FIVE NEW SPECIES OF AUSTRALIAN BUPRESTIDAE (COLEOPTERA)

By S. Barker*

* Entomology, South Australian Museum, North Terrace, Adelaide 5000.

Summary
Four new species of Astraeus are described: *A. hanloni*, *A. goldingi*, *A. mayoi*, *A. sundholmi* and a revised key for their identification presented; also one new species of Stanwatkinsius is described: *S. amanda*.

KEY WORDS; Coleoptera, Buprestidae, New species, Astraeus, Stanwatkinsius.

Introduction
The buprestid genus Astraeus was revised by Barker (1975) with a key for identification of subgenera (p. 107). Additional species were described by Barker (1977, 1989, 1995, 1999, 2004). New material has become available and four new species are described. The key for identification of Astraeus (s.str.) species (Barker, 1975 p. 114) is updated and corrected. With additional collecting and more biological information available, it is apparent that the genus is not as confined to association with Casuarina and Allocasuarina as was thought earlier. Described herein is a species, so far only collected on the flowers of Myrtaceae, the first such record in the genus. It has long been suspected that *A. navarchis* is associated with a Hakea species. Modern collections of that species are virtually non-existent, as it occurred in areas of Victoria cleared for agriculture. Two other species are associated with Hakea; one a well known species, the other not previously described.

The genus Stanwatkinsius was described by Barker & Bellamy (2001). Most of the known species occur in Western Australia. They are found on the leaves of Hakea sp., Grevillea sp., Casuarina sp. and Allocasuarina sp. A new species has been collected recently in Central Australia on the leaves of Grevillea. It is hoped that more collecting in isolated areas in the future will shed more light on the distribution of this interesting genus.

Materials and Methods
Specimens examined were borrowed from or are deposited in the following private collections and one institution:

ASSA – A. Sundholm, Sydney.
MGWA – M. Golding, Perth.
MHSA – M. Hanlon, Sydney.
MPWA – M. Powell, Perth.
RMQA – R. Mayo, Pomona, Queensland.
SAMA – The South Australian Museum, Adelaide.

Abbreviations used in the text for museum and private collections follow Watt (1979). Male genitalia were dissected, mounted on cards and photographed with a digital camera. The images were transmitted to a computer then manipulated to form an illustration. Holotypes were mounted on pins and photographed with a digital camera and an illustration created using the same process.
Astraeus sundholmi sp. nov.
(Figs 1b, 2b)

Holotype
♂, 50 km SE Kimba on Cowell rd, S.Aust., on Callitris sp., 25.x.1993, S. Barker SAMA I 21 716.

Allotype
♀, Round Hill Nature Reserve: The Round Hill (summit area) ~ 32° 57' 50.7" S, 146° 08' 54.4 " E. Elev. ~ 266 m, 25.x.2005, on leaves of Callitris glaucophylla (white pine), A. Sundholm, SAMA I 21 717.

Paratypes
NSW: ♂, Round Hill, NSW on Callitris glaucophylla, 10.x.2004, A. Sundholm & R. de Keyzer; ♂, Round Hill, on Callitris glaucophylla, 24.x.2004, A. Sundholm & R. de Keyzer, ASSA; 4 ♂♂, 3 ♀♀, summit Round Hill, Round Hill Reserve, 16.xi.2004, T.M. Hanlon, on Callitris glaucophylla, MHSA; 15 ♂♂, 5 ♀♀, The Round Hill: Round Hill Nature Reserve, NSW, 2.x.2005, on Callitris glaucophylla, T.M. Hanlon, MHSA; 4 ♂♂ & 2 ♀♀, same data as allotype, ASSA; ♂, S. Australia, SAMA.

Size: Holotype, 7.4 x 3.1 mm. Males, 7.1 x 2.8 - 8.0 x 3.3 mm. Females, 6.7 x 2.6 – 8.2 x 3.4 mm.

Colour: head coppery. Antennomeres: 1-2 coppery: 3-11 blue. Pronotum coppery. Elytra black with purple and blue reflections with the following yellow marks on each elytron: basal spot; mark beneath humeral callus along lateral margin from anterior margin just covering humeral fold; pre-medial fascia commencing on second interval from suture reaching margin, constricted medially; post-medial fascia commencing on fourth interval from suture, reaching margin, constricted medially, sometimes forming two spots; pre-apical mark. Ventral surface coppery. Legs: femora and tibiae coppery, first tarsomere mostly coppery, distal end pale blue, remaining tarsomeres pale blue. Setae silver.

