entire underside setose, finely punctate.

Legs: femora fusiform; tibiae slightly longer than femora, narrow, with 2 apical spines; tarsal segment 1 longer than 2; lateral tarsal lobes increasing in width from 2 to 4, segments progressively shortened 2 to 4 with increasing size of ventral pulvilli; 5 narrow, claws simple; entire tarsi covered with fine erect setae.

Male genitalia: as in Fig. 20.

MATERIAL EXAMINED. Holotype of *caffra* (MNHN): locality and sex unknown; holotype of *caffrum* ssp. *obliteratum* (NMPC 22024): De Vlyder, Cap. b. sp.; all others examined: SOUTH AFRICA: CAPE PROVINCE: 1, (SAMS): Namaqualand, Okiep, 29.36 S, 17.52 E; 12, (SAMS, TMPS): Namaqualand, Van Rhyns Pass, 31.23 S, 19.00 E, G. van Son; 1, (NCPS): same data except, 28.ix.1972, Brown, Koster, Prinsloo; 2, (SAMS): Olifants River, between Clanwilliam and Citrusdal, 31.42 S, 18.12 E, x-xi.1931; 1, (TMPS): Cedarberg, jeep track 1000, 32.28 S, 19.14 E, 1150 m, 7.xi.1983, leg. Endrödy-Younga; 1, (NCPS): Gydo Pass, 15 km N. Prince Alfred Hamlet, 33.13 S, 19.19 E, 19.xi.1982; 1, (TMPS): Devils Peak, 33.57 S, 18.27 E, 27.xii.1977, Duke; 6, (NCPS, SAMS): Rondebosch, 33.52 S, 18.28 E, x-xi.1931; 2, (SAMS): Stellenbosch, 33.50 S, 18.45 E, 29.x.1948, Dr Brauns; 1, (NCPS): same data except, 12.v.1947, R. de Burger; 1, (NCPS): Wunberg, 34.00 S, 18.30 E; 1, (TMPS): Bredasdorp, 34.32 S, 20.02 E, 13.x.1984, M. Stiller; 1, (TMPS): Tradouw Pass, Swellendam, 33.57 S, 20.42 E, xi.1925; 1, (NCPS): Seweweekspoort, 33.22 S, 21.25 E, x.1954, G. van Son; 2, (SAMS); Rust de Vrede, Oudtshoorn, 32.44 S, 23.12 E, x.1951; 1, (TMPS): Mossel Bay, 34.00 S, 22.00 E, 18.xi.1904, Brady; 1, (SAMS): Assegaaibos, La Motte, 33.53 S, 19.05 E, x.1950, G. van Son; 1, (NCPS): Port Elizabeth, 33.55 S, 25.35 E; 3, (SAMS): Algoa bay, 33.50 S, 25.50 E, 1.xi.1969, Dr. Brauns; 1, (MNHN): Grahamstown, 33.18 S, 26.30 E, 1923.

Because of a lack of morphological and ecological differentiation, *A. caffrum* is herein considered conspecific with *A. suturale*, even though we suspect that they are probably subspecifically distinct. The significance of the two colour morphs is unknown, but it is not sexually linked. The possibility of subspecies cannot be ruled out, but because of the non-specific labelling from early collections, further collecting is needed to help answer this question. The type material of *Buprestis aurata* and *B. suturalis* from the collections at Uppsala, Sweden were not available for our examination. The original and subsequent descriptions and the large amount of material left no doubt as to the identity of these taxa.

Tribe Thomassetiini Bellamy, **trib. nov.**

Type-genus: *Thomassetia* Théry.

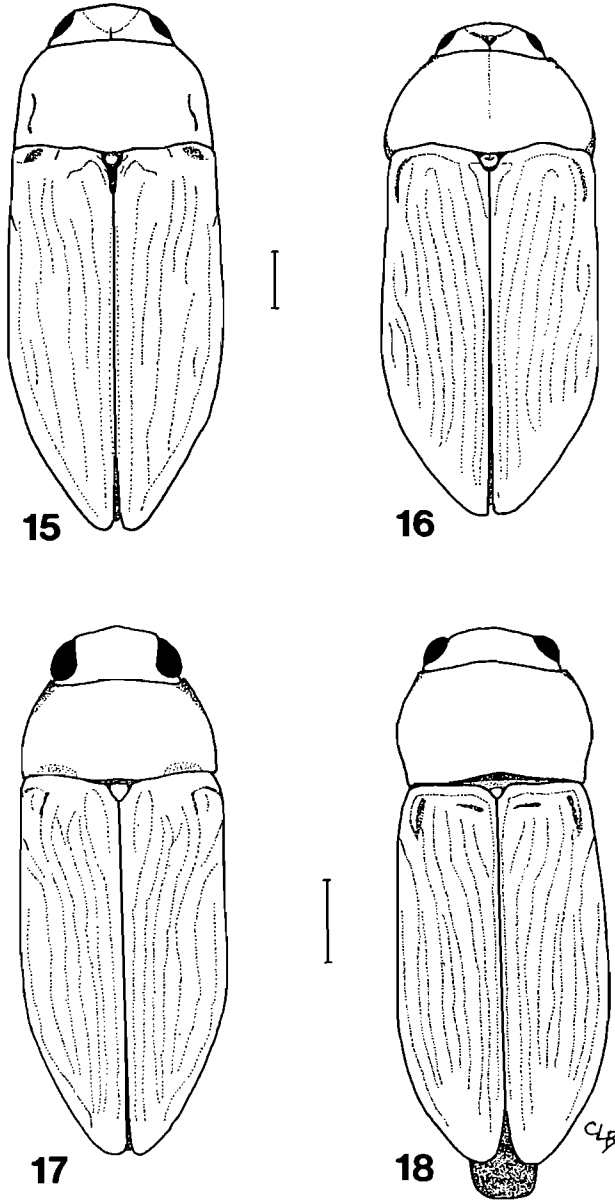
Description

Small; elongate ovoid; subconvex.

Head: produced between eyes; eyes small to moderately large, elongate, inner margins suparallel to slightly divergent dorsally; antennal insertions moderately large, widely separated; frontoclypeus widely emarginate; anteclypeus partially visible; labrum emarginate, moderately covered with adpressed setae on apical $\frac{1}{2}$; mandibles robust, recurved, coarsely punctuate, setose on basal $\frac{1}{2}$, impunctate, glabrous on distal $\frac{1}{2}$; maxillary palpi with segment 3 elongate, longer than 2. *Antennae*: with segment 1 elongate, geniculate basally, subequal or equal to 2 + 3 + 4; distal segments serrate, longer than wide, serrate portion rounded, sparsely setose.

