## Book Review: Bellamy, C.L. (2003). Zoological Catalogue of Australia 29.5. Coleoptera: Buprestoidea. CSIRO Publishing, Collingwood, Victoria.

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Abstract: A detailed book review is provided on the Buprestidae of Australia catalogue entitled "Zoological Catalogue of Australia 29.5. Coleoptera: Buprestoidea" by C.L. Bellamy, CSIRO Publishing, Victoria. [Recommended retail price in Australia: \$140.00]

The long awaited taxonomic catalogue of the Buprestidae of Australia was finally published in 2003. The publication is actually dated 2002 but did not appear until early 2003. C.L. Bellamy is well known as perhaps one of the world's leading Buprestidologists, although in most of his publications there are significant errors and differences in opinion from that of other authors.

The present Australian buprestid catalogue is a huge work and at the first instance it appears to have had the last word on the taxonomy of the Australian Buprestidae. However this book contains numerous errors and many taxonomic and biological omissions. And even Bellamy himself admits that the taxonomy of many of the genera is outdated and there is a requirement for modern revisions.

There are 4 coloured plates (paintings) of dead specimens near the beginning of the book which appear to have a washed out look - in other words their true colours are not represented. I know of a number of amateurs/collectors/photographers who have a vast collection of coloured slides of living Buprestidae. Why some of these were not selected from is anyone's guess, as the bright photos of living beetles would have made the book more presentable than these dull paintings of dead specimens. However, as one consolation, there are a few genera illustrated which have never been presented as such before, e.g. *Paratrachys, Synechocera, Germarica*.

The Bellamy buprestid catalogue contains over 500 errors that my colleagues and I have detected to date. For each species where biological data are available, Bellamy omits much of the earlier biological literature and cites mostly the works of Williams, Webb and Hawkeswood as well as his own. However, despite the apparent heavy citations, 20% of Hawkeswood papers were not cited even though all were sent to Bellamy by Australia Post airmail before the catalogue was published. Hence not all host records for any particular species will be found in this catalogue, so readers should not assume that the data provided for each species/genus are the only data actually available. In a sense, these omissions could be very misleading to those not familiar with the vast literature on Australian Buprestidae.

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There are also numerous errors regarding the distributions of species. For instance, here are a few examples: Astraeus mastersi Macleay (p. 22), Selagis caloptera (Boisduval) (formerly Curis) (p. 114) and Calotemognatha yarelli (Gory & Laporte) (p. 180) also occur in South Australia; Pseudotaenia gigas (Hope) (p. 56) is listed as occurring in Queensland only but is actually endemic to Western Australia (see also Hawkeswood, 2006d); Chrysobothris subsimilis Thomson (p. 93) also occurs in New South Wales and South Australia; Astraeus prothoracicus Van de Poll (p. 24), Anilara pagana (Obenberger) (p. 100), Neocuris anthaxioides Fairmaire (p. 120), Melobasis propinqua (Laporte & Gory) (p. 160), Castiarina decipiens (Westwood) (p. 215), Hypocisseis ornata Carter (p. 386) also occur in New South Wales; Diadoxus regius Peterson (p. 134) is also known from Western Australia; Habroloma australis (Macleay) (p. 415) and Cisseis duodecimmaculata (p. 371) also occur in Queensland etc etc.

On page 19 Bellamy erroneously refers to the record of Hawkeswood (1978) of *Astraeus pygmaeus* from *Casuarina* within the records for *Astraeus crassus* Van de Poll. Strange citations of botanical names often also appear unexpectedly [e.g. p. 27 for *Astraeus aberrans* Van De Poll and p. 44 for *Xyroscelis crocata* (Gory & Laporte)] where authorities are cited and the family is placed in capital letters. This occurs in other places but is absent from most of the book. It would appear that Bellamy had initially adopted one style of presentation and then changed his mind, hence some records were not changed from the original plan. Some plant records are referenced but others are not. *Merimna atrata* (Gory & Laporte) has numerous omissions- this species is also found in NSW, *Corymbia* the host plant is misspelt, references to Hawkeswood (1990) and Williams (1982) are omitted, etc. Hawkeswood (2005a,b; 2006 a,c,d,e,f,g,h,i,j) has recently provided reviews on a number of Australian genera and species, pointing out the omissions in the Bellamy catalogue as they concern those taxa.

Bellamy on page 134 for *Diadoxus erythrurus* (White) notes that Peterson & Hawkeswood (1980) last summarized the known biology and distribution of this species; however, this is incorrect as there is a more modern review (Hawkeswood & Turner, 1997) and see also Hawkeswood & Turner (2003b).

Host plant data are sometimes omitted even when the reference is cited in the species reference list: see for example entries for *Anilara antiqua* Thery (p. 97) and *A. nigrita* Kerremans (p. 99).

There are also spelling errors for some plant names, e.g. *Callitris rhomboideus* should be *Callitris rhomboidea* (page 20), *Cormybia* should be *Corymbia* (p. 88), *Exocarpus* should be *Exocarpos* (p. 387). There are also spelling errors in buprestid names: e.g. *Chalcophorotaenia violaecea* should be *Chalcophorotaenia violaecea* (p. 51).

Bellamy p. 246 repeats the error of Barker (1987) in referring to the type locality of *Castiarina kanangara* as Kanangara Walls; it should be Kanangra Walls (see also

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Hawkeswood & Turner, 1994); thus the species should have been known as *Castiarina kanangra* and under the Code of Zoological Nomenclature should be formally amended. Both Bellamy and Barker should be more careful with the spelling of place names unfamiliar to them outside their usual stamping grounds (viz. USA and South Australia respectively).

It is interesting to note that this book was apparently not reviewed before publication by any of the other Australian Buprestidae workers. If this action had have been undertaken, many, if not all, of the errors and omissions would have been corrected before publication. The book really smacks of being rushed, and really, in an important taxonomic account, carefulness and accuracy are critical.

It should be noted that the Bellamy catalogue is already out of date with the appearance of the following papers: Bily and Volkovitsh (2003), Hawkeswood (2002; 2005 a,b,c; 2006a,b,c,d,e,f,g,h,i,j), Hawkeswood & Peterson (2004), Hawkeswood & Turner (2003 a,b,c) and Turner & Hawkeswood (2003), some of which appeared about the same time as the catalogue appeared.

The cost of the book at 140 AUD is astronomical but I guess that in modern times very few technical scientific books are cheap (unless you manage to get a second hand copy).

Criticisms aside, it should be appreciated that this catalogue is the only modern reference available at the present time which purports to include all species and synonyms for the Australian Buprestidae fauna. However, we have a long way to go before the taxonomy of Australian Buprestidae is complete or near complete. And of course, it may take hundreds of years before an adequate knowledge of Australian buprestid biology is gained. But at least the Bellamy catalogue is a start in the right direction. Indeed, I have found it to be somewhat useful in my own researches.

However, because of the numerous errors and omissions, I would rate this publication as 6 out of 10. Furthermore, now that this catalogue is available, there is scope to produce more extensive, more accurate and more up to date catalogues by those with energy and adequate knowledge of the Australian Buprestidae and its associated literature. Please don't use this catalogue for host plants or distribution as these are often incomplete and erroneous. And when using it for a taxonomic purpose, simply take care!.

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