Shape & sculpture: head punctured, setose, without median keel. Pronotum punctured, laterally rounded and narrowed from base to apex, median glabrous line free of punctuations from apex to base ending in a very small basal crypt. Elytra costate, intervals flat dorsally, rounded ventrally, each with single row of punctures; laterally straight from base, angled inwards, rounded post-medially and narrowed to apex; small, sharp marginal spine, sutural spine larger, sharp, rounded inner margin; humeral fold poorly developed, slightly angled (sensu Barker 1975). Ventral surface shallowly punctured, moderately setose, setae short but longer and denser on pro-sternum than on abdomen. Legs moderately setose.

Aedeagus: slightly rounded from basal piece to pointed apex (Fig. 2b).

Remarks
Resembles A. badeni but not as broad as that species. Associated with Callitris sp. Two other species also associated with Callitris are A. crockerae Barker and A. jansoni van de Poll.

Etymology
This species is named for A. Sundholm, Sydney.

Astraeus hanloni sp. nov.
(Figs 1d, 2d)

Holotype
♂, 6 km NW Yathong H.S., Yathong N.R., NSW, 17.x.2004, T.M. Hanlon, on flowers of Micromyrtus sessilis, SAMA I 21 718.
Allotype
♀, same data as holotype, SAMA I 21 719.

Paratypes

NSW: 2 ♀♀, 14 km W of Euabalong W., on stems of *Baeckea* sp., 10.x.1992, T.M.S. Hanlon, MHSA; ♀, Keginni Range 32° 41’ 55.7” S 145° 32’ 29.4” E. Elev. ~268 m., 8.ix.2003, A. Scott & A. Sundholm, on flowers of *Kunzea ambiguza* on side of ridge, ASSA; ♀, vicinity of Shepherd’s Hill 33° 03’ 35.5” S 146° 15’ 03.5” E. Elev. ~161 m, 4.x.2003, A. Scott, on flowers of *Baeckea* sp. ASSA; ♂, nr Shepherds Hill : 32 ° 2’ 51.7” S. 146° 12’ 9.9” E. Elevation ~ 163 m., 19.x.2004, on flowering *Eucalyptus gracilis*, R. de Keyzer, A. Scott, A. Sundholm, ASSA; of 7 ♂♂, 13 ♀♀, Shepherds Hill at NE base of hill: 33° 12’ 2.1” S. 146° 14’ 28.6” E. Elevation ~ 191 m., 24.x.2004, on post-flowering stems and leaves of *Micromyrtus sessilis*, R. de Keyzer, A. Scott, S. Sundholm, ASSA; 8 ♂♂, 6 ♀♀, same data as holotype, MHSA; ♂, Shepherds Hill ~ 33° 03’ 19.9” S, 146° 13’ 59.1” E. ix.2004. On flowers of *Micromyrtus sessilis* in peak bloom. J. Forman, ASSA; ♀, 4 km E Matakana rail siding: 33° 00’ 20.1” S, 146° 00’ 03.0” E. 2.ix.2005. On flowers of *Micromyrtus sessilis* in peak bloom. A. Sundholm, A. Scott, J. Forman, ASSA; 6 ♂♂, 4 ♂♀, 4 km E Matakana, NSW, 2.x.2005, on *Micromyrtus sessilis*, T. M. Hanlon, MHSA; 3 ♂♂, 16 km E Matakana, NSW, 2.x.2005, on *Micromyrtus sessilis*, T. M. Hanlon, MHSA; 3 ♂♂, 4 ♀♀, 14 km W Euabalong W, NSW, 2.x.2005, on *Micromyrtus sessilis*, T. M. Hanlon, MHSA; 3 ♀♀, Nombinnie Nature Reserve, 9.8 km E of Matakana Rail Siding: 33° 00’ 22.5 “ S. 146° 00’ 30.3” E. 25.x.2005. On freshly dead flowers of *Micromyrtus sessilis*, A. Sundholm, ASSA; 7 ♂♂, Nombinnie Nature Reserve 16.3 km E Matakana Rail Siding: 33° 01’ 21.5 S. 146° 04’ 34.5” E. 25.x.05. On freshly dead flowers of *Micromyrtus sessilis*, A. Sundholm, ASSA.

Size: Holotype, 7.6 x 3.4 mm. Males, 5.5 x 2.4 – 8.1 x 3.5 mm. Females, 6.0 x 2.7 – 7.8 x 3.5 mm.