Pronotum: wider than long; apical margin arcuate; basal margin bisinuate; lateral margins arcuate, carinate from base to past apical $\frac{1}{2}$; disc flattened; scutellum triangular to cordate, longer than wide.

Elytra: widest past middle; lateral margins narrowing from opposite humeri to middle, then widening before narrowing to separately rounded apices, margins serrate



Figs 15–18, dorsal habitus, Fig. 15, *Aristosoma suturale*, Fig. 16, *Thomassetia crassa*, Fig. 17, *Jakovleviola strandi*, Fig. 18, *Senegalisia semireticulata* (scale bars = 1.0 mm).

to serrulate, at least on lateroapical portion; disc slightly convex, interstriae usually costate.

Underside: prosternum feebly convex, process attenuate apically, with or without lateral lobes; sternal cavity formed between swollen mesosterna, basally by metasternum; metacoxal plates with posterior margin broadly emarginate.

Legs: femora fusiform; tibiae with two distal spines; tarsi with ventral pulvilli; claws simple, with base slightly swollen.

Wing: venation as in Figs 4–6; without closed anal cell.

This new tribe is erected for the following four genera, one of which was coincidentally collected during the time in which this study was underway. The lack of the anal cell in the wing venation is a significant point of divergence in major lineages of the Buprestidae (Good 1925, Toyama 1986). There are several non-Afrotropical genera which show a certain degree of relationship to the components of Thomassetiini, the Indo-Oriental *Philanthaxia*, *Kurosawaia* Toyama from the Bonin Islands, Japan and *Pagdeniella* Théry from the Solomon Islands. Further study is needed to determine the correct level of relationship.

Key to the genera of Thomassetiini

- 1 Pronotum widest at or near base; epipleural portion of elytra not separated from disc by distinct carina (Fig. 11), except for *T. anniae*; female tarsal pulvilli short very widely lobed (Fig. 13) *Thomassetia*
- Pronotum widest at or past middle; epipleura separated from elytral disc by distinct carina, at least to opposite metacoxae (Fig. 12); female tarsal pulvilli with length and width subequal (Fig. 14) 2
- 2 Anterior margin of pronotum strongly arcuate, forming lobe over base of head; lateral margins lobate in apical $\frac{1}{2}$ *Augrabies*, gen. nov.
- Anterior pronotal margin only very slightly arcuate, not extending over head; lateral margins evenly arcuate and widest near middle 3
- 3 Antennal segments 2 and 3 subequal, each shorter than 4; frons flattened between eyes ... (Senegal) *Senegalisia*, gen. nov.
- Antennal segment 2 globose, 3 longer than either 2 or 4; frons convex between eyes ... (South Africa) *Jakovleviella*

Genus THOMASSETIA Théry

Philanthaxia (*Thomassetia*) Théry, 1928: 182.

Thomassetia, Théry 1931: 111.

Type-species: *Thomassetia natalensis* Théry (by original monotypy).

Diagnosis

Size, 8.0–11.0 mm in length; coppery black; elongate ovoid; flattened; entire body punctate; elytra costate; underside setose.

Redescription

Head: convex; frons slightly produced with medial depression between eyes; inner margins of eyes subparallel; frontoclypeus constricted between antennal insertions; labrum bilobed; eyes small, not touching pronotum laterally. *Antennae:* serrate from segment 4.

Pronotum: wider than head, wider than long, widest at base or in basal $\frac{1}{2}$; regularly convex or irregularly convex with 2 basolateral depressions, or with disc flat; basal margin bisinuate; scutellum cordate to subtriangular.

Elytra: slightly narrower or of same width as pronotum; irregularly convex; basal margin irregularly elevated; humeri prominently elevated; shallow irregular depressions mediolaterally from apical $\frac{1}{3}$ to apex; striations distinct, subparallel; lateral margins subparallel and entire up to apical $\frac{1}{3}$, then converging and serrate to apex, apices separately rounded.

Underside: prosternum convex; prosternal process trilobed; suture between abdominal sternites 1 and 2 clearly visible medially.

Legs: femora fusiform; tibiae elongate, narrow with 2 apical spines; tarsal segments 1-4 with increasingly wider-lobed ventral pulvilli; 5 narrow, claws simple.

Wing venation: as in Fig. 4.

Thomassetia differs from the other genera placed within the tribe having the body generally more flattened, the punctation greatly reduced, a well-developed frontal depression and a strongly carinate distal margin to the frontoclypeus.

The species of *Thomassetia* are distributed from northern Namaqualand to northern Natal, following the coastal belt. The species inhabit semi-arid to subtropical climates. All four species of *Thomassetia* display various degrees of sexual dimorphism: the females are generally larger than the males, their antennal segments 4-11 are roundly serrate, while those of the males are angularly serrate, and the female tarsi (Fig. 13) have the ventral pulvilli much wider than the males.

Key to species of *Thomassetia*

- 1 Epipleura separated from disc of elytra by distinct carinae *T. anniae*
- Epipleura not separated from elytral disc by carinae 2
- 2 Two shallow frontolateral depressions between eyes; four distinct basolateral depressions on pronotum (two on either side); one small deep basomedial depression opposite scutellum on pronotum *T. natalensis*
- Single round or arrow-shaped frontal depression between eyes; basolateral depression on pronotum weakly developed or absent; no basomedial depression opposite scutellum 3
- 3 Prosternal disc evenly flattened, with two shallow mediolateral depressions adjacent to procoxae, one on each side *T. strandi*
- Prosternal disc moderately convex and without mediolateral depressions adjacent to procoxae *T. crassa*

Thomassetia natalensis (Théry)

Philanthaxia (Thomassetia) natalensis Théry, 1928: 182; Obenberger 1931a: 178 (as synonym of *Aristosoma anniae*).

Thomassetia natalensis (Théry) 1931: 111.

Diagnosis

Small, 9.5 × 4.1 mm; flattened above and below; subnitid black with cupreous reflection; coarsely punctate; underside setose.

Redescription

Head: convex; frons slightly produced; 2 shallow depressions between eyes,

one on either side of feeble longitudinal carina; inner margins of eyes subparallel; frontoclypeus narrowed between antennal insertions, distal margin not carinate; labrum barely visible with dense, erect setae on distal margin. *Antennae*: with segment 1 equal 2 + 3; 3 shorter than 4; 4-11 serrate, densely setose.

