



# Natural History Museum

Title	Descriptions of two new Australian genera of Anthicidae (Insecta: Coleoptera)
Item Type	Journal Article
Authors	Telnov, Dmitry
Citation	Telnov D. 2018. Descriptions of two new Australian genera of Anthicidae (Insecta: Coleoptera). <i>Baltic J. Coleopterol.</i> , 18(2): 199 - 218.
Publisher	Baltijas Koleopterologijas Instituts/Baltic Institute of Coleopterology
Journal	Baltic Journal of Coleopterology
Rights	openAccess
Download date	2026-05-12 06:29:40
Link to Item	<a href="http://hdl.handle.net/10141/622570">http://hdl.handle.net/10141/622570</a>

## Descriptions of two new Australian genera of Anthicidae (Insecta: Coleoptera)

Dmitry Telnov

Telnov D. 2018. Descriptions of two new Australian genera of Anthicidae (Insecta: Coleoptera). *Baltic J. Coleopterol.*, 18(2): 199 - 218.

Two new Australian Anthicidae genera, *Australosteropes* gen. nov. (Steropinae) and *Sahulanthicus* gen. nov. (Anthicinae: Anthicini) are described, diagnosed, and illustrated. Some critical morphological characters of these new groups and the subfamilies to which they belong are discussed. New combinations are made for the following 18 taxa: *Australosteropes davidsonae* (Armstrong, 1948) comb. nov. (from *Macratria* Newman, 1838), *Sahulanthicus abundans* (Lea, 1922) comb. nov., *S. apicalis* (King, 1869) comb. nov., *S. baudinensis* (Champion, 1895) comb. nov., *S. brevicollis* (King, 1869) comb. nov., *S. cavifrons* (Champion, 1895) comb. nov., *S. crassipes* (LaFerté-Sénéctère, 1849) comb. nov., *S. crassus* (King, 1869) comb. nov., *S. discoideus* (Champion, 1895) comb. nov., *S. immaculatus* (King, 1869) comb. nov., *S. inglorius* (Lea, 1896) comb. nov., *S. laticollis* (MacLeay, 1872) comb. nov., *S. luridus* (King, 1869) comb. nov., *S. monostigma* (Champion, 1895) comb. nov., *S. obliquefasciatus* (King, 1869) comb. nov., *S. permutatus* (Pic, 1897) comb. nov., *S. scutellatus* (Lea, 1896) comb. nov. (all from *Microhoria* Chevrolat, 1877), and *S. dilatipennis* (Pic, 1900) comb. nov. (from *Anthicus* Paykull, 1798). Lectotype is designated for *Sahulanthicus dilatipennis* (Pic, 1900).

Key words: Anthicinae, Macratriinae, Steropinae, taxonomy, morphology, Australia, Papuan Region.

Dmitry Telnov (ORCID: 0000-0003-3412-0089). Department of Life Sciences, Natural History Museum, London SW7 5BD, United Kingdom & Institute of Biology, University of Latvia, Miera iela 3, Salaspils, LV-2169, Latvia. E-mail: anthicus@gmail.com

### INTRODUCTION

Anthicidae (Insecta: Coleoptera), ant-like flower beetles, is a rather large group of Tenebrionoidea with a cosmopolitan distribution (Chandler 2010) and over 3500 extant species (Telnov 2008) in eight subfamilies (Chandler 2010). Two groups of uncertain placements until recently placed in the Anthicidae, are the Afreminae and Lagrioidinae (Lawrence et al. 2010). The Australian fauna is characterized by a high proportion of continent-

endemic genus-rank taxa (Uhmann 2007). Despite an attempt of a review by Uhmann (2007), Australian anthicid taxa are particularly insufficiently studied and in need of a more comprehensive and critical revision.

Having examined Australian and Papuan specimens from various collections (see Materials and methods), several distinctive species of Anthicini (Anthicinae) and Steropinae were recognized. These species are substantially different from the type species of the genera to

which they were hitherto assigned (*Anthicus* Paykull, 1798, *Macratrìa* Newman, 1838, and *Microhoria* Chevrolat, 1877). Thus, I have decided to establish new genera for these species.

My goal is to characterize the two new genera, and assign currently known species to them.

Eighteen new combinations are made. Lectotype is designated for *Sahulanthicus dilatipennis* (Pic, 1900).

## MATERIALS AND METHODS

The nomenclature of the Anthicidae generally follows Chandler (2010). All taxa are listed alphabetically since a phylogenetic arrangement is currently impossible.

Specimens were studied using a Leica® S6D stereomicroscope and photographed using a Canon® EOS 77D or EOS 1200D DSLR camera attached to this stereomicroscope. Multiple photographs were taken at different focal planes and reassembled using Combine ZP software.

All label text is reproduced verbatim, with no corrections or additions. Labels are separated by slashes if more than one label is present for the same specimen. The author's comments are enclosed in square brackets.

### Acronyms of the material stores:

BMNH – The Natural History Museum (British Museum, Natural History), London (United Kingdom);

DTC – Dmitry Telnov collection, Rīga (Latvia);  
MSNG – Museo Civico di Storia Naturale “Giacomo Doria”, Genova (Italy).

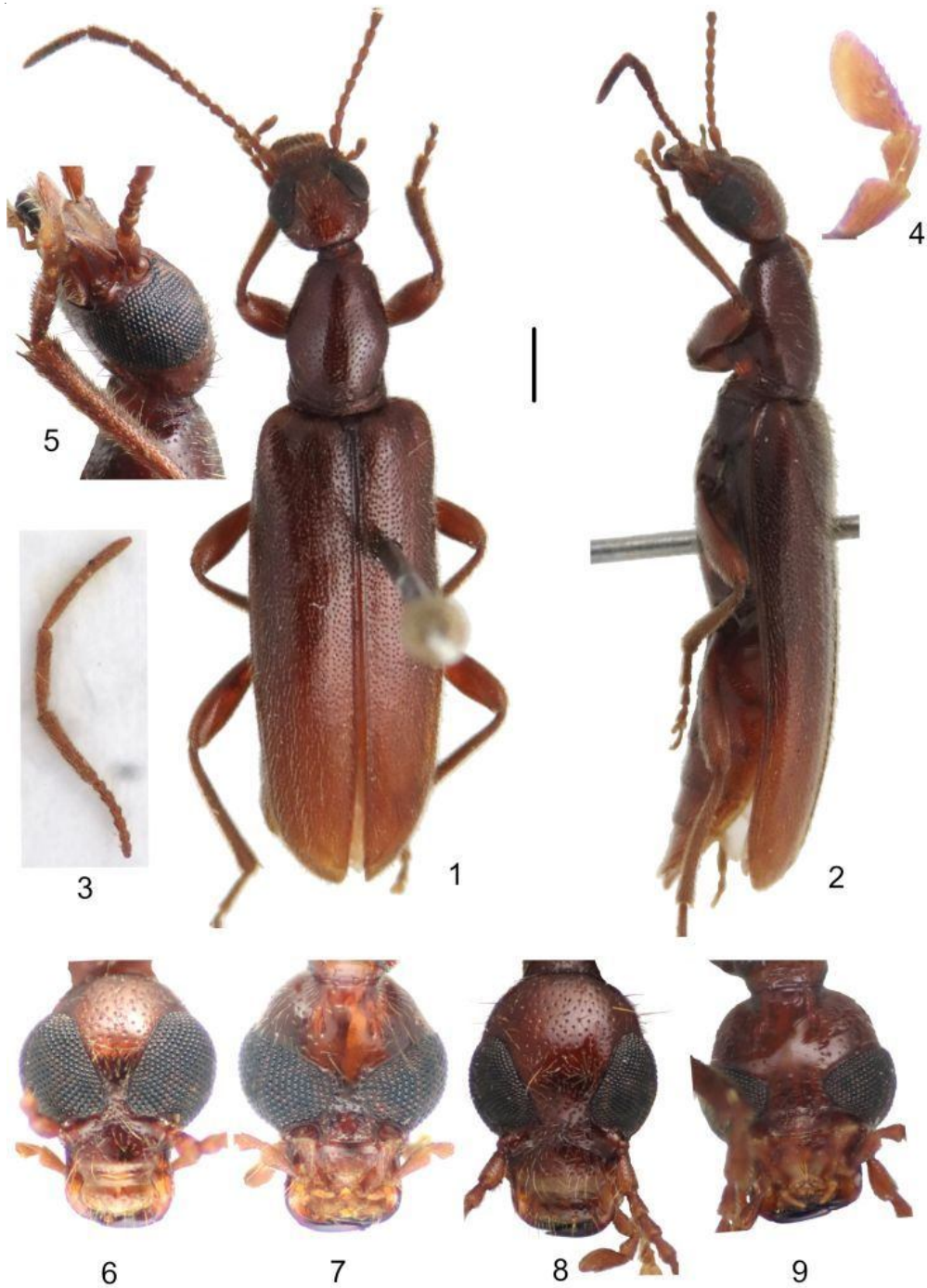
## SYSTEMATIC PART

*Australosteropes* gen. nov. (Figs 1-18)