Colour: head black with coppery reflections. Antennae black with blue reflections. Pronotum black with coppery reflections. Elytra black with purple and blue reflections and the following yellow marks on each elytron: basal spot; pre-medial fascia broken into two spots, one on margin, one near suture; post-medial fascia commencing two intervals from suture reaching margin; pre-apical spot. Ventral surface coppery. Legs: femora and tibiae coppery; dorsal surface of tarsi blue. Setae silver.

Shape & sculpture: head punctured, setose, without median keel. Pronotum punctured, setose laterally, basal crypt present, laterally more or less parallel-sided from base, rounded before middle and narrowed to apex. Elytra costate, intervals flat with irregular punctures; laterally straight from base and slightly angled inwards, rounded and concave from pre-apical area to small, sharp marginal spine, very large sharp sutural spine; humeral fold moderately developed, angled. Ventral surface shallowly punctured, moderately setose, setae moderately long. Legs moderately setose.

Aedeagus: narrow, slightly rounded from basal piece to pointed apex (Fig. 2 d).

Remarks
Resembles *A. crockerae* but is a larger species and not associated with *Callitris* sp. So far this is the only species of *Astraeus* collected exclusively on flowers.

Etymology
This species is named for T.M. Hanlon, indefatigable collector of Buprestidae.
Astraeus goldingi sp. nov.  
(Figs 1a, 2a)

Holotype  
♂, 12 km N Galena Bridge, WA, 30.ix.1992, on Hakea foliage, Golding & Powell, SAMA I 21 720.

Allotype  
♀, 44 km N Galena Bridge, W.A., 25.ix.1993, on Allocasuarina campestris foliage, Golding & Powell, SAMA I 21 721.

Paratypes  
W.A.: ♀, 13 km N Galena Bridge, WA, 1.viii. 1987, on Hakea foliage, M.R.Golding, MGWA; ♂, same data as holotype, MPWA; 3 ♀♀, 44 km N Galena Bridge, 25.ix.1993, on Grevillea foliage & Allocasuarina campestris foliage, Golding & Powell; 2 ♂♂, 13 km N Galena Bridge, 6.ix.2004, on Grevillea pinaster, M.Powell & D.Knowles, MPWA.

Size: Holotype, 10.6 x 3.9 mm. Males, 9.0 x 3.3 – 10.9 x 3.9 mm. Females, 10.6 x 3.9 – 14.2 x 12.0 mm.

Colour: head, antennae and pronotum coppery. Elytra black with coppery reflections and the following yellow markings on each elytron: basal medial spot; pre-medial fascia reaching margin and covering humeral fold, not quite reaching suture and slightly concave anteriorly; small post-medial spot on margin; short pre-apical fascia reaching margin and slightly concave anteriorly, not reaching suture; pre-apical spot in middle. Ventral surface coppery. Legs coppery. Setae silver.

Shape & sculpture: head punctured, setose, without medial keel. Pronotum punctured; with long setae laterally, much shorter setae medially; laterally more or less parallel-sided from base to middle, rounded and tapered to apex; small basal crypt. Elytra costate, intervals flat with single row of punctures; laterally more or less parallel-sided from base, rounded post-medially and tapered to small marginal spine, margin rounded to thick, blunt apical spine; humeral fold poorly developed, slightly angled. Ventral surface punctured; with long setae. Legs moderately setose.

Aedeagus: laterally straight sided, diverging slightly from basal piece to pointed apex (Fig. 2 a)

Remarks  
This species superficially resembles A. oberthuri van de Poll. However male genitalia are different, the lateral shape is different and the species is associated with different plants. A. oberthuri is mostly associated with Allocasuarina huegelliana. A. fraterculus van de Poll is another species associated with Hakea sp.

Etymology  
Named for M Golding, Willagee, W.A.

Astraeus mayoi sp. nov.  
(Figs 1c, 2c)

Holotype  
♂, 5 km S Yarrawa, NSW, 5.xi.1998, R. Mayo, SAMA I 21 722.