Pronotum: apex as broad as head, widest at basal $\frac{1}{3}$, almost 2 × as wide as long; regularly convex; lateral declivity greatly swollen, resulting in 2 distinct basolateral depressions on either side of pronotum; a small, deep depression opposite scutellum mediobasally; anterior margin strongly bisinuate; lateral margins arcuate to basal $\frac{1}{3}$, then subparallel to base, separated from hypomera by weak carinae from apical $\frac{1}{3}$ to base; basal margin weakly bisinuate, median lobe obtuse; scutellum cordate, finely punctate, slightly wider than long.

Elytra: as wide as pronotum at base, widest at apical $\frac{1}{3}$; basal margin irregularly elevated; disc irregularly convex with weak depressions and elevations; humeri swollen; striae parallel; interstriae regularly costate, coarsely punctate; epipleural lobe small; lateral margins sinuate, subparallel to apical $\frac{1}{3}$, converging to apex, serrate on apical $\frac{1}{3}$, apices separately rounded.

Underside: prosternum subtriangular, shallow, anterior margin arcuate, with one transverse depression medioapically, process trilobed, well-developed attenuate lateral lobes, truncate median lobe; suture between abdominal sternites 1 and 2 visible; 1 + 2 longer than 3 + 4 + 5; apex of 5 arcuate, slightly concave.

MATERIAL EXAMINED. Holotype female (BMNH): (SOUTH AFRICA) Natal, Weenen, 28.15 S, 30.05 E, xii.1926, H. P. Thomasset.

T. natalensis is unfortunately represented only by the holotype. It is easily distinguished from the other species by its pronotal depressions. Morphologically, it is nearest to *T. crassa*.

Thomassetia strandi Obenberger

Thomassetia strandi Obenberger, 1936: 133.

Diagnosis

Small, 10.4 × 4.5 mm; black with cupreous sheen; flattened; coarsely, densely punctate; underside setose, nitid.

Redescription

Head: convex; frons produced; deep arrow-shaped depression continuous with carinate suture between eyes; inner margins of eyes subparallel; frontoclypeus constricted between antennal insertions, strongly carinate laterally, arcuate distal margin; labrum bilobed, moderately covered with erect setae. *Antennae*: with segment 1 equal to 2 + 3; 4-11 serrate, laterally setose.

Pronotum: wider than head, widest at base, width 2 × length; irregularly convex, disc flat; anterior margin regularly bisinuate; lateral margins arcuate, carinate, not continuous with hypomera; basal margin irregularly bisinuate, median lobe truncate; scutellum cordate, attenuate apically, longer than wide.

Elytra: slightly narrower than pronotum at base, widest in apical $\frac{1}{3}$; irregularly convex; basal margin irregularly elevated, continuous with longitudinal costate interstriae; humeri weakly elevated; striae converging at basal $\frac{1}{3}$, parallel in middle then

converging again near apex; costate interstriae near suture slightly more elevated; 2 shallow depressions from apical $\frac{1}{3}$ to apex; lateral margins not carinate, continuous with small epipleural lobe, subparallel to apical $\frac{1}{3}$, then converging and serrate to separately rounded apices.

Underside: prosternum convex, coarsely punctate, densely setose; prosternal process finely punctate, 2 shallow angular depressions anterolaterally to procoxae, one on either side, trilobed with weakly developed lateral lobes, large truncate median lobe; hypomera convex, reticulately punctate; abdomen regularly convex, shallow longitudinal median depression on sternite 1; suture between 1 and 2 clearly visible; 1 + 2 longer than 3 + 4 + 5; 5 with disc feebly depressed, obtusely arcuate and feebly carinate laterally.

MATERIAL EXAMINED. Holotype female (NMPC 22029): (SOUTH AFRICA) Cape Province, Albany district, Revolution, 33.10 S, 26.37 E, i.1929, A. Walton; 1 female (NCPS): Cape Province, Fort Beaufort, 32.46 S, 26.38 E, i.i.1984, R. Oberprieler.

This species bears a close resemblance and is morphologically difficult to distinguish from *T. crassa*. It can be differentiated from the latter by the presence of one very feeble oblique supra-antennal carina dorsad to each antennal insertion and by having the frontoclypeal emargination deeper and more constricted.

Despite the striking morphological resemblance, *T. strandi* and *T. crassa* occur in different climatic zones. The former is found in the southeastern Cape, in a subtropical climate, and the latter in the northwestern Cape regions, in a semi-arid climate.

Thomassetia crassa (Waterhouse), **comb. nov.** Figs 4, 11, 13, 16 and 22.

Aristosoma crassum Waterhouse, 1887: 291; Obenberger 1930: 422.

Aristosoma crassa (*sic*), Kerremans 1903: 152.

Diagnosis

Small, 8.5–10.2 × 3.4–4.6 mm; flattened above and below; nitid black with cupreous sheen; pronotum slightly more aeneous; underside cupreous; densely punctate; underside setose.

Redescription

Head: regularly convex; frons slightly produced; prominent arrow-shaped depression between eyes; inner margins of eyes subparallel; frontoclypeus narrowed between antennal insertions, weakly emarginate distally. *Antennae:* with segment 1 longer than 2 + 3; 4–11 serrate, moderately setose.

Pronotum: wider than head, widest at base, width 2 × length; convex; disc slightly flattened; 2 weak basolateral depressions from basal $\frac{1}{3}$ to base, one on either side; anterior margin regularly bisinuate; lateral margins broadly arcuate, carinate from base to basal $\frac{1}{3}$; basal margin bisinuate, irregular, median lobe truncate; scutellum subtriangular to cordate, lateral margins arcuate.

Elytra: slightly narrower than pronotum at base, widest at apical $\frac{1}{3}$, length 1.8 × width; broadly convex; disc flattened; basal margin weakly, irregularly elevated, continuous with costate interstriae; humeri moderately elevated; striae largely parallel, converging weakly at basal $\frac{1}{3}$, then parallel to suture to apex; interstriae regularly cos-

tate, interstriae near suture nearly carinate; lateral margins subparallel and entire to apical $\frac{1}{3}$, then converging and serrate to separately rounded apices.

Underside: prosternum strongly convex, subtriangular; process finely punctate, finely setose, trilobed, with weakly developed lateral lobes, truncate median lobe; hypomera, reticulately punctate; abdomen convex, shallow longitudinal median depression on sternite 1; suture between 1 and 2 strongly indicated medially; 1 + 2 longer than 3 + 4 + 5; 5 with disc feebly depressed.

Male genitalia: as in Fig. 22.