<http://zoobank.org/B67F2877-F208-4BF6-B953-3CBCD2F131FD>

**Type species.** *Macratrìa davidsonae* Armstrong, 1948: 296

**Description of adult.** With general characters of Coleoptera: Polyphaga: Tenebrionoidea (sensu Lawrence 2016; McKenna 2016). Very large anthicids, total body length 9-12 mm. Head longer than wide. Frontoclypeal suture absent, vague impression at place of it. Labrum short, transverse. Compound eyes nearly entire (slightly notched at the insertions of antennae), very large and narrowly separated (partly occupying also ventral part of head), intraocular distance nearly the same on head dorsum and venter (Figs 5, 8-9), eyes with distinct short interfacetal setae. Antennal insertions exposed and clearly visible in dorsal view, antennae inserted on sides of frons between base of mandibles and compound eyes. Antennae 11-segmented, three terminal antennomeres greatly elongated (Figs 1 & 3). Neck long and narrow (0.26-0.3 of head width in *A. davidsonae*), well-differentiated from head (Fig. 1), its connection with head situated slightly ventrally as head base somewhat angularly produced posterodorsally (Fig. 13). Mandibles subsymmetrical, mandible with outer margin almost straight (Figs 6-9). Mandible apice slightly emarginate (scoop-like) on mesal margin. Maxillary palpomere 2 cylindrical and slightly widened distally, palpomere 3 short, moderately widened distally (Fig. 4). Terminal maxillary palpomere scalene-triangular (Fig. 4). Pronotum elongate, narrowed apically, widest postmedially and at base, barely narrower than head with eyes. Apically with thin flanged rim (collar) ventrally, not flanged dorsally (Figs 11 & 13). Pronotal base dorsally with a thin complete basal bead and a broad, well-defined antebasal sulcus originating at lateral foveae (Figs 13 & 16). Thin basal bead directed anteroventrally on lateral margins to margin of hypomeron above procoxae. Lateral pronotal fovea conspicuous, glabrous, forming deep and narrow, internally closed incision, with somewhat raised lower margin and ends shortly in a broad pit (Figs 13 & 16). The fovea is horizontal in lateral view, short and not extending anteroventrally at lateral margin towards



Figs. 1-9. *Australosteropes davidsonae* (Armstrong, 1948), specimens from Millaa Millaa, N Queensland, Australia. 1 – Female, habitus, dorsal view; 2 – ditto, lateral view; 3 – Male, left antenna; 4 – ditto, left maxillary palp; 5 – Female, head, lateral view; 6 – Male, head, dorsal view; 7 – ditto, ventral view; 8 – Female, head, dorsal view; 9 – ditto, ventral view. Scale bar for figures 1-2: 1 mm. Figures 3-9 not reproduced to the same scale.

procoxae. Procoxal cavities broadly open internally and externally. Procoxae contiguous, elongate fusiform, truncate basally and with slightly convex anterior margin (Fig. 12). Outer margins prolonged slightly, exposing trochantins. Intercoxal process of proventrite absent, sharp subcircular-shaped concave median carina partly separating procoxal cavities (Fig. 11). Area beneath procoxae partly sclerotized. Mesoventrite triangular, its lateral margins slightly sinuous, and its truncate apex apically contacting a narrow heart-like sclerite (possible, rest for a median carina of the proventrite) which narrowly separates the procoxal rests at the anterior margin of the mesothorax (Figs 14-16). Procoxal rests well-developed, transverse, rather deeply impressed, simple, narrowly separated (Figs 14 - 15). Intercoxal process of mesoventrite fully separating mesocoxae, touching long and slightly broader median protrusion of metaventrite (Figs 14 - 16). Mesepisterna moderately impressed, rugose, separated by transverse groove from the semi-circular apicolateral portions (situated lateral to the procoxal rests; Figs 14 - 15). Mesepimera flattened, not fused to mesanepisterna (narrow flattened suture present in-between) and somewhat impressed at the meeting point with metaventrite (Figs 14 - 16). Mesoscutellum rounded apically. Metanepisterna elongate, densely punctured, with anterior margin narrowly bead and vaguely C-like impressed (Figs 15 - 16). Metaventrite large, deeply angulate excavated medially at meeting point with 1<sup>st</sup> abdominal ventrite and with metathoracic discrimen half of median length of metaventrite (Fig. 17). Metathoracic wings fully developed. Elytra strongly elongate, without modifications, lacking omoplates or transverse impression. Elytral apices entire. Sutural stria not present. Subhumeral longitudinal stria not present. Epipleura almost complete, strongly narrowing in apical part. Elytral setation consists of short suberect setae intermixed with sparse longer erect tactile setae. Five free abdominal ventrites (Fig. 18). Abdominal ventrite I simple, without fovea or sulci behind metacoxae, with well-developed

and complete anterior margin. Process of metacoxae narrow, longitudinally medially impressed, narrowly rounded apically and delicately bead (Fig. 17). Legs long, femora clavate. Paired tibial terminal spurs moderately long, not spinulose or dentate. Penultimate tarsomeres broadly triangular with short distal notch. Tarsal claws equal, not appendiculate, each provided with a short basal spine. Male genitalia with phallobase and parameres separate. Parameres separate apically. Penis free, elongate.

**Sexual dimorphism.** Males generally smaller and more slender than females (total body length 8.8 mm vs 12.3 mm). Minimal intraocular distance is significantly smaller in males than in females both dorsally and ventrally (Figs 6-9). Male basal protarsomere more strongly widened than that of female. Male last visible ventrite emarginate distally, entire in female. Female antennomeres 2-8 shorter and stouter than male, three terminal antennomeres comparatively longer in male.

**Immature stages.** Unknown.

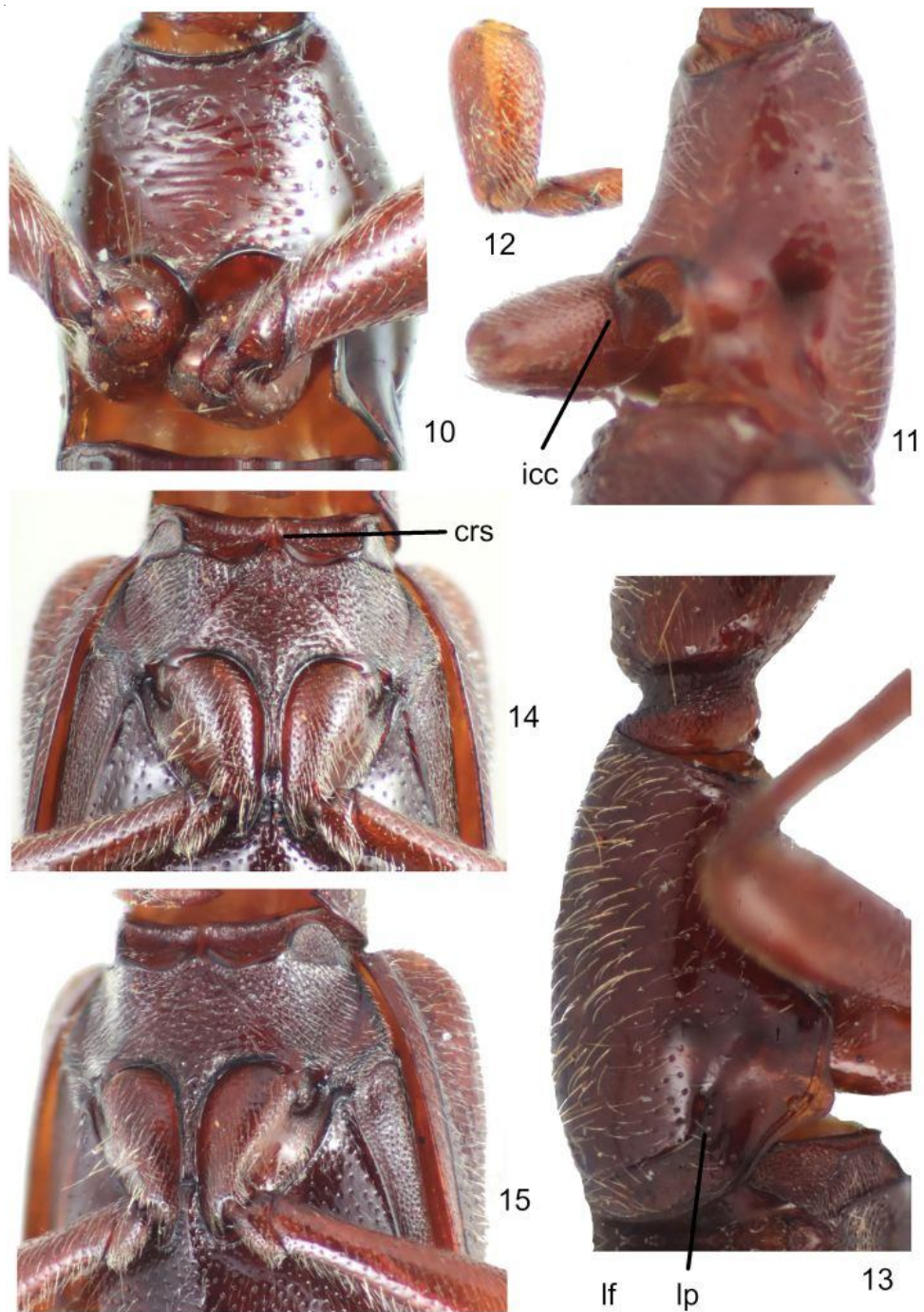
**Biology.** The life history of *Australosteropes* gen. nov. is essentially unknown.

**Distribution.** Australian Region: Queensland to northern New South Wales.

**Derivatio nominis.** Composed from Australia and *Steropes*; referring to the Australian distribution and placement within Steropinae.