Allotype  
♀, same data as holotype, SAMA I 21 723.
FIVE NEW SPECIES OF AUSTRALIAN BUPRESTIDAE (COLEOPTERA)

Paratypes

NSW: ♂, same data as holotype, MHSA; 4 ♂♂ & 6 ♀♀, same data as holotype, RMQA; 8 ♂♂ & 3 ♀♀, 5 km SW Yarrawa, 11.xi.98, R. Mayo, RMQA; 2 ♂♂, 5 km SW Yarrawa, 26.xi.98, R. Mayo, RMQA; 4 ♂♂ & 3 ♀♀, 5 km SW Yarrawa, 19.xii.98, R. Mayo, RMQA; 3 ♂♂ & ♀, 5 km SW Yarrawa, 22.xii.98, R. Mayo, RMQA; 2 ♂♂, 5 km SW Yarrawa, 7.i.99, R. Mayo, RMQA; ♂, 5 km SW Yarrawa, 22.xii.98, R. Mayo, RMQA; 2 ♂♂, 5 km SW Yarrawa, 23.xii.99, R. Mayo, RMQA; 9 ♂♂, 11 ♀♀, 9 km S Sandy Hollow, NSW, on Allocasuarina verticillata, 6.xi.2005, T. M. Hanlon, MHSA.

Size: Holotype, 8.9 x 3.3 mm. Males, 7.9 x 3.1 – 9.7 x 3.7 mm. Females, 8.3 x 3.2 – 11.3 x 4.3 mm.

Colour: head apically bronze, basally dark blue. Antennomeres 1-3 bronze; 4-11 dark blue. Pronotum light blue along apical margin, remainder dark blue with purple reflections. Elytra dark blue with the following seven yellow spots on each elytron; basal, pre and post-medial, pre-apical near suture, three along the margin, the first extending beneath the humeral callus the third in the form of a short fascia. Ventral surface and legs dark blue with purple reflections. Setae silver.

Shape & sculpture: head punctured and setose, without a median keel. Antennae, as in all Astraeus (s.str.), antennomeres same length in males, becoming progressively shorter in females. Pronotum heavily punctured and setose; laterally rounded and narrowed from base to apex; small basal crypt. Elytra costate, intervals flat, punctured and wrinkled; laterally rounded from base, rounded post-medially and tapered to marginal spine, both spines well developed; humeral fold poorly developed, slightly angled. Ventral surface and legs setose.

Aedeagus: rounded from basal piece to pointed apex (Fig. 2 c).

Remarks

Superficially this species resembles A. kitchini Barker as the yellow marks are similar, however it is a slightly smaller species and the male genitalia differ.

Etymology

Named after the collector R. Mayo, Pomona, Qld.

New locality record

A male specimen of A. princeps Barker was collected at Mt Garnet, Qld on 16.i.1989 by J. Olive (MHSA). The only previous record of this species was from Prince of Wales Island, Arafura Sea.

Correction to host plant identification

In Barker (1975) under Astraeus simulator van de Poll p.119, A. mastersi Macleay p.122 and A. adamsi Barker p.124, I identified Casuarina equisetifolia occurring at Edungalba. The identity of the tree is C. cristata; C. equisetifolia does not occur at Edungalba.

Key to the species of Astraeus (sensu stricto)*

*see (Barker, 1977 p. 108) for different states of humeral fold.

1 Head with median keel 2
2 Head without median keel 22
2 Setae silver 3
Setae yellow 21

3 Part or all of anterior ventral surface red-brown 4
None of anterior ventral surface red-brown 7

4 Gular, prosternum, meso- and metasternum, coxae two & three,
abdominal segment one red-brown  A. bakeri Barker
Less of ventral surface red-brown 5

5 Prosternum, coxae red-brown  A. minutus Barker
Red-brown area on either side of prosternal process 6

6 Shorter than 7.5 mm; humeral fold well developed,
acutely angled  A. fraseriensis Barker
Longer than 7.5 mm; humeral fold moderately
developed, angled  A. obscurus Barker

7 Most or part of leg testaceous 8
None of leg testaceous 15

8 Legs one & two testaceous except for outer margin
of femora, hind leg testaceous except for femur  A. dilutipes van de Poll
Legs less testaceous than above 9

9 Tibiae, tarsomeres one & two testaceous  A. smythi Barker
Legs less testaceous than above 10

10 Tibiae testaceous, distal tips blue, tarsomere one testaceous  A. yarrattensis Barker
Legs less testaceous than above 11

11 Distal tips of tibiae testaceous,
tarsomeres one & two testaceous, distal tips blue  A. williamsi Barker
Legs less testaceous than above 12