MATERIAL EXAMINED. Holotype male (BMNH): (SOUTH AFRICA); all additional material: Cape Province: 3, (SAMS): Namaqualand, Bowesdorp, 30.09 S, 17.52 E, ix.1931, museum staff; 1, (NHBS): 10 km SW of Nieuwoudtville, 31.22 S, 19.06 E, ix.1984, W. Wittmer; 1, (NHBS): 4 km W of Clanwilliam, 32.10 S, 19.00 E, 150 m, 22.ix.1984, W. Wittmer; 1, (CLBC): Wildepaardehoek Pass, 29.56 S, 17.37 E, 380 m, *Rhus undulata*, 18.ix.1984, C. L. Bellamy, W. Wittmer; 3, (CLBC): Grootvlei, 30.12 S, 17.47 E, 500 m, 16.ix.1983, C. L. Bellamy; 3, (CLBC): Eselsfontein, 29.42 S, 17.42 E, 500 m, 16/18.ix.1985, C. L. Bellamy; 2, (NMBS): 2 km E of Kamieskroon, 30.12 S, 17.56 E, 19.ix.1985, A. v. Rensburg; 26, (CLBC, NMBS, TMPS): Farm Wiedou, 31.46 S, 18.47 E, 20–24.ix.1985, C. L. Bellamy, S. Louw, beaten from the foliage of *Rhus undulata*.

When first describing this species, Waterhouse (1887) placed it in *Aristosoma* with a question mark and discussed the differences with *A. suturale* L. & G. (*sic*). It clearly belongs in *Thomassetia* and most closely resembles *T. strandi*, but it can be distinguished from that species by characters already noted. *Rhus undulata* is the putative larval host.

Thomassetia anniae (Obenberger), **comb. nov.**, Fig. 23

Aristosoma anniae Obenberger, 1928: 206.

Diagnosis

Small, 8.1–8.7 × 3.4–3.6 mm; flattened; nitid black with slight aeneous reflection; finely punctate, appearing glabrous; underside setose.

Redescription

Head: small, almost continuous with arch of pronotum; weakly convex; frons weakly produced, round depression between eyes; inner margins of eyes subparallel; frontoclypeus strongly constricted between antennal insertions, carinate distally. *Antennae:* with segment 1 longer than 2 + 3; 3 smaller than 4; 4 subequal to 5; 4–11 serrate, moderately setose.

Pronotum: wider at apex than head, widest at base, width 16.7 × length; regularly weakly convex; nitid, impunctate, with narrow median groove; 2 extremely shallow depressions from basal $\frac{1}{3}$ to basal $\frac{2}{3}$; anterior margin bisinuate, median lobe broad, convex; lateral margins regularly arcuate, not continuous with hypomera; basal margin irregularly bisinuate, median lobe truncate; scutellum small, cordate, with broad arcuate lateral margins, apex sharply attenuate, width equal to length.

Elytra: as wide as pronotum at base, widest at apical $\frac{1}{3}$; irregularly weakly convex; basal margin weakly elevated, joined to humeri; humeri swollen; striae feebly con-

vergent in basal $\frac{1}{3}$, then parallel to suture almost to apex; costate interstriae regular, finely punctate; two shallow depressions extending from apical $\frac{1}{3}$ to apex; small, broad epipleural lobe; lateral margin sinuate, strongly carinate, subparallel to apical $\frac{1}{3}$, then converging, serrate to separately rounded apices.

Underside: prosternum subtriangular, process trilobed, lateral lobes weakly developed, median lobe broad, truncate; hypomera reticulately punctate; suture between abdominal sternites 1 and 2 strongly indicated medially; 1 + 2 longer than 3 + 4 + 5; apex of 5 acutely arcuate, weakly carinate, with 2 rows of erect setae distally.

Male genitalia: as in Fig. 23.

MATERIAL EXAMINED. Lectotype (new designation), male (TMPS): (SOUTH AFRICA) Natal, G. A. Burn; Paralectotype, male (NMPC): same data.

T. anniae can be distinguished from its congeners by the continuous arch formed by its head and pronotum, the carinate epipleura and by the male genitalia; it is not particularly close to any of the other three species.

Genus *Jakovleviola* Obenberger

Jakovleviola Obenberger, 1924: 17; Théry 1925: 225; Obenberger 1930: 422.

Jakovleviola (*sic*), Théry 1936: 233.

Type-species: *Jakovleviola oresibata* Obenberger (by original monotypy).

Diagnosis

Small, 6.0–12.0 mm in length; subcylindrical to flattened; dark cupreous; coarsely striatopunctate; underside setose.

Redescription

Head: convex; slightly produced between eyes; eyes small, not touching pronotum laterally, with inner margins weakly convergent dorsally; frontoclypeus narrow between antennal insertions; labrum bilobed distally. *Antennae*: serrate from segment 4.

Pronotum: wider than head, width greater than length; disc convex; anterior margin weakly bisinuate; lateral margins arcuate; basal margin bisinuate; scutellum subtriangular to cordate.

Elytra: broadest at apical $\frac{1}{3}$; irregularly convex; humeri elevated; costate interstriae parallel; lateral margins sinuate, carinate, subparallel to apical $\frac{1}{3}$, then converging, serrate to separately rounded apices.

Underside: prosternum strongly convex; process trilobed; suture between abdominal sternites 1 and 2 visible medially; 1 + 2 longer than 3 + 4 + 5; 5 weakly concave apically.

Legs: femora fusiform; tibiae straight, narrow; tarsal segments 1–4 with broad ventral pulvilli, 5 narrow, claws simple.

Wing venation: as in Fig. 6.

Jakovleviola differs from *Thomassetia* as noted under that genus and in the key. It differs from *Senegalisia* gen. nov. mainly in differences of the eyes, head and antennae as well as the widely disjunct known localities of these species. From *Augrabies* gen. nov., *Jakovleviola* can be immediately separated by the shape of the pronotum and the ovipositor.

Key to the species of *Jakoveviola*

- 1 Frons strongly produced between eyes; pronotum strongly convex, coarsely punctate; strongly developed humeral swellings; suture between abdominal sternites 1 and 2 strongly indicated medially . . . (Cape) *J. strandi*
 — Frons not produced between eyes; pronotum feebly convex, finely punctate; weakly developed humeral swellings; suture between abdominal sternites 1 and 2 visible medially but only feebly indicated . . . (Natal) *J. oresibata*

Jakoveviola oresibata Obenberger, Figs 6, 24

Jakoveviola oresibata Obenberger, 1924: 19; Théry 1925: 225; Obenberger 1930: 422.

Diagnosis

Small, 9,8–11,3 × 3,4–4,2 mm; flattened; black with cupreous sheen; moderately punctate; underside setose.

Redescription

Head: vertex convex; frons flattened, broad; moderately deep depression between eyes; eyes small, weakly convex, inner margins slightly convergent dorsally; frontoclypeus narrowed between antennal insertions, feebly carinate distally; labrum bilobed with erect on distal margin. *Antennae*: with segment 1 subequal to 2 + 3; 2 smaller than 3; 4–11 serrate, setose.