**Diversity.** Hitherto only one species is assigned to this genus - *Australosteropes davidsonae* (Armstrong, 1948), consider new combination below.

**Relationships.** *Australosteropes* gen. nov. belongs to the subfamily Steropinae Jacquelin du Val, 1863 of the Anthicidae primarily due to the combination of the following characters: procoxal cavities internally and externally open (Fig. 11 & 21), presence of lateral pronotal fovea (Figs 22 & 27), presence of narrow sclerite (possible, rest for a median carina of the proventrite) separating the procoxal rests (Fig. 26), scalene-triangular terminal maxillary palpomere (Fig. 24), relatively narrow neck (0.26 - 0.3 of head width), mesepimera not fused to mesanepisterna (Fig. 26), narrowly separated metacoxae (Fig. 25), claws basally spinose (as in *Steropes*), male genitalia with



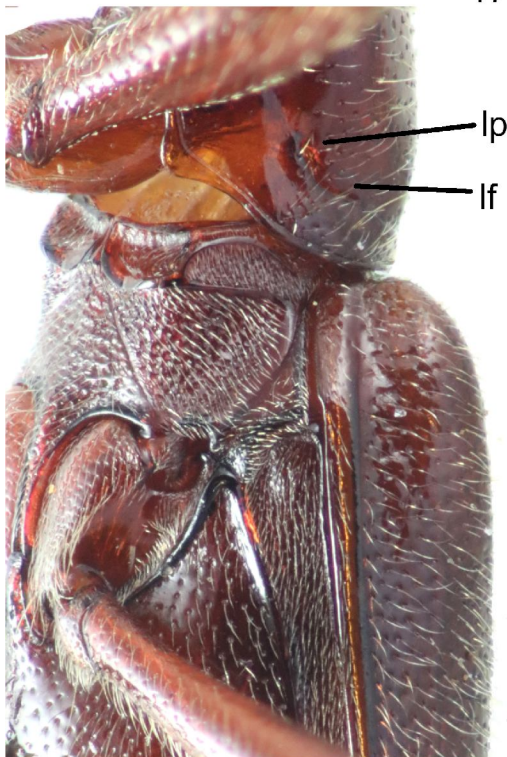
Figures 10-15. *Australosteropes davidsonae* (Armstrong, 1948), specimens from Millaa Millaa, N Queensland, Australia. 10 – Female, prothorax; 11 – Male, right procoxa and intercoxal carina (icc), lateral view; 12 – ditto, left procoxa; 13 – Female, pronotum, lateral view (lf – lateral fovea; lp – lateral pit); 14 – Female, mesothorax (crs – procoxal restsseparatingsclerite); 15 – ditto, ventro-lateral view. Not reproduced to the same scale.



17



18

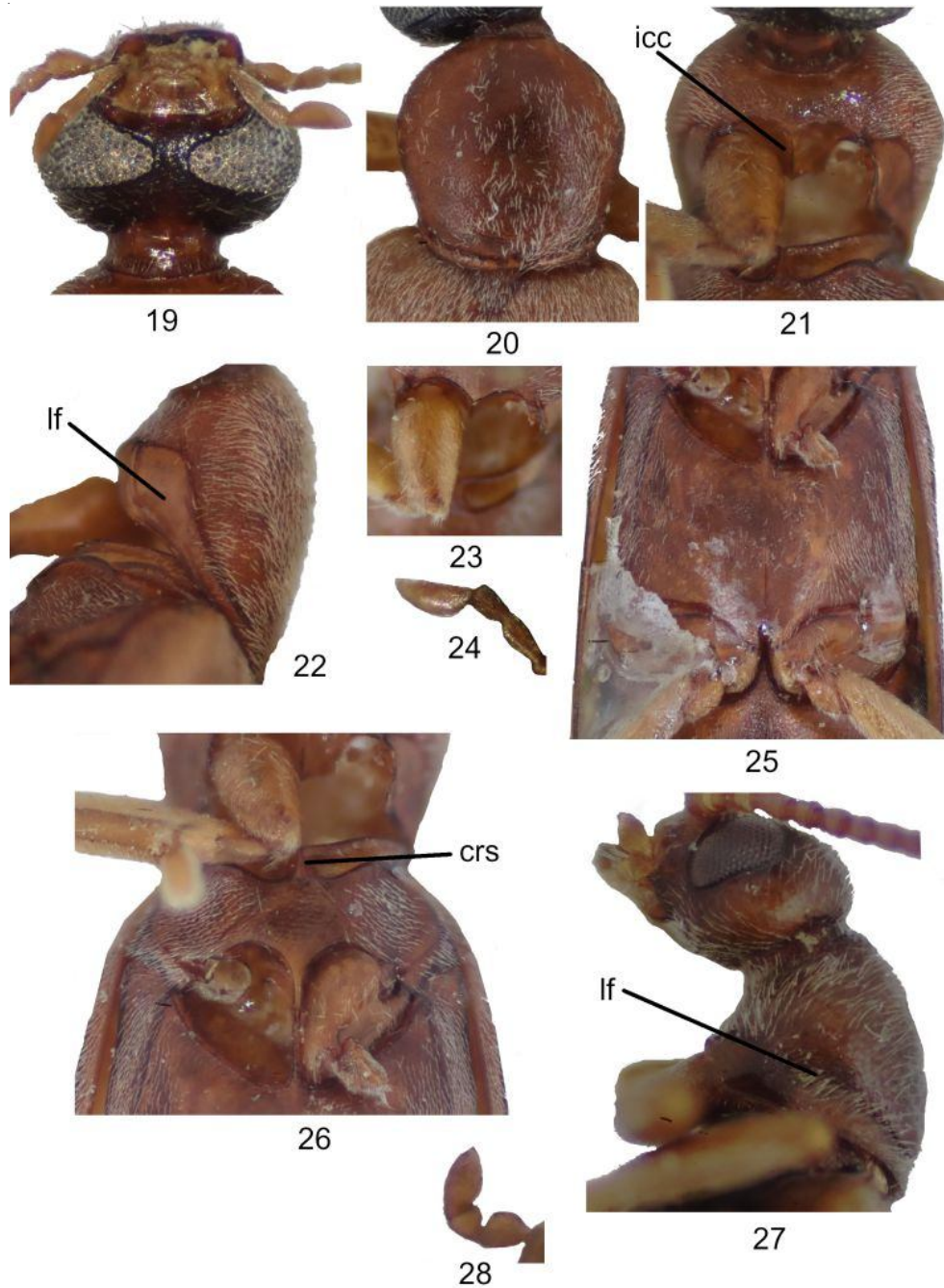


16

Figures 16-18. *Australosteropes davidsonae* (Armstrong, 1948), specimen from Millaa Millaa, N Queensland, Australia. 16 – Female, mesothorax, lateral view (lf – lateral fovea; lp – lateral pit); 17 – ditto, metathorax; 18 – ditto, abdominal ventrites. Not reproduced to the same scale.

phallobase and parameres separate and in three terminal antennomeres being greatly elongated (similar modifications are not uncommon in Papuan *Macratria* Newman, 1838 (see Telnov 2011)). It appears to be close to *Anisotria* Young, 1984<sup>1</sup> and *Steropes* Stevens, 1806 but specifically different primarily in the absence of an anterior rim of the pronotum in dorsal view (present in *Steropes*; Figs 20-21), elongate and anteriorly constricted pronotum which is widest postmedially and at base (pronotum ovoid or subcampanulate both in *Steropes* and *Anisotria* and not constricted anteriorly but widest medially; Figs 20-22 & 27), absence of frontoclypeal suture

<sup>1</sup>*Anisotria* was initially described in Pyrochroidae (Young 1984), and moved to Anthicidae by Lawrence et al. (1999) and later listed both in Pyrochroidae (Young 2002; Young & Pollock 2010) and Anthicidae (Chandler 2010). Here I follow Lawrence et al. (1999) and Chandler (2010) and consider *Anisotria* to be a member of Anthicidae: Steropinae.



Figures 19-28. Features of Steropinae. 19 – *Steropes caspius* Steven, 1806 male specimen from S Russia, Astrakhan surroundings, head, ventral view; 20 – ditto, pronotum, dorsal view; 21 – ditto, prothorax (icc – intercoxal carina); 22 – ditto, pronotum, lateral view (lf – lateral fovea); 23 – ditto, right procoxa; 24 – ditto, left maxillary palp; 25 – ditto, metathorax; 26 – ditto, mesothorax (crs – procoxal rests separating sclerite); 27 – *Anisotria shooki* Young, 1984 male paratype from Idaho, U.S.A., forebody, lateral view; 28 – ditto, left maxillary palp. Not reproduced to the same scale.

(present in *Anisotria*, absent in *Steropes*), maxillary palpomeres 2-3 slightly widened distally somewhat similar to those of *Anisotria* (Fig. 28) (palpomere 2 cylindrical, 3 with slight angular mesal lobe in *Steropes*; Fig. 24), metacoxae narrowly but distinctly in part separated by intercoxal process as in *Steropes* (Figs 21 & 23) (metacoxae rather broadly separated in *Anisotria*), body dorsally with sparse and suberect pubescence (dorsal pubescence appressed and dense in *Steropes*), male elytra without modifications in elytral vestiture (male elytra in basal third with a spot of very short and dense pubescence in *Steropes*) and metathoracic wings present (reduced in *Anisotria*, fully developed in *Steropes*).

