

## Book Review

**Australian Longhorn Beetles (Coleoptera: Cerambycidae) Volume 1: Introduction and Subfamily Lamiinae** by A. Ślipiński and H. Escalona. 2013. CSIRO Publishing, Australia. 504 pp. ISBN 9781486300037, hardcover, AU\$ 150. (Available from <http://www.publish.csiro.au/pid/71110.htm>)

The longhorn beetles (family Cerambycidae) are a diverse and economically important group of insects. With more than 37 000 described species in about 5000 genera worldwide (Tavakilian & Chevillotte, 2013), the longhorn beetles comprise one of the largest beetle families. Nearly all cerambycids are phytophagous or xylophagous as larvae, generally feeding within injured or decaying wood. Many longhorn beetles are pests of agricultural crops, ornamental trees and lumber products, causing millions of dollars in damage each year. Due to their remarkable diversity of biology and morphology, this charismatic family of beetles has been popular with taxonomists and insect collectors for centuries.

*Australian Longhorn Beetles (Coleoptera: Cerambycidae) Volume 1: Introduction and Subfamily Lamiinae* is the first in a three-volume set dedicated to the Australian fauna. This beautiful hardcover volume (297 × 210 mm) is the first comprehensive treatment of Australian lamiines. The book is richly illustrated with hundreds of colour photographs, including over 400 type specimens and 56 *in situ* photographs. The general introduction to longhorn beetles contains 31 pages on the morphology of adults, larvae and pupae. These sections are beautifully illustrated with line drawings and colour photographs of dissected morphological structures such as wings, genitalia and larval mouthparts. The introduction is followed by sections on biology and ecology, economic importance, geographic distribution, and phylogeny and classification. The next section is focused on the Australian fauna, beginning with a brief historical overview of previous taxonomic work followed by sections on higher classification, diagnosis of the family, and well-illustrated identification keys to the subfamilies (adults and larvae) and genera of adult lamiines. This is followed by a monograph-style treatment of the 74 genera and 536 species of Lamiinae occurring in Australia. Each generic treatment contains a diagnosis, detailed morphological description, remarks, biological data (when available) and list of Australian species annotated with distribution information. In addition to the three new genera and two new species proposed, over 200 taxonomic changes are listed in Appendices 1 and 2. Over 400 colour photographs of type specimens are provided in Appendix 3. A bibliography and index to scientific names is also included.

As a first-ever comprehensive overview of the Australian lamiine fauna with valuable identification keys, this volume

is a resounding success. In fact, among the regional faunal books on longhorn beetles, it is one of the best treatments we've seen. However, as with any work of this scope, this volume is not without its flaws. We noticed that several lamiine species recorded from Australia were not included [e.g. *Batocera wallacei* Thomson, 1858, mentioned by Lawrence & Britton (1994: 148) as 'the largest Australian beetle']. Furthermore, no maps of Australia were provided, and some works are missing from the bibliography. Consultation of Tavakilian & Chevillotte's (2013) 'Titan database', the most comprehensive catalogue of the world cerambycid fauna, would have provided a list of Lamiinae from Australia with complete bibliographic citations. Although the Titan database has been available at the current URL since 21 November 2012, this may have been too late as *Australian Longhorn Beetles* was published a mere 9 months later (September 2013). We recommend caution when referring to the type specimen photographs provided in Appendix 3 because most lack any indication of the type status (i.e. holotype, syntype, lectotype, neotype) and some of the specimens labelled as paratypes are not indicated as such in the original descriptions. In addition, one species (*Saperdopsis basicristata* Breuning, 1938) is illustrated with two different photographs representing two different species.

In summary, Ślipiński and Escalona's beautifully illustrated first volume of *Australian Longhorn Beetles* is an important contribution to the systematic study of Cerambycidae and will facilitate further research on this group. We recommend this book to anyone interested in Australian beetles, and especially those with a passion for longhorns. This comprehensive treatment of Australian Lamiinae will appeal to a wide audience, from amateur collectors to port identifiers. We look forward to the next two volumes!

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### References

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- Tavakilian, G.L. & Chevillotte, H. (2013) *Titan: base de données internationales sur les Cerambycidae ou Longicornes. Version 3.0* [WWW document]. URL <http://lully.snv.jussieu.fr/titan/> [accessed on 27 April 2014].

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