Pronotum: wider than head, widest at base, width 1,7 × length; regularly convex; disc weakly rounded laterally, flattened medially; anterior margin feebly bisinuate, slight emargination; lateral margins arcuate, separated from hypomera by carinae; basal margin irregularly bisinuate; scutellum cordate, length 1,5 × width.

Elytra: slightly narrower than pronotum, widest at apical $\frac{1}{3}$; disc broadly convex; basal margins irregularly elevated; humeri swollen; costate interstriae parallel, converging at basal $\frac{1}{3}$, then extending parallel to suture almost to apex; costate interstriae regular, coarsely rugosely punctate; broad basal epipleural lobes; lateral margins sinuate, subparallel and entire from base to apical $\frac{1}{3}$, then converging and serrate to separately rounded apices.

Underside: prosternum subtriangular, strongly convex, almost compressed into a broad longitudinal carina, process trilobed, median lobe truncate, lateral lobes attenuate; hypomera broad, convex; suture between abdominal sternites 1 and 2 feebly prominent medially; 1 + 2 longer than 3 + 4 + 5; 5 acutely arcuate apically, weakly carinate; entire ventral surface finely reticulately punctate, setose.

Male genitalia: as in Fig. 24.

MATERIAL EXAMINED. Holotype male (NMPC): (SOUTH AFRICA) Natal, Ifafa, 30.27 S, 30.29 E; 1 male (NMPC): Natal.

The locality label on the holotype indicates that the specimen was collected at 'Mt. Ifata', Natal; the original description confirms this. We were unable to find listing for this place name and will assume that the locality corresponds to Ifafa, at the coordinates listed.

This species can be distinguished from *J. strandi* by the characters outlined in the key, by differences in the size, by the shape of the male genitalia and by the disjunct localities in Natal and the eastern Cape respectively.

Jakovleviola strandi Obenberger, Figs 17, 25.

Jakovleviola strandi Obenberger, 1931b: 87.

Diagnosis

Small, 6,5–7,0 × 2,5–2,6 mm; subcylindrical; matt black with purple-golden sheen; coarsely punctate; underside setose.

Redescription

Head: convex; frons produced, slight between depression between eyes; eyes small, flattened, inner margins weakly converging dorsally; frontoclypeus constricted between antennal insertions, apical margin strongly carinate; labrum bilobed, with erect setae on distal margin. *Antennae*: with segment 1 equal to 2 + 3; 3 longer than 4, subequal to 5; 4–11 serrate, moderately setose.

Pronotum: at apex as wide as head, width 1,9 × length, widest at basal $\frac{1}{3}$; irregularly convex; 2 shallow to deep depressions basolaterally, one on either side; anterior margin weakly bisinuate; lateral margins strongly arcuate up to basal $\frac{1}{3}$ then subparallel to base; basal margin bisinuate, median lobe broad, obtuse; scutellum cordate to subtriangular, length 1,5 × width.

Elytra: slightly wider than pronotum at base, widest at apical $\frac{1}{3}$; disc regularly convex; basal margin irregularly elevated; humeri swollen; striae converging at basal $\frac{1}{3}$; costate interstriae irregular; densely rugosely punctate; epipleural lobes broad; lateral margins carinate, subparallel to apical $\frac{1}{3}$, then converging abruptly to separately arcuately rounded, serrate apices.

Underside: prosternum convex, rugose, weakly setose; process trilobed, median lobe truncate, lateral lobes small, attenuate; hypomera broad; abdominal sternites strongly convex; suture between 1 and 2 strongly indicated medially; apical margin of 5 weakly carinate; abdomen densely setose.

Male genitalia: as in Fig. 25.

MATERIAL EXAMINED. Lectotype (new designation), male (BMNH): (SOUTH AFRICA) Cape Province, Cape Town, Milnerton, 33.53 S, 18.29 E, i.1926, R. E. Turner; 6 male (5, BMNH, 1, TMPS), 1 female (BMNH) paralectotypes: same data as lectotype; 1 male paralectotype (NMPC): Cape Province, Cape Town, 33.55 S, 18.25 E; 3 specimens (BMNH): Moselbaay, 1939, R. E. Turner; 1 ex. (TMPS): Bainskloof, 8.iii.1985, J. G. Theron.

This species can be separated from *J. oresibata* as indicated in the key and as discussed under that species previously.

Genus *Senegalisia* Bellamy, **gen. nov.**

Type-species: *Anthaxia semireticulata* Chevrolat.

Diagnosis

Small; elongate, flattened; head and pronotum alveolate; elytra striate.

Description

Head: slightly convex between eyes; eyes moderately convex, widely separated, inner margins very slightly converging; frons feebly convex; antennal insertions of moderate size; separated by slightly more than their distance from the eyes; frontoclypeus broadly emarginate; anteclypeus just visible; labrum with length subequal to

width, emarginate and moderately covered with stiff recumbent setae distally; mandibles recurved, coarsely punctate basally, lateroapically attenuate, truncate distally. *Antennae*: with segment 1 narrow, elongate; longer than 2 + 3 + 4; 2 subglobose, shorter than 3; 3 slightly expanded distally; 4 subserrate; 5-10 roundly serrate; 11 oblong; 3-11 sparsely setose.

Pronotum: wider than long, widest at middle; anterior margin feebly convex; basal margin feebly concave, with narrow transverse impunctate band; lateral margins arcuate, marginal carina entire from base to apical margin; basal angles obtuse; scutellum triangular, longer than wide.

Elytra: wider at base than pronotal base; lateral margins slightly widening to apical $\frac{1}{2}$ before narrowing to separately acute apices, serrate from basal $\frac{1}{3}$; disc very feebly convex, striate, rugose; pygidium and laterodorsal aspect of distal abdominal sternites partially visible from above.

Underside: prosternum with disc flattened, steeply declivous laterally; process with lateral lobes posterior to procoxae, apex narrowly truncate; metacoxal plate with distal margin concave; abdominal sternites with suture between 1 and 2 finely impressed, visible for entire length; suture between 2 and 3 straight; between 3, 4 and 5 slightly concave, lateroapical angles slightly acute; sternite 5 with lateroapical margin subtruncate.

Legs: femora fusiform; tibiae slightly arcuate, longer than femora, armed with two short distal spines; metatibiae with moderately dense setal brush on dorsal surface; tarsi with segment 1 as long as 2 + 3; 1-4 each with ventral pulvillus, increasing in width distally; 5 with claws swollen basally, widely separated apically.