*Australosteropes* gen. nov. appears visually similar to Macratriinae LeConte, 1862 (genus *Macratria* Newman, 1838 in particular), but differs from members of this subfamily in externally and internally open procoxal cavities (procoxal cavities open externally and closed internally in *Macratria*; Fig. 32), broader neck (0.26-0.3 of head width in *Australosteropes* gen. nov., 0.25 or less of head width in Macratriinae; Figs 29-30), pronotum dorsally without anterior collar (pronotum with entire anterior collar in Macratriinae; Figs 32-33 & 36), mesosternum not completely fused with mesepisterna, narrow suture present in-between (fused in most *Macratria*; Figs 37-41), presence of heart-like sclerite separating procoxal rests (absent in Macratriinae, procoxal rests contiguous when available; Figs 37-41), elongate and truncate fusiform procoxae (procoxae shorter and more ovoid laterally in Macratriinae; Fig. 31), absence of longitudinal subhumeral stria on each elytra (present in most *Macratria*; Fig. 40), scalene-triangular terminal maxillary palpomere (securiform to strongly securiform in *Macratria*) and palpomeres 2-3 widened distally (palpomeres 2-3 with strong angular mesal lobes in *Macratria*; Fig. 30), non-appendiculate but basally spinose claws (claws cleft in most *Macratria*), elytra confusedly punctate (elytra at least with tracks of rows of punctures in *Macratria* with confusedly punctate elytra in five species only. However, *Australosteropes* gen. nov. has prominent an-

terior process of metaventrite between mesocoxae, similar as in Macratriinae (Figs 37-41) and lateral fovea present on pronotum but is much shorter than in Macratriinae (where it extends anteroventrally at lateral margin towards procoxae towards a pit, which is situated just dorsal of procoxae; Figs 34-36) and not obscured by setation.

**Remarks.** The generic features discussed above (see Description and Relationships) supplement the definition of Steropinae sensu Abdullah (1966; 1969) and Chandler (2010). Therefore, Steropinae is in need of redefinition, and the position of *Australosteropes* gen. nov. within the Steropinae needs to be clarified (it might be reasonable to define a new tribe for this genus in the future).

One new combination is made:

***Australosteropes davidsonae* (Armstrong, 1948) comb. nov.** (Figs 1-18)

*Macratria davidsonae* Armstrong, 1948: 296.

Studied material. 1 male & 1 female BMNH: Mt Fisher S.F. Milla Milla [sic!], N. Qld 10 Nov. 1979 A. Walford-Huggins / ex collection A. Walford-Huggins / E. Gowing-Scopes collection BMNH{E} 2005-4.

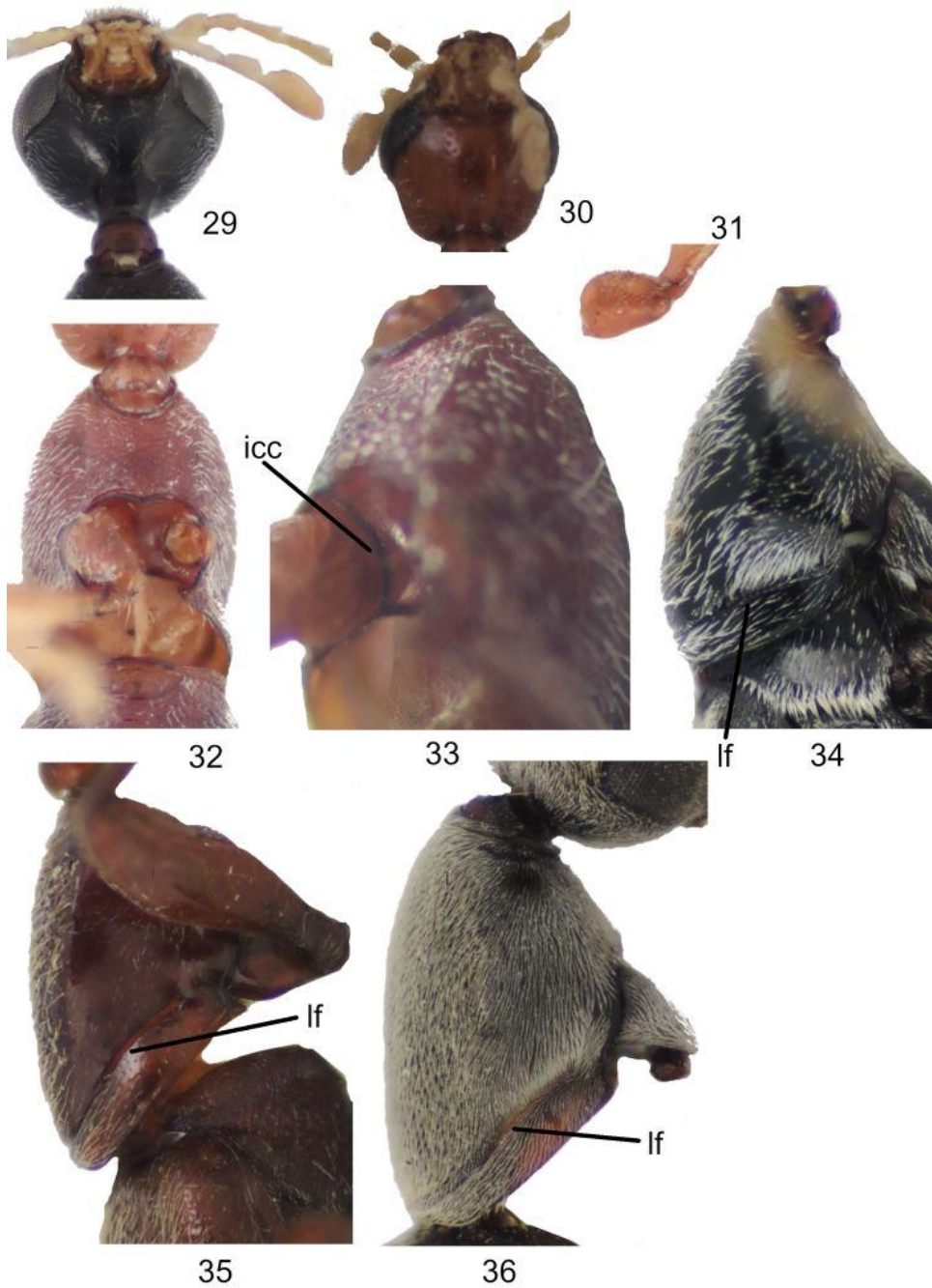
First record from northern Queensland, previously known only from northern New South Wales. Correct name for the settlement is Millaa Millaa.

***Sahulanthicus* gen. nov.** (Figs 44-60)

<http://zoobank.org/B5D15417-09F9-46AB-A3A1-7B1B5B4D2C0D>

**Type species.** *Anthicus crassipes* LaFerté-Sénectère, 1849

**Description of adult.** With general characters of Coleoptera: Polyphaga: Tenebrionoidea (sensu Lawrence 2016; McKenna 2016). Generally small anthicids with total body length 2.1-3.7 mm and rather uniform in external



Figures 29-36. Features of Macratriinae. 29 – *Macratria subguttata* Pascoe, 1860 male from N Halmahera, Indonesia, head, ventral view; 30 – ditto, *M. nilgirica* Champion, 1916 male syntype from Nilgiri Hills, India; 31 – ditto, left procoxa; 32 – ditto, prothorax; 33 – ditto, procoxal cavity and intercoxal carina; 34 – *M. subguttata*, pronotum, lateral view (lf – lateral fovea); 35 – ditto, *M. rubiginosa* Champion, 1916 male from Penatang, Sumatra, Indonesia; 36 – ditto, *Macrartia* sp. from Leon, Nicaragua. Not reproduced to the same scale.

appearance. Body smooth, covered with dense appressed hairs intermixed with sparse long suberect to erect tactile setae. Head triangular to almost circular. Frontoclypeal suture present, delicate. Clypeus transverse. Labrum trapezoid, rather long and broad. Compound eyes entire, ovoid or circular (Figs 46-47), with sparse and extremely inconspicuous interfacetal setae (barely visible at x80 magnification). Antennal insertions exposed and clearly visible in dorsal view, antennae inserted on sides of frons between base of mandibles and compound eyes. Antennae 11-segmented, filiform. Neck short, narrow, glabrous (about 0.3-0.35 of head width), well-differentiated from head, its connection with head situated slightly ventrally as head base somewhat angularly produced posterodorsally. Mandible with evenly curved outer margin. Mandible apices simple (not bidentate), cutting edge uneven, with inconspicuous rounded denticle medially, provided with 4-5 very long setae on the outer margin close to base (Fig. 52). Maxillary palpomeres 2-3 bearing strong mesal lobes which are provided with a bunch of long setae (Fig. 53), or cylindrical and somewhat widened distally. Terminal maxillary palpomere scalene-triangular or securiform. Pronotum cordate - broad apically strongly narrowing basally, widest in anterior half, slightly broader than the head with eyes (Figs 44-47). Apically with slightly flanged and complete rim (collar). Pronotal base with complete, rather deep, well-defined and densely setose antebasal sulcus originating at lateral foveae. Thin antebasal sulcus directed anteroventrally on lateral margins to margin of hypomerion above procoxae. Lateral pronotal fovea forming a conspicuous incision, deep and broad in median part but narrowing apically (Figs 49-51). Foveae filled with long, dense whitish pubescence. Procoxal cavities broadly open externally, closed internally. Procoxae contiguous, short and broad, externally with a few conspicuous very long median setae (Fig. 55), anterior margin of procoxa slightly convex. On the dorsal surface of coxa, at point of articulation is a dorsally deeply excavated process of irregular shape (Figs 56-57). Intercoxal process of proventrite absent,

