



## The reinstatement of *Julodimorpha saundersii* Thomson 1879 