Wing venation: without closed anal cell, most similar to Fig. 6.

Senegalisia is feminine in gender and named for the country of origin. It comes nearest to *Jakouleviola* but can be separated by differences of the eyes, head and pronotum and the widely separated localities of the respective species. The single species, *S. semireticulata*, was placed in *Thomassetia* by Théry (1928) (under an erroneous specific epithet), but we believe it to show stronger relationship to species of both *Jakouleviola* and *Augrabies*, gen. nov. than to any species of *Thomassetia*. Obenberger (1930: 568) listed this species under "Species generum incertae sedis" with a question mark as to the generic placement. We feel that the above generic description in addition to the previous descriptions of the synonyms listed below are adequate to define the species and it will not be redescribed herein.

Senegalisia semireticulata (Chevrolat), **comb. nov.** Figs 18, 21.

Anthaxia semireticulata Chevrolat, 1837: 75; Théry 1936: 234.

Anilara semireticulata, Saunders 1871: 57; Kerremans 1892: 130; 1903: 170; Obenberger 1930: 568.

Anthaxia rotundicollis Gory & Laporte, 1839: 6; Saunders 1871: 57; Kerremans 1892: 130; 1903: 170; Obenberger 1930: 568; Théry 1936: 234.

Anthaxia subrotundicollis Chevrolat (*sic*), Théry 1928: 184.

Thomassetia semireticulata, Théry 1936: 234.

MATERIAL EXAMINED. Holotype of *Anthaxia semireticulata*, male (BMNH): Senegal.

We were not able to examine the type of *A. rotundicollis* and thus will accept the junior synonymy discussed and used by several previous authors.

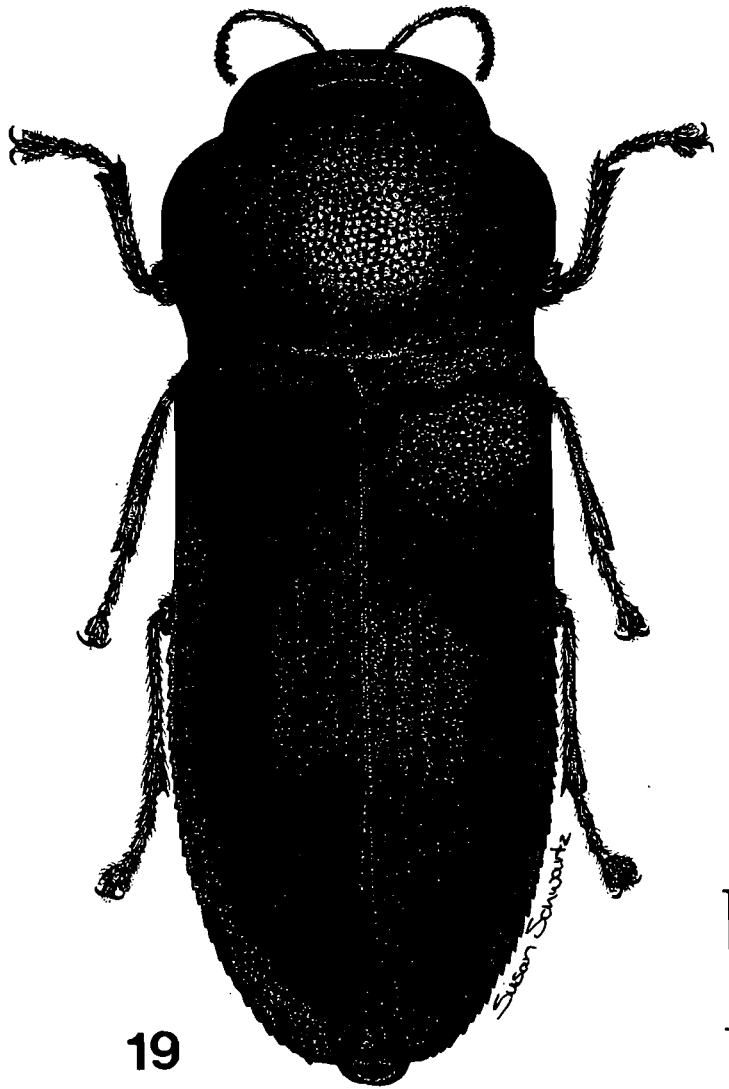


Fig. 19, dorsal habitus, *Augrabius schotiaphaga*, gen. et sp. nov. (scale bar = 1,0 mm).

Genus *Augrabies* Bellamy, **gen. nov.**Type-species: *Augrabies schotiaphaga*, sp. nov.

Diagnosis

Small; elongate, flattened; metallic cupreous or aeneous; surface variously coarsely punctate, with feeble longitudinal striae; fresh specimens moderately covered with white pulverulence.

Description

Head: convexly produced between eyes; eyes small, widely separated, not prominent but continuous with arch of head, inner margins subparallel, slightly diverging dorsally; frontovertex with small calloused area between eyes; frons with slight depression between antennae; antennal insertions large, more widely separated than their distance from each eye; frontoclypeus with lunate emargination; genac slightly obliquely depressed beneath eyes for reception of basal antennal segments; anteclypeus partially visible; labrum bilobed, setose distally; mandibles robust, recurved, acuminate apically; maxillary palpi elongate, segment 2 shorter than either 1 or 3; 3 truncate apically. *Antennae*: short, reaching only to middle of pronotum when laid along side; sparsely setose; segment 1 elongate, feebly geniculate, subequal to 2 + 3 + 4; 2 slightly shorter than 3, slightly more globose; 3 elongate, shorter than 4; 4–10 roundly serrate, becoming shorter distally; 11 oblong.

Pronotum: wider than long, widest in apical $\frac{1}{2}$; anterior margin with medial lobe strongly convex; basal margin bisinuate; lateral margins sinuate basally, broadly arcuately lobed in apical $\frac{2}{3}$, marginal carinae entire, ventrally deflexed; laterobasal angles obtuse; disc feebly convex in anterior $\frac{1}{2}$, more flattened in basal $\frac{1}{2}$, with slight depression on either side in laterobasal $\frac{1}{2}$; scutellum longer than wide, acuminate distally.