sharp median carina separating procoxal cavities (Fig. 54). Area beneath procoxae sclerotized. Mesoventrite subcircular, its lateral margins broadly rounded together with raised apical margin, impressed anteriorly, its anterior bead expands into a broadly triangular projection which contacts and separates the procoxal rests (Fig. 58). Procoxal rests well-developed, transverse, simple, deeply impressed and densely setose, separated (Fig. 58). Intercoxal process of mesoventrite fully separating mesocoxae, delicately bordered, rounded apically and bearing a fringe of long whitish setae, covering short and broad median protrusion of metaventrite. Mesepisterna slightly impressed, sparsely punctured, provided with short whitish setae on anterior margin and with much longer and denser setae on lateral margin almost completely hiding mesepimera (Fig. 59). Mesepimera impressed, narrow, entirely obscured by very dense short whitish pubescence. Mesocoxae subovate, externally provided with a few very long median setae. Mesoscutellum pointed or rounded apically. Metanepisterna delicately punctured, strongly widened in anterior part (Figs 58-59). Metaventrite large, smooth and convex, deeply angulate excavated medially at meeting point with 1<sup>st</sup> abdominal ventrite and with very short metathoracic discrimen. Metacoxae transverse, with a conspicuous median pit (Fig. 60). Metathoracic wings fully developed. Elytra ovoid or broadly cylindrical with maximum width around median third, without modifications, lacking omoplates or transverse impression. Elytral apices entire. Sutural stria narrowly developed in apical part of elytron. Epipleura widened in basal third (Fig. 59), strongly narrowing towards midlength of elytra and disappearing far before apices. Five free abdominal ventrites. Abdominal ventrite I (morphological sternite III) simple, without fovea or sulci behind metacoxae but with pubescence-lined invagination of long appressed setation just posterior to metacoxae in external half of its length (Fig. 60), with well-developed and complete anterior margin. Process of metacoxae rather broad and short. Legs



Figures 37-43. Features of Macratriinae and *Sapintus* Casey, 1895 (Anthicinae: Anthicini). 37 – *Macratria laszlowagneri* Telnov, 2011 male paratype from Central Seram, Indonesia, meso- & metathorax, ventral view; 38 – ditto, ventro-lateral view; 39 – *M. nilgirica* Champion, 1916 male syntype from Nilgiri Hills, India, meso- & metathorax, ventral view; 40 – ditto, ventro-lateral view; 41 – *M. princeps* Champion, 1895 syntype from Panzos, Guatemala, meso- & metathorax; 42 – *Sapintus gracilicornis* (Pic, 1895) female from S Halmahera, Indonesia, mesothorax; 43 – ditto, meso- & metathorax. Not reproduced to the same scale.

moderately long, metafemora clavate in most species, pro- and mesofemora not or slightly clavate. Paired tibial terminal spurs long, unequal in length (inner spur slightly longer), not spinulose or dentate. Penultimate tarsomeres deeply bilobate. Tarsal claws equal, not appendiculate. Male genitalia of Anthicini type, with distinct phallobase and penis with parameres fused to form a tegmen.

**Sexual dimorphism.** Male last visible ventrite emarginate distally, entire in female. Male metatibiae with modifications. Males comparatively smaller and slender than females.

**Immature stages.** Unknown.

**Biology.** The life history of members of *Sahulanthicus* gen. nov. is essentially unknown. Based on personal communication of collectors, specimens have been collected in semidry forests, sand dunes and savannahs to rainforests, mostly by using light traps or in plant debris.

**Distribution.** Australian and Papuan regions: Australia, Tasmania, Torres Strait Islands, eastern New Guinea (Papuan Peninsula).

**Derivatio nominis.** Composed from Sahul and *Anthicus*; referring to occurrences on the Sahul Shelf, and its relationship with Anthicini Anthicinae. Gender masculine.

**Diversity.** 16 Australian and 1 Papuan species, as well as several undescribed species from the region.

**Relationships.** *Sahulanthicus* gen. nov. belongs to the subfamily Anthicinae Latreille, 1819 tribe Anthicini Latreille, 1819 of the Anthicidae, primarily due to the combination of the following characters: frontoclypeal suture present, clypeus transverse, anterior margins of eyes rounded to briefly flattened, neck narrow (about 0.25 of head width or less), pronotum with anterior collar of equal width dorsally and ventrally, antebasal sulcus of pronotum distinct and thin, procoxal cavities open externally but closed internally, mesoventrite triangular to transverse and with distinct suture marking lines of fusion with mesanepisterna, pronotal horn not present, metacoxae moderately to widely separated by intercoxal projection the margins of which diverge at about 60-90°, elytral setation not scale-

like, tarsal claws simple, male genitalia with free penis.

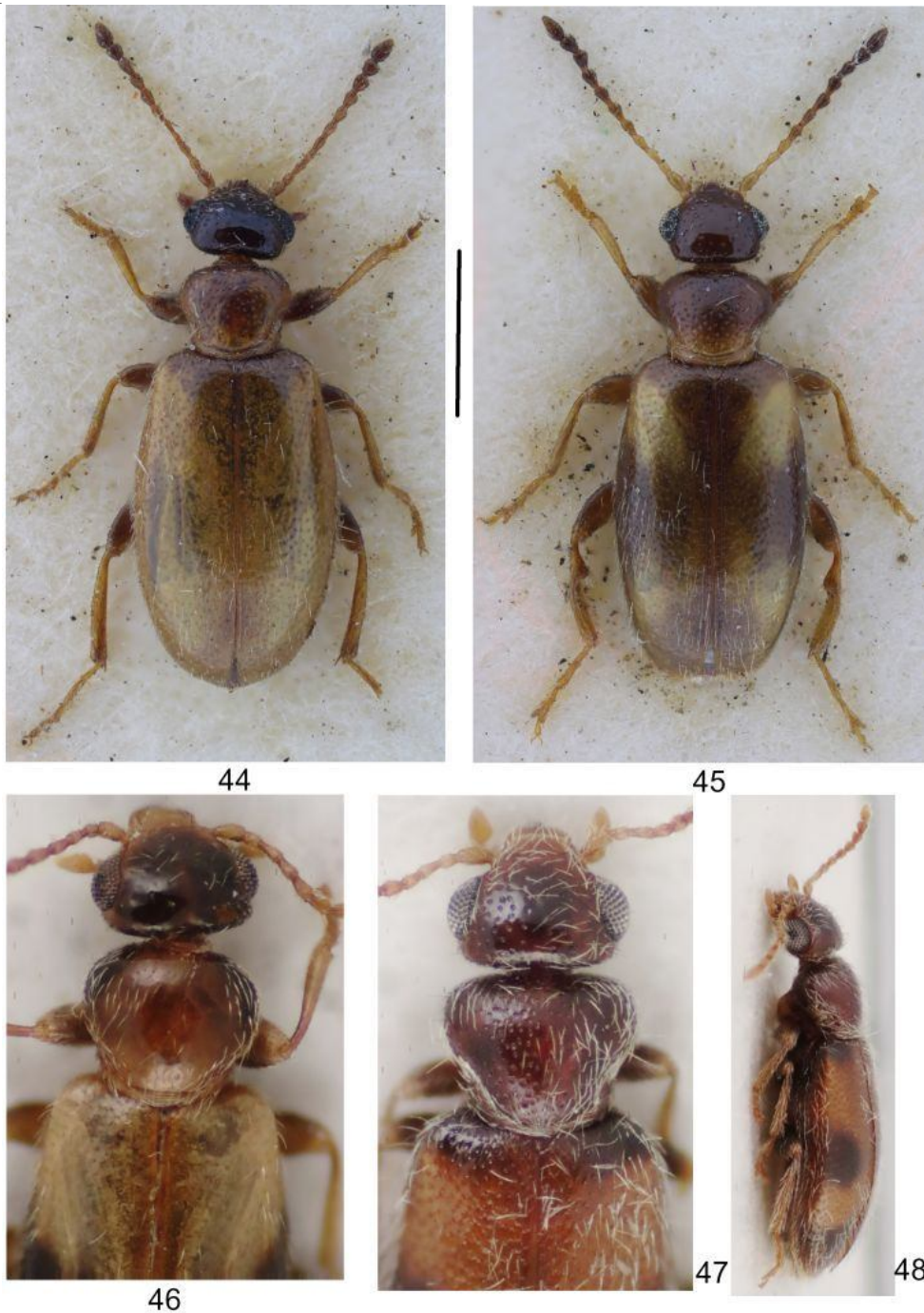
This new genus primarily resembles *Sapintus* Casey, 1895 due to the posterolateral margins of the mesepisterna being covered with a thick fringe of setae overlying the obliquely impressed mesepimera (Figs 42-43), the presence of a median pit on the metacoxa and the presence of a pubescence-lined invagination on abdominal ventrite I posterior to metacoxae. Both *Sahulanthicus* gen. nov. and *Sapintus* share modified procoxa with a basal process (as in Figs 56-57). However, *Sahulanthicus* gen. nov. differs from it primarily in non-bidentate mandible apices (bidentate in *Sapintus* I've had opportunity to study), the presence of a deep densely setose lateral fovea on pronotum (fovea less conspicuous, narrower in *Sapintus*) which does not ends in a deep pit (in *Sapintus*, a large or small deep pit is present on lateral margin of pronotum dorsal of procoxa), more uniform elytral pubescence (elytral pubescence double in most *Sapintus*, supplemented with long suberect setae from large elytral punctures, with a few exceptions), epipleura widened in basal half (epipleura narrow in *Sapintus*, narrowing gradually towards elytral apices), pro- and mesocoxae externally with a very long setae (not present in *Sapintus*), mesepimera entirely hidden under short whitish pubescence (pubescence of mesepimera less conspicuous in *Sapintus*).