12 Tips of tibiae & tarsomere one testaceous  A. mourangeensis Barker
Tarsomere one testaceous

290
| 13 | Length usually < 7 mm | *A. pygmaeus* van de Poll |
|    | Length usually > 7 mm |
| 14 | Humeral fold well developed, acutely angled | *A. mastersi* Macleay |
|    | Humeral fold well developed, angled | *A. samouelli* Saunders |
| 15 | Humeral fold moderately developed, angled | 16 |
|    | Humeral fold poorly developed, slightly angled | 19 |
| 16 | Head green & coppery purple or blue-green | 17 |
|    | Head black | 18 |
| 17 | Head, pronotum green & coppery purple | *A. intricatus* Carter |
|    | Head blue-green, pronotum with medial, cordiform purple mark, anteriorly green laterally blue | *A. blackdownensis* Barker |
|    | Head & pronotum blue-green | *A. kitchini* Barker |
| 18 | Elongate species | *A. watsoni* Barker |
|    | Rounded species, elytra laterally narrowed in pre-apical area | *A. acaciae* Barker |
|    | broad, rounded species | *A. globosus* Barker |
| 19 | Body blue; elytra with two yellow fascia | *A. fraterculus* van de Poll |
|    | Body black or coppery-bronze | 20 |
| 20 | Body black; elytra with numerous yellow spots | *A. crassus* van de Poll |
|    | Body coppery-bronze; each elytron with yellow fascia, four or five yellow spots | *A. occidentalis* Barker |
| 21 | Elytra with three yellow fascia, red areas | *A. major* Blackburn |
|    | Elytra with two yellow fascia | *A. navarchis* Thomson |
| 22 | Body elongate & cylindrical | 23 |
|    | Body tear-drop shaped | 24 |
| 23 | Pronotum conically elevated medially | *A. prothoracicus* van de Poll |
|    | Pronotum convex medially | *A. elongatus* van de Poll |
24 Sutural spine with rounded inner margin  
Sutural spine with straight inner margin

25 Legs red-brown colour  
Legs other than red-brown colour

26 Elytral marks spots & one fascia  
Elytral marks vittae

27 Head, pronotum, legs metallic brown or bronze
Head, pronotum, legs other than brown or bronze

28 Humeral fold well developed, angled  
Humeral fold moderately or poorly developed

29 Head black or coppery purple; ventral surface coppery-purple
Head blue or green; ventral surface blue-green

30 Humeral fold moderately developed, angled  
Humeral fold poorly developed, slightly angled

31 Pronotum laterally rounded from base to apex
Pronotum parallel-sided at base, rounded, indented to apex
Pronotum parallel-sided from base, rounded before middle and narrowed to apex

32 Basal spot touching margin of elytron  
Basal spot not touching margin of elytron

33 Elytron with one, two or three spots; one or two fascia; or four spots and one fascia
Elytron with six spots and one fascia; or seven or eight spots and no fascia

34 Elytron with one spot & two fascia or three spots & one fascia  
Elytron with three spots & two fascia

35 Head, pronotum & elytra black  
Head, pronotum & elytra black with blue & purple reflections
36 Pronotum laterally rounded & narrowed from base to apex  
   Pronotum laterally more or less parallel-sided from base to middle, 
   rounded and narrowed to apex  
   \[A. \text{sundholmi} \] sp.nov.

37 Each elytron with six spots & one fascia; or eight spots  
   Each elytron with seven spots  
   \[A. \text{goldingi} \] sp. nov.

38 Head & pronotum bronze-green or black 
   with green or purple reflections  
   \[A. \text{jansoni} \] van de Poll
   Head bronze apically, dark blue basally; pronotum light blue apically, 
   remainder dark blue with purple reflections  
   \[A. \text{mayoi} \] sp. nov.

39 Pronotum parallel-sided from base to middle, strongly rounded 
   and narrowed to apex; dorsally convex in lateral profile  
   \[A. \text{oberthuri} \] van de Poll
   Pronotum gradually rounded laterally, narrowed from 
   base to apex; dorsally flattened in lateral profile  
   \[A. \text{carteri} \] Barker

40 Head with frontal spot  
   \[A. \text{princeps} \] Barker
   Head without frontal spot  
   \[A. \text{goerlingi} \] Barker

41 Head with shallow median sulcus  
   \[A. \text{goerlingi} \] Barker
   Head with deep median sulcus  
   \[A. \text{cyaneous} \] Kerremans

42 Head with basal median sulcus; pronotum laterally inflated, 
   medial oval patch of hexagonal cells  
   \[A. \text{cyaneous} \] Kerremans
   Head with apical median sulcus; pronotum laterally rounded, 
   without medial hexagonal cells  
   \[A. \text{caledonicus} \] Fauvel
Figure 1. Habitus photographs of a. *Astraeus goldingi* sp. nov. b. *A. sundholmi* sp. nov. c. *A. mayoi* sp. nov. d. *A. hanloni* sp. nov. e. *Stanwatkinsius amanda* sp. nov. male f. *S. amanda* sp. nov. female. Scale bar = 5 mm.
**Figure 2.** Male genitalia of the following species. a. *Astraeus goldingi* b. *A. sundholmi* c. *S. mayoi* d. *A. hanloni* e. *Stanwatkinsius amanda*. Scale bar = 1 mm.