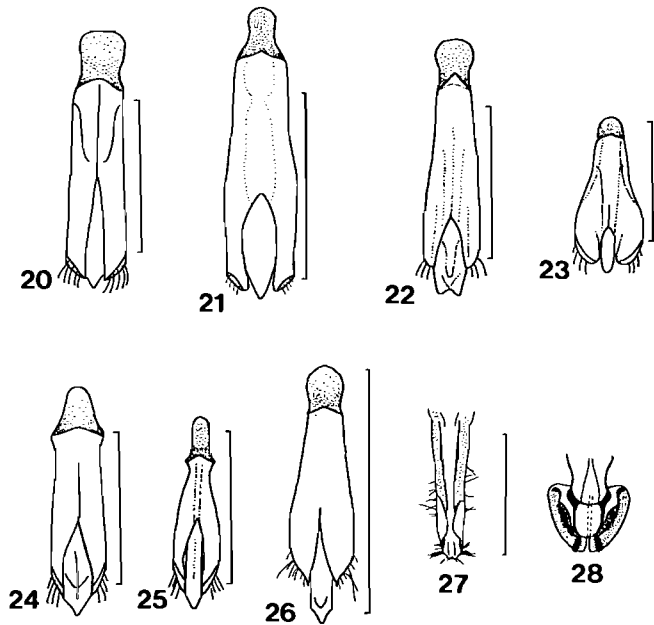
Elytra: narrower than pronotum, widening opposite humeri and gradually widening to apical $\frac{1}{3}$ before narrowing to separately subtruncate apices; disc feebly convex, costulate, with broad, shallow pre-lateral depression from opposite basal $\frac{1}{3}$, parallel to margin; lateral margins serrate from before middle to apex; epipleura separated from disc by carinae from base to just before apex; pygidium partially visible from above.

Underside: prosternum with anterior margin slightly elevated, impunctate, then slightly depressed before disc; disc flattened, laterally declivous; process with slight broadly obtuse lateral lobes, narrowing to subtruncate apex; abdominal sternites with suture between 1 and 2 finely impressed, visible for entire width; sutures between 2, 3, 4 and 5 straight medially, lateroapical angles acute; 5 with margin broadly rounded.

Legs: femora subfusiform; tibiae longer than femora, slightly arcuate, with two short spines distally; tarsi with segment 1 as long as 2 + 3; 2–4 subequal in length; 1–4 each with progressively longer ventral pulvilli; 5 with claws swollen basally, apices widely separated.

Wing venation: as in Fig. 5.

This genus is named for the type-locality and feminine in gender. It would seem to be most closely related to *Jakovleviola* but *Augrabies* differs importantly in the widely lobed anterior portion of the pronotum, the seemingly atrophied connections between the anal veins and cubitus on the wings and with its very different ovipositor (Fig. 28).



Figs 20-26, male genitalia, dorsal view, Fig. 20, *Aristosoma suturale*, Fig. 21, *Senegalisia semireticulata*, Fig. 22, *Thomassetia crassa*, Fig. 23, *T. anniae*, Fig. 24, *Jakovleviola oresibata*, Fig. 25, *J. strandi*, Fig. 26, *Augrabies schotiaphaga*; Figs 27, 28, ovipositor, dorsal view, Fig. 27, *J. strandi*, Fig. 28, *A. schotiaphaga* (scale bars = 1,0 mm).

***Augrabies schotiaphaga* Bellamy, sp. nov., Figs 5, 12, 19, 26, 28.**

Description

MALE. 5,8-6,3 × 2,0-2,3 mm; generally cupreous, sometimes with disc of elytra aeneous; head and pronotum alveolate; elytra coarsely punctate, costulate; underside more coarsely alveolate on hypomera and prosternum; less coarsely punctate on rest of ventral surface.

Head: with dorsal triangular callus between eyes.

Pronotum: 1,4 × as wide as long.

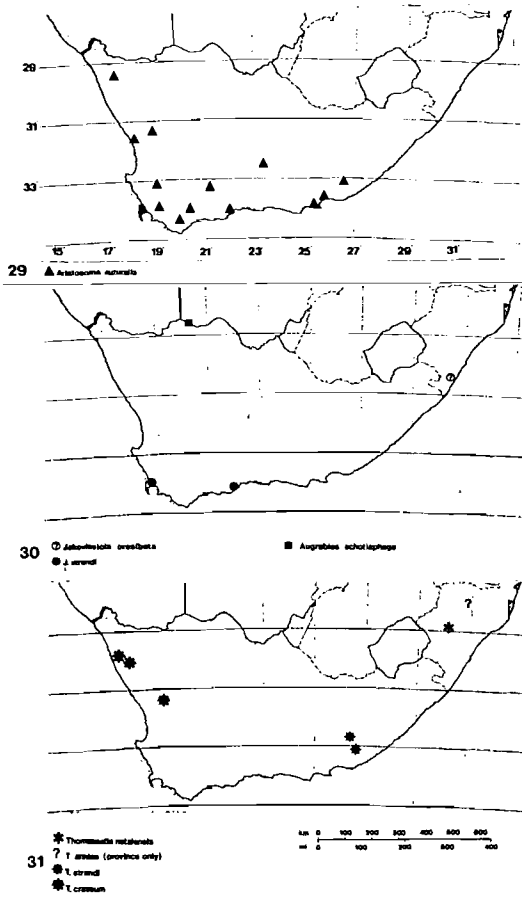
Genitalia: as in Fig. 26.

FEMALE. 7,1-8,0 × 2,6-3,0 mm; head, pronotum and disc of elytra aeneocupreous; margin of elytra cupreous to roseocupreous; ovipositor as in Fig. 28.

MATERIAL EXAMINED. Holotype male (NMBS), allotype female (TMPS), 22 paratypes, 6 ♂♂, 4 ♀♀: SOUTH AFRICA: CAPE, Augrabies National Park, 28.36 S, 20.19 E, 650 m, 12.ix.1985, C. L. Bellamy, A. V. Evans, beating foliage of *Schotia afra* var. *angustifolia* (Fabaceae: Caesalpinioideae); 9 ♂♂, 3 ♀♀ same data except,

31.viii.1986, C. L. Bellamy, D. S. Verity. Paratypes in AFNP, BMNH, CLBC, DSV, MTCJ, NCPS, NMBS, NMPC and TMPS.

This very interesting species was first discovered during the time that the initial part of this study was under way. The occurrence of a pulverulent coating is not surprising considering the arid environment of the type-locality; it is an apparent protective covering observed by us in other desert buprestids, both in Africa and western North America.



Figs 29–31, distribution maps, Fig. 29, *Aristosoma suturale*, Fig. 30, *Jakouleviola* and *Augrabies*, Fig. 31, *Thomassetia*.