Seventeen new combinations are made (see below). I am not familiar with some of these taxa and therefore cannot comment on their validity. With one exception, I follow Uhmman (2007) for those species for which I have not yet studied type material.

***Sahulanthicus abundans* (Lea, 1922) comb. nov.**

*Anthicus abundans* Lea, 1922: 500. Type locality: Australia, Cairns District, Townsville, Bundaberg.

*Microhoria abundans*: Uhmman (2007: 62 key, 64 new combination & redescription, 100 figures).



Figures 44-48. Features of *Sahulanthicus* gen. nov. 44 – *S. crassus* (King, 1869) female from Australia (locality unknown), habitus, dorsal view; 45 – ditto, male; 46 – *Sahulanthicus* sp. from Curtin Springs, Northern Territory, Australia, forebody, dorsal view; 47 – ditto, *Sahulanthicus* sp. from Cairns, Queensland, Australia; 48 – ditto, habitus, lateral view. Scale bar for figures 44-45: 1 mm. Figures 46-48 not reproduced to the same scale.

***Sahulanthicus apicalis* (King, 1869) comb. nov.**

*Anthicus apicalis* King, 1869: 16. Type locality: Australia, Port Denison.

*Anthicus apicalis*: Masters (1886: 366 checklist); Pic (1911: 33 checklist); Lea (1922: 471 checklist).

*Microhoria apicalis*: Uhmman (2007: 62 key, 64 new combination & redescription, 100 figure).

***Sahulanthicus baudinensis* (Champion, 1895) comb. nov.**

*Anthicus baudinensis* Champion, 1895: 260. Type locality: Australia, Baudin Island.

*Anthicus baudinensis*: Pic (1911: 35 checklist); Lea (1922: 471 checklist).

*Microhoria baudinensis*: Uhmman (2007: 62 key, 65 new combination & redescription, 101 figures).

Studied type material: 2 syntypes BMNH, Baudin I. N.W. Australia. J. J Walker [printed] / Type [printed, label circular, red framed] / Fremantle. 91—49. [printed] / *Anthicus baudinensis* Ch. [handwritten] / G.C.Champion Coll. B.M.1927-409. [printed].

Other material studied: 2 males, 1 female, BMNH, Baudin Put. / 1153 / *Anthicus baudinensis* Champ.

***Sahulanthicus brevicollis* (King, 1869) comb. nov.**

*Anthicus brevicollis* King, 1869: 20. Type locality: Australia, Randwick.

*Anthicus brevicollis*: Masters (1886: 366 checklist); Pic (1911: 38 checklist); Lea (1902: 17 new record; 1922: 471 checklist);

*Microhoria brevicollis*: Uhmman (2000: 152 new combination & records; 2007: 62 key, 68 redescription & 102 figure).

Studied material: 2 males, 1 female, BMNH, *A. brevicollis* King ex Lea N.S.W. / Australia. Ex A.M.Lea / G.C.Champion Coll. B.M.1927-409.

***Sahulanthicus cavifrons* (Champion, 1895) comb. nov.**

*Anthicus cavifrons* Champion, 1895: 263. Type locality: Australia, Fremantle.

*Anthicus cavifrons*: Pic (1911: 40 checklist); Lea (1922: 471 checklist).

*Microhoria cavifrons*: Uhmman (2007: 62 key, 65 new combination & redescription, 101 figure).

Studied type material: holotype BMNH, 1776 [printed] / Type [printed, label circular, red framed] / Fremantle. 91—49. [printed] / *Anthicus cavifrons* type Ch. [handwritten] / G.C.Champion Coll. B.M.1927-409. [printed].

***Sahulanthicus crassipes* (LaFerté-Sénéctère, 1849) comb. nov.**

*Anthicus crassipes* LaFerté-Sénéctère, 1849a: 16. Type locality: Nova Hollandia.

*Anthicus crassipes* LaFerté-Sénéctère, 1849b: 171 second description; King (1869: 19 supplementary description); Masters (1886: 367 checklist); Lea (1907: 167 new records; 1922: 471 checklist & new records, 474 supplementary description); Pic (1911: 41 checklist; 1912: 283 new record).

*Microhoria crassipes*: Uhmman (2007: 62 key, 65 new combination, redescription & records, 101 figure).

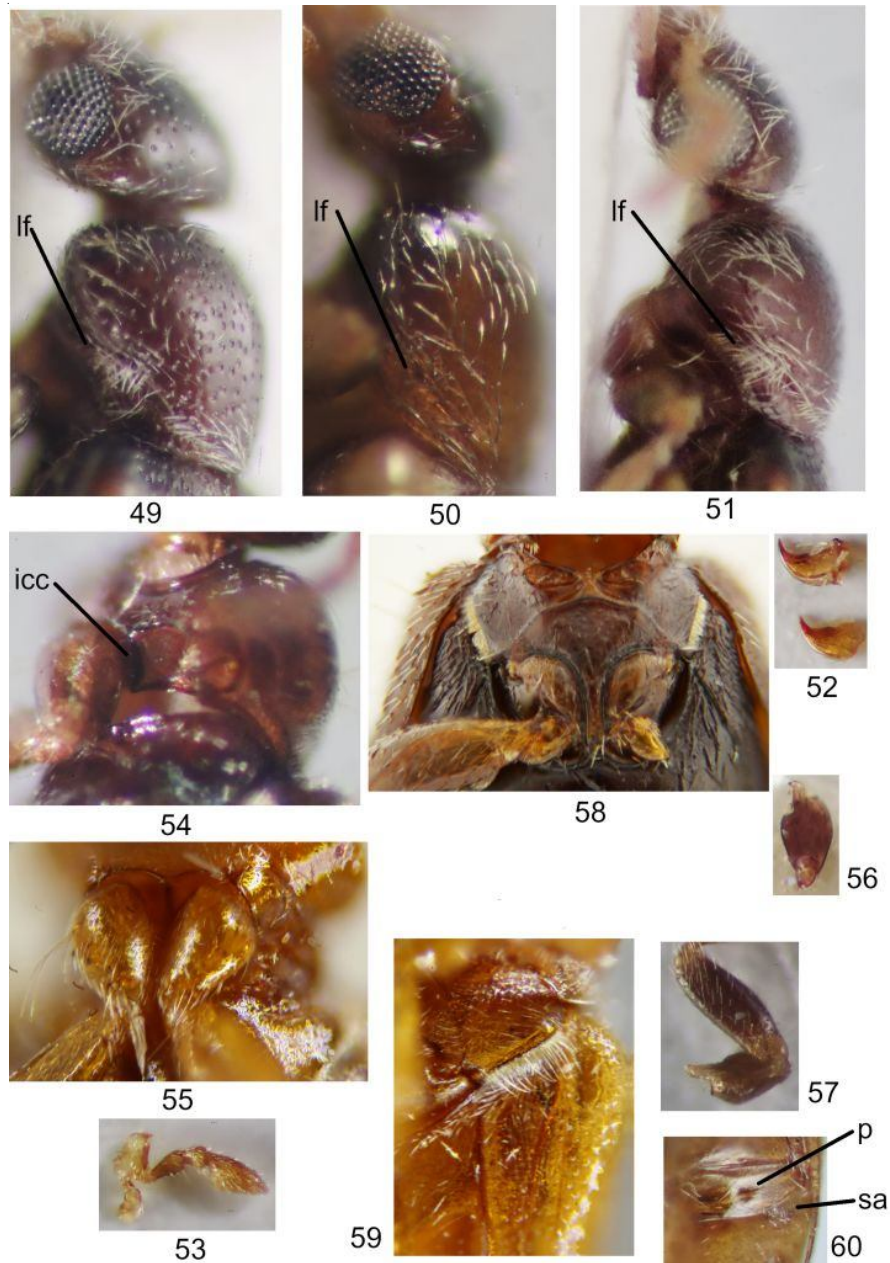
Studied material: 1 male, 1 female, BMNH, *Anthicus crassipes* Laf Id. by A. M. Lea Tasmania / Brit. Mus. 1924—156.

***Sahulanthicus crassus* (King, 1869) comb. nov.**

= *Anthicus tasmanicus* Champion, 1895  
*Anthicus crassus* King, 1869: 21. Type locality: Australia, Gawler.

*Anthicus crassus*: Masters (1886: 367 checklist); Pic (1911: 41 checklist); Lea (1922: 471 checklist & 475 supplementary description & new records);

*Microhoria crassus*: Uhmman (2000: 152 new combination & record; 2007, as *M. crassa*: 62 key, 63 redescription, 100 & 102 figures).