*Stanwatkinsius amanda* sp. nov.

Figs 1e, 1f, 2e

**Holotype**

♂, Chambers Pillar, N.T., 28.viii.2005, on leaves of *Grevillea juncifolia*, T.M. Hanlon & A. Commins, SAMA I 21 000.

**Allotype**

♀, same data as holotype, SAMA I 21 000.

**Paratypes**

N.T.: 9 ♂♂, 4 ♀♀, same data as holotype, MHSA.

**Size:** Holotype, 7.6 x 2.8 mm. Males, 7.3 x 2.8 – 8.1 x 3.1 mm. Females, 6.5 x 2.3 – 7.9 x 3.0 mm.

**Male**

*Colour:* Head coppery at apex, rest blue-green. Antennomeres: 1-4 blue-green; 5-11 black. Pronotum & scutellum blue-green. Elytra dull purple-black medially with a red lateral margin. Ventral surface & legs blue-green. Setae silver.

*Shape & sculpture:* Head deeply punctured, apical median sulcus. Antennomeres: 1-4 obconic; 5-11 triangular. Pronotum deeply striolate, apical margin broadly projecting medially, basal
margin bisinuate, dorsal carina separated widely from margin except at base, not reaching apical margin, space between deeply punctured, without setae. Scutellum scutiform, flat, unpunctured. Elytra striolate, laterally parallel-sided from base, concave, rounded postmedially then narrowed to rounded, subserrate apices. Ventral surface striolate, with moderately long, mainly medial setae, edges of abdominal sternites not sculptured, glabrous.

Aedeagus: similar to other species in the genus (Fig. 2e).

Female

Colour: Head coppery-brown. Antennomers: 1-4 coppery-brown, 5-11 black. Pronotum & scutellum coppery-brown. Elytra coppery-brown medially, coppery red laterally along margin and basally. Ventral surface & legs coppery-red.

Shape & sculpture: As in male.

Remarks
The colour combination of the sexes does not match of any other known species in the genus. This is the first species collected in Central Australia.

Etymology
This species is named for Mrs Amanda Hanlon, one of its collectors.

Acknowledgements
I thank the following for their assistance: Mr A. Sundholm, Sydney; Mr M Golding, Willagee; Mr T.M.S. Hanlon, Perth; Mr T. Lander, Brussels, for providing images of the holotype of Astraeus badeni van de Poll; Mr M. Powell, Applecross; Mr R. Mayo, Pomona; Ms J. Forrest & Mr A. McArthur, SAMA.

References
Barker, S. (1975) Revision of the Genus Astraeus LaPorte & Gory (Coleoptera: Buprestidae). Transactions of the Royal Society of South Australia 99, 105-141.
Barker, S. (1977) Astraeus (Coleoptera: Buprestidae). A description of three new species and new locality records. Ibid. 101, 11-14.
Barker, S. (1989) Contributions to the taxonomy of Australian Buprestidae (Coleoptera): New species of Astraeus and Stigmodera (Castiarina) and a key to Astraeus (s.s.). Ibid. 113, 185-194.
Barker, S. (1995) Eight new species of Australian Buprestidae (Insecta: Coleoptera). Ibid. 119, 149-156.
Barker, S. (1999) Designation of a lectotype and descriptions of four new species of Australian Buprestidae (Coleoptera). Records of the South Australian Museum 32, 45-49.
Barker, S. (2004) Twelve new species of Australian Buprestidae (Coleoptera) and new synonymy. Transactions of the Royal Society of South Australia 128, 195-204.
Barker, S. & Bellamy, C.L. (2001) Stanwatkinsius, a new genus of Australian jewel beetles (Coleoptera: Buprestidae: Agrilinae) with a key to known species. Ibid. 125: 1-14.
Watt, J.C. (1979) Abbreviations for entomological collections. New Zealand Zoology 6, 519-520.