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REFERENCES

- BELLAMY, C. L. 1986a. The higher classification of Australian Buprestidae with the description of a new genus and species (Coleoptera). *Australian Journal of Zoology* **34** (4): 583-600.
- 1986b. A new species of *Anthaxia* (*Agrilaxia*) Kerremans from Natal (Coleoptera, Buprestidae). *Journal of the Entomological Society of Southern Africa* **49** (2): 193-196.
- BÍLÝ, S. 1974. A revision of the genus *Coomaniella* Bourgoin of the Coomaniellini tribe nov. (Coleoptera, Buprestidae). *Acta Entomologica Bohemoslovaca* **71** (1): 30-41.
- 1982. The Buprestidae (Coleoptera) of Fennoscandia and Denmark. *Fauna Entomologica Scandinavica* **10**: 1-109.
- CHEVROLAT, A. 1837. Centurie de Buprestides. *Revue Entomologique* **5**: 41-111.
- COBOS, A. 1956. Cuarta nota sobre Buprestidos (Ins. Coleoptera) neotropicales. Sobre la posición sistemática del género *Trigonogenium* Gem. et Harold y diversas descripciones de especies nuevas. *Archivos del Instituto de Acclimatación* **5**: 60-95.
- 1980. Ensayo sobre los géneros de la subfamilia Polycestinae (Coleoptera, Buprestidae) (Parte I). *EOS, Revista Española de Entomología* **54** (1979): 15-94.
- GOOD, H. G. 1925. Wing venation of the Buprestidae. *Annals of the Entomological Society of America* **18**: 251-276.
- GORY, H. L. and F. L. de LAPORTE. 1839. *Histoire naturelle et iconographie des insectes coléoptères*. Monographie des buprestides. Livr. 25-36, Paris. [genera paged separately]
- HERBST, J. F. W. 1801. *Natursystem aller bekannten in- und ausländischen Insecten, als eine Fortsetzung der von Buffonschen Naturgeschichte, Der Käfer*, vol. 9. Berlin.
- HOLM, E. and C. L. BELLAMY. 1985. Buprestoidea. In: C. H. Scholtz and E. Holm (eds). *Insects of Southern Africa*, Butterworths, Durban.
- KERREMANS, C. 1892. Catalogue synonymique des buprestides décrits de 1758 a 1890. *Mémoires de la Société Entomologique de Belgique* **1**: 1-304.
- 1893. Essai de groupement des Buprestides. *Annales de la Société Entomologique de Belgique* **37**: 94-122.
- 1903. Coleoptera, fam. Buprestides. In.: P. Wytzman (ed.). *Genera Insectorum*, Fascicles 12b; 12c; 12d, Verteneuil & Desmet, Bruxelles.
- NELSON, G. H. 1981. A new tribe, genus and species of North American Buprestidae with consideration of subfamilial and tribal categories. *The Coleopterists Bulletin* **35** (4): 431-450.
- OBENBERGER, J. 1920. Revision du genre *Bubastes* Lap., Gory (Col. Buprestidae). *Annales de la Société Entomologique de France* **89**: 89-108.

- 1924. Deuxième série de nouveaux genres de Buprestides. *Acta Entomologica Musei Nationalis Pragae Cechoslovakensis* **2**: 7–44.
- 1928. Opuscula Buprestologica I. Beiträge zur Kenntnis der Buprestiden (Col.). *Archiv für Naturgeschichte* **92** (A), Heft, 9–11 (1926): 1–350.
- 1930. Buprestidae 2. In: W. Junk and S. Schenkling (eds). *Coleopterorum Catalogus*, part 111: 213–568.
- 1931a. Studien über die aethiopischen Buprestiden I. *Folia Zoologica et Hydrobiologica* **2**: 175–201.
- 1931b. Studien über die aethiopischen Buprestiden II. *Folia Zoologica et Hydrobiologica* **3**: 84–127.
- 1936. Eine Festschrift zum sechzigjährigen Jubiläum meines Freundes Univ.-Prof. Dr Embrik Strand. *Festschrift zum 60. Geburtstag von Professor Dr Embrik Strand* **1**: 97–145.
- 1941. De novis Africae Buprestidorum speciebus (Col.). *Acta Societatis Entomologicae Bohemiae* **38**: 7–8.
- OLIVIER, A. G. 1790a. *Entomologie, ou histoire naturelle des insectes, avec leurs caractères génériques et spécifiques, leur description, leur synonymie, et leur figure enluminée*. Coléoptères, vol. 2, Paris. [genera paged separately]
- 1790b. *Encyclopédie méthodique, Histoire naturelle, Insectes*, vol. 5, (pt. 1).
- SAUNDERS, E. 1871. *Catalogus Buprestidarum synonymicus et systematicus*. Janson, London.
- SCHAEFER, L. 1949. Les buprestides de France. *Miscellanea Entomologica Supplement*.
- SCHÖNHERR, C. J. 1817. *Synonymia insectorum, oder: Versuch einer Synonymie aller bisher bekannten Insecten; nach Fabricii Systema Eleutheratorum geordnet*, vol. 1, pt. 3.
- THÉRY, A. 1925. Observations sur le genre nouveaux publiés par M. Obenberger dans 'Sbornik' 1924. *Bulletin de la Société Entomologique de France* 1925: 223–229.
- 1928. Buprestides nouveaux d'Afrique. *Bulletin de la Société des Science Naturelles du Maroc* **8**: 182–194.
- 1930a. Note sur le genre *Bubastoides* Kerr. *Bulletin de la Société Entomologique de France* 1930: 29–32.
- 1930b. Description d'un genre nouveau de Buprestides de la sous-tribu des Anthaxiae. *Bulletin de la Société Entomologique de France* 1930: 263–265.
- 1931. Notes sur la genre *Aristosoma*. *Bulletin de la Société Entomologique de France* **8**: 109–112.
- 1936. Buprestides nouveaux d'Afrique (cinquieme notes). *Bulletin de la Société de Science Naturelle du Maroc* **16**: 217–238.
- THOMSON, J. 1879. *Typi Buprestidum Musei Thomsoniani*, Appendix 1a, Paris.
- THUNBERG, C. P. 1787. *Museum naturalium academiae Upsaliensis*. Cujus partem quartam, pp. 43–58, Upsaliae.
- 1789. *Dissertatio entomologica novas insectorum species sistens*, part 5, pp. 85–106.
- 1827. Coleoptera capensis antennis filiformibus enumerata et nova descripta. *Nova Acta Regiae Societatis Scientiarum Upsaliensis* **9**: 1–52.
- TOYAMA, M. 1986. The buprestid genus *Chalcophorella* Kerremans and its related genera (Coleoptera, Buprestidae). *Entomological Papers presented to Yoshihiko Kurosawa on the Occasion of his Retirement*, March 20, 1986. Coleopterists' Association of Japan, Tokyo, p. 188–193.
- WATERHOUSE, C. O. 1887. Descriptions of new Coleoptera in the British Museum. *Annals and Magazine of Natural History* **19**: 289–295.