Figures 49-60. Features of *Sahulanthicus* gen. nov. 49 – *Sahulanthicus* sp. from Cairns, Queensland, Australia, forebody, dorso-lateral view (lf – lateral fovea); 50 – *Sahulanthicus* sp. from Curtin Springs, Northern Territory, Australia, forebody, lateral view; 51 – *Sahulanthicus* sp. from Cairns, Queensland, Australia, forebody, lateral view; 52 – *S. crassus* (King, 1869) mandibles; 53 – ditto, left maxillary palp; 54 – *Sahulanthicus* sp. from Cairns, Queensland, Australia, prothorax (icc – intercoxal carina); 55 – *S. crassus*, procoxae (note extraordinary long setae); 56 – ditto, procoxa (note basal process); 57 – ditto, procoxa and profemora; 58 – *Sahulanthicus* sp. from Cairns, Queensland, Australia, mesothorax; 59 – *S. crassus*, mesanepisternum, ventro-lateral view (note long setae at posterolateral margin and shorter and denser setae covering mesepimeron); 60 – ditto, left metacoxa (note median pit (p) and setose area of the abdominal ventrite (sa)). Not reproduced to the same scale.

*Anthicus tasmanicus* Champion, 1895: 259. Type locality: Tasmania, Hobart.  
*Anthicus tasmanicus*: Lea (1902: 17; 1922: 471 checklist & 475 new synonymy); Uhmman (2007: 46 key, 48 redescription).

Studied type material: male holotype BMNH, Hobart, Tasmania. J. J. Walker [printed] / Type [printed, label circular, red framed] / *Anthicus tasmanicus* male type Ch. [handwritten] / G.C.Champion Coll. B.M.1927-409. [printed]. Other material studied: 4 males & 3 females BMNH, Murrax Bridge S. Aus.: Lea / S. Australia. Brit. Mus. 1924—156. / *Anthicus crassus* King Id. by A. M. Lea very variable; 1 male, 3 females BMNH, Brit. Mus. 1977-126 [no other data].

***Sahulanthicus dilatipennis* (Pic, 1900) comb. nov.**

*Anthicus dilatipennis* Pic, 1900: 608. Type locality: British New Guinea, Kapakapa.  
*Anthicus dilatipennis*: Pic (1911: 44 checklist).

Studied type material: Lecotypus MSNG [here-with designated], N.GUINEA MER. KAPAKAPA *Mag. Giugno.1891* L.Loria [printed, black framed] / Typus [printed, text red, red framed] / *dilatipennis* Pic [handwritten, black framed] / *A. dilatipennis* Pic n sp [handwritten] / Mus. Civ. Genova [printed, label orange]; 5 paralectotypes MSNG, N.GUINEA MER. KAPAKAPA *Mag. Giugno.1891* L.Loria [printed, black framed]; 1 paralectotypus MSNG, N. GUINEA MER. KAPAKAPA *Mag. Giugno.1891* L.Loria [printed, black framed] / *Anthicus dilatipennis* Pic Cotyp. [handwritten].

***Sahulanthicus discoideus* (Champion, 1895) comb. nov.**

*Anthicus discoideus* Champion, 1895: 259. Type locality: Australia, Cossack.  
*Anthicus discoideus*: Pic (1911: 44 checklist); Lea (1922: 471 checklist).  
*Microhoria discoidea*: Uhmman (2007: 62 key, 66 new combination & redescription, 101 figure).

Studied type material: 2 syntypes BMNH, Cossack I. W. Australia. J. J. Walker [printed] / Type [printed, label circular, red framed] / Fremantle. 91—49. [printed] / *Anthicus discoideus* Ch. [handwritten] / G.C.Champion Coll. B.M.1927-409. [printed] [originally, there were two syntypes mounted on same card on very same pin, but the left syntype is missing with only hind leg and pro- and mesotibiae remaining on the card].

Other material studied: 1 male, 2 females BMNH, Cossack. 91—49. / *Anthicus discoideus* Champ.

***Sahulanthicus immaculatus* (King, 1869) comb. nov.**

*Anthicus immaculatus* King, 1869: 17. Type locality: South Australia.

*Anthicus immaculatus*: Masters (1886: 368 checklist & new record); Pic (1911: 54 checklist; 1912: 283 new record); Lea (1920: 380 new record; 1922: 471 checklist & 475 supplementary description & new records); *Microhoria immaculatus*: Uhmman (2000: 152 new combination & records; 2007, as *M. immaculata*: 62 key, 68 redescription & 102 figure).

Studied material: 1 male, 1 female BMNH, *Anthicus immaculatus* K. Id. by A. M. Lea S. Australia / Brit. Mus. 1924—156.

***Sahulanthicus inglorius* (Lea, 1896) comb. nov.**

*Anthicus inglorius* Lea, 1896: 272. Type locality: South Australia.

*Anthicus inglorius*: Pic (1897: 344 checklist; 1911: 55 checklist); Lea (1914: 450 new record; 1922: 472 checklist, 479 supplementary description & new records); *Microhoria ingloria*: Uhmman (2007: 62 key, 65 new combination & redescription, 101 figure).

***Sahulanthicus laticollis* (MacLeay, 1872) comb. nov.**

= *Anthicus excavatus* Champion, 1895  
 = *Anthicus triangularis* Lea, 1895

*Anthicus laticollis* MacLeay, 1872: 307. Type locality: Australia, Gayndah.

*Anthicus laticollis* Masters (1886: 368 checklist & new record); Pic (1911: 57 checklist); Lea (1922: 472 checklist, 477 supplementary description).

*Microhoria laticollis*: Uhmann (2007: 62 key, 67 new combination, redescription & record, 101 figure).

*Anthicus excavatus* Champion, 1895: 259. Type locality: Australia, Fremantle.

*Anthicus excavatus*: Pic (1911: 45 checklist); Lea (1922: 472 checklist & 677 new synonymy and supplementary description).

*Microhoria excavata*: Uhmann (2000: 152, new combination & records; 2007, as *M. excavata*: 62 key, 66 redescription & 101 figure).

*Anthicus triangularis* Lea, 1895b: 273. Type locality: North-West Australia.

*Anthicus excavatus* var. *triangularis*: Champion (1896: 448 new synonymy); Pic (1911: 45 checklist); Uhmann (2007: 66, as synonym of *Microhoria excavata*).

Studied type material: female holotype *Anthicus excavatus* BMNH, Fremantle, W. Australia. J. J. Walker. [printed] / Type [printed, label circular, red framed] / G.C.Champion Coll. B.M.1927-409. [printed] / *Anthicus excavatus* Ch. [handwritten].

Other material studied: 2 males, 2 females BMNH, *triangularis* Lea, ex Lea Champion Bay / = *excavatus* Champion var ! / Australia. Ex A.M.Lea / G.C.Champion Coll. B.M.1927-409.

***Sahulanthicus luridus* (King, 1869) comb. nov.**

*Anthicus luridus* King, 1869: 16. Type locality: Australia, Port Denison.

*Anthicus luridus*: Masters (1886: 368 checklist & new record); Pic (1911: 59 checklist; 1912: 283 new record); Lea (1922: 472 checklist, 475 supplementary description & new records);

*Microhoria luridus*: Uhmann (2000: 152 new combination & records; 2007, as *M. lurida*: 62 key, 63 redescription & new records, 100 figure).

***Sahulanthicus monostigma* (Champion, 1895) comb. nov.**

*Anthicus monostigma* Champion, 1895: 261. Type locality: Australia, Baudin Island.

*Anthicus monostigma*: Pic (1897: 221 checklist; 1911: 62 checklist); Lea (1922: 472 checklist).

*Microhoria monostigma*: Uhmann (2007: 62 key, 66 new combination & redescription, 101 figure).

Studied type material: holotype BMNH, Baudin I. N.W. Australia. J. J. Walker [printed] / Type [printed, label circular, red framed] / *Anthicus monostigma* type Ch. [handwritten] / G.C.Champion Coll. B.M. 1927-409. [printed].

***Sahulanthicus obliquefasciatus* (King, 1869) comb. nov.**

*Formicomus obliquefasciatus* King, 1869: 8. Type locality: Australia, Paramatta.

*Formicomus obliquefasciatus*: Masters (1886: 365 as *F. obliqui-fasciatus*, new record); Pic (1911: 19 checklist).

*Anthicus obliquefasciatus*: Lea (1904: 95 new combination; 1922: 472 checklist & 477 supplementary description).

*Microhoria obliquefasciata*: Uhmann (62 key, 66 new combination, redescription & new records, 101 figure).

***Sahulanthicus permutatus* (Pic, 1897) comb. nov.**

= *Anthicus latus* Lea, 1895

*Anthicus permutatus* Pic, 1897: 344 new name, not *A. latus* Pic, 1982 (junior synonym of *Microhoria fasciata fasciata* (Chevrolat, 1834)). Type locality: Australia, Baudin Island.

*Anthicus permutatus*: Pic (1911: 66 checklist); Lea (1922: 472 checklist).

*Microhoria permutata*: Uhmann (2007: 62 key, 64 new combination & redescription, 101 figure).

*Anthicus latus* Lea, 1895a: 614. Type locality: Australia, Galston.

***Sahulanthicus scutellatus* (Lea, 1895) comb. nov.**

*Anthicus scutellatus* Lea, 1895b: 271. Type locality: North-West Australia.

*Anthicus scutellatus*: Pic (1897: 344 checklist; 1911: 72 checklist); Lea (1922: 472 checklist & 478 supplementary description).

