

Preface

"Taxonomic keys are made by people who don't need them, for people who don't know how to use them" – Laurence Packer

Researchers from multiple fields, as well as citizen scientists and enthusiasts, work on projects that involve Australian bees. There are a number of keys available for identifying bee specimens to family and genus. A common thread throughout these keys, and indeed in taxonomic keys more widely, is that they are often tricky to use when one is new to using them. Many researchers now working on Australian bees are new to bees, and/or do not have formal insect taxonomy experience or training, and thus find formal bee identification keys difficult without guidance. A seemingly increasingly common approach to bee identifications instead, are quick, potentially superficial identifications of bee specimens by matching with online pictorial resources. Australia has some great online tools such as formal photo libraries and groups that are useful in learning about and identifying Australian bees. Because of the difficulty of most existing formal Australian bee keys, these online tools are sometimes over-relied on for identifications by those new to bee identification. This can lead to errors, and does little to help increase the taxonomic skill sets of the next generations of bee workers.

It is with all of this in mind that I have put together this annotated key to the Australian bee genera. I believe that the way to get more widespread use of keys is to make them more user-friendly and simple, without losing taxonomic integrity. Here I provide a simplified, user-friendly key to all of the Australian bee genera, in which all couplets are supported by photos and diagrams to support the descriptions. This book is designed to be as practical and easy as possible, while maintaining the integrity of this complex task. This book is not designed to be a comprehensive summary of the bee families and genera and, as such, gives little detail on the biology or ecology of groups. Once a genus-level identification has been made using this annotated key, it is then up to the user to look further afield for more information. A collection of sources for further information is listed at the end of this book. To get the most from this book, use this annotated key in parallel with the comprehensive taxonomic information in *The Bees of the World*, by Charles Michener (2007).

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