*Microhoria scutellata*: Uhmman (2007: 62 key, 63 new combination, redescription & new records, 100 figure).

## ACKNOWLEDGEMENTS

I sincerely thank Maxwell V.L. Barclay (BMNH) for providing access to the material studied and for checking English. I am indebted to Donald S. Chandler (University of New Hampshire, Durham, U.S.A.) for valuable comments on the critical characters of *Australosteropes* gen. nov. Keita Matsumoto (BMNH) is thanked for assistance with certain photographs used in this publication.

## REFERENCES

Abdullah, M. 1966. A revision of the genus *Steropes* Steven, with a proposed new subfamily Steropinae of the family Anthicidae (Coleoptera). – *Entomologist's Monthly Magazine* 101: 206–216.

Abdullah, M. 1969. The natural classification of the family Anthicidae with some ecological and ethological observations. *Deutsche entomologische Zeitschrift, Neue Folge*, 16, No 4/5: 323–366.

Armstrong, J.W.T. 1948. On Australian Coleoptera. Part I. – *Proceedings of the Linnean Society of New South Wales* 82, No 5/6: 292–298.

Champion, G.C. 1895. On the heteromerous Coleoptera collected in Australia and Tasmania by Mr. James J. Walker, R.N., F.L.S., during the voyage of H.M.S. “Penguin”, with descriptions of new genera and species. Part II. –

*Transactions of the Entomological society of London* 1895: 213–276, 6 pls.

Champion, G.C. 1896. Supplementary note to my previous papers on the heteromerous Coleoptera of Australia and Tasmania. – *Transactions of the Entomological society of London* 1896: 447–449.

Chandler, D.S. 2010. 11.26. Anthicidae Latreille, 1819: 729–741. In: Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (eds) *Coleoptera, Beetles. Volume 2: Morphology and Systematics* (Elateroidea, Bostrichiformia, Cucujiformia partim). *Handbook of Zoology. Arthropoda: Insecta. De Gruyter, Berlin & New York: 786 pp.*

King, R.L. 1869. Description of the Anthicides of Australia. – *The Transactions of the Entomological Society of New South Wales* 2: 1–24.

LaFerté-Sénéctère, F.T. de 1849a. *Anthicus* (Première Division), Livraison 7, 27: 1–45, 1 pl. In: Guérin-Méneville, F.-E. (ed.) *Species et iconographie générique des Animaux Articulés ou représentation des genres, avec leur description et celle de toutes les espèces de cette grande division du règne animal. Première Partie: Insectes Coléoptères (1846-1847). De Fain et Thunot, Paris.*

LaFerté-Sénéctère, M.F. de, 1849b. *Monographie des Anthicus et genres voisins, Coléoptères, Hétéromeres de la tribu des Trachélides. Paris, Sapia: xxii + 340 pp, 16 pls.*

Lawrence, J.F. 2016. 2 Classification (families & subfamilies): 13–22. In: Leschen, R.A.B. & Beutel, R.G. (eds) *Handbook of Zoology. Arthropoda: Insecta. Coleoptera, Beetles. Volume 1: Morphology and Systematics* (Archostemata, Adephaga, Myxophaga, Polyphaga partim). 2<sup>nd</sup> edition. *De Gruyter, Berlin & Boston: 684 pp.*

- Lawrence, J.F., Hastings, A.M., Dallwitz, M.J., Paine, T.A. & Zurcher, E.J. (eds) 1999. Beetles of the World: A Key and Information System for Families and Subfamilies. *CD-ROM, Version 1.0 for MSWindows*. CSIRO Publishing, Melbourne.
- Lawrence, J.F., Escalona, H. & Leschen, R.A.B. 2010. 11.29. Tenebrionoidea Incertae sedis: 750–760. In: Leschen, R.A.B., Beutel, R.G. & Lawrence, J.F. (eds) *Coleoptera, Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim)*. Handbook of Zoology. Arthropoda: Insecta. *De Gruyter, Berlin & New York*: 786 pp.
- Lea, A.M. 1895a. Descriptions of new species of Australian Coleoptera. – *Proceedings of the Linnean Society of New South Wales, Second Series, 9, No 4*: 589–634.
- Lea, A.M. 1895b. Descriptions of new species of Australian Coleoptera. Part II. – *Proceedings of the Linnean Society of New South Wales, Second Series, 10, No 2*: 224–319.
- Lea, A.M. 1902. List of the described Coleoptera of Tasmania. – *Papers and Proceedings of the Royal Society of Tasmania for the years 1903-1905*: 1–26.
- Lea, A.M. 1904. Descriptions of new species of Australian Coleoptera. Part VII. – *Proceedings of the Linnean Society of New South Wales, Second Series, 29, No 1*: 60–107, pl. 4.
- Lea, A.M. 1907. The Coleoptera of King Island, Bass Strait. – *Proceedings of the Royal Society of Victoria, New Series, 20, No 2*: 143–207.
- Lea, A.M. 1914. Scientific notes on an expedition into the interior of Australia, carried out by Captain S. A. White, M.B.O.U., from July to October, 1913. (j) Insecta. – *Transactions of the Royal Society of South Australia, 38*: 448–454.
- Lea, A.M. 1920. Descriptions of new species of Australian Coleoptera. Part XVI. – *Proceedings of the Linnean Society of New South Wales, Series 2, 45, No 3*: 375–403.
- Lea, A.M. 1922. On Australian Anthicidae (Coleoptera). – *Proceedings of the Linnean Society of New South Wales 47, part 4, No 188*: 471–512.
- MacLeay, W. 1872. Notes on a collection of insects from Gayndah. – *Proceedings of the Linnean Society of New South Wales 2*: 79–205.
- Masters, G. 1886. Catalogue of the described Coleoptera of Australia. Part IV. – *Proceedings of the Linnean Society of New South Wales, Series 2, 1*: 259–380.
- McKenna, D.D. 2016. 3 Molecular systematics of Coleoptera: 23–34. In: Leschen, R.A.B. & Beutel, R.G. (eds) *Handbook of Zoology. Arthropoda: Insecta. Coleoptera, Beetles. Volume 1: Morphology and Systematics (Archostemata, Adephaga, Myxophaga, Polyphaga partim)*. 2<sup>nd</sup> edition. *De Gruyter, Berlin & Boston*: 684 pp.
- Pic, M. 1897. Premier supplément a ma liste des Anthicidae. Addenda. – *Annales de la Société Entomologique de Belgique 41, No 9*: 343–344.
- Pic, M. 1900. Diagnoses d'Anthicidae de la Nouvelle Guinée. – *Annali del Museo Civico di Storia Naturale di Genova, Series 2, 20*: 602–608.
- Pic, M. 1911. Fam. Anthicidae [Pars 36]. In: Junk, W. & Schenkling, S. (eds) *Coleopterorum Catalogus 17. W. Junk, Berlin*: 102 pp.
- Pic, M. 1912. Anthicides et Hylophilides provenant des chasses de M. G. E. Bryant (îles Ceylan et Trinité. — Australie). – *Annales de la Société Entomologique de France 81*: 271–288.
- Telnov, D. 2008. Order Coleoptera, family Anthicidae: 270–292. In: Harten, A. van (ed.)

- Arthropod fauna of the UAE. Volume 1. *Dar Al Ummah Printing, Publishing, Distribution & Advertising, Abu Dhabi*: 754 pp.
- Telnov, D. 2011. Taxonomische Revision der Gattung *Macratria* Newman, 1838 (Coleoptera: Anthicidae: Macratriinae) aus Wallacea, Neuguinea und den Salomonen: 97–285. In: Telnov, D. (ed.) Biodiversity, Biogeography and Nature Conservation in Wallacea and New Guinea. Volume I. *The Entomological Society of Latvia, Rīga*: 434 pp, 92 pls.
- Uhmann, G. 2000. Anthicidae (Coleoptera) aus verschiedenen Regionen. – *Annales historico-naturales musei nationalis hungarici* 92: 145–160.
- Uhmann, G. 2007. Die Anthicidae Latreille 1819 (Coleoptera: Tenebrionoidea) von Australien ohne Formicomini. 68. Beitrag zur Kenntnis der Anthicidae. – *Coleoptera. Schwanfelder Coleopterologische Mitteilungen* 11: 1–103.
- Young, D.K. 2002. 115. Pyrochroidae Latreille 1807: 540–543. In: Arnett, R.H. Jr., Thomas, M.C., Skelley, P.E. & Frank, J.H. (eds) American Beetles. Polyphaga: Scarabaeoidea through Curculionoidea. Volume 2. *CRC Press, Boca Raton, London, New York & Washington*: 861 pp.
- Young, D.K. 1984. *Anisotria shooki*, a new genus and species of Pedilinae (Coleoptera: Pyrochroidae), with a note on the systematic position of *Lithomacratria* Wickham and a key to the genera. *The Coleopterists Bulletin* 38: 201–208.
- Young, D.K. & Pollock, D.A. 2010. 11.24. Pyrochroidae Latreille, 1807: 715–721. In: Leschen, R.A.B, Beutel, R.G. & Lawrence, J.F. (eds) Coleoptera, Beetles. Volume 2: Morphology and Systematics (Elateroidea, Bostrichiformia, Cucujiformia partim). *Handbook of Zoology. Arthropoda: Insecta. De Gruyter, Berlin & New York*: 786 pp.

Received: 10.05.2018.

Accepted: 20.12.2018.

Published: 31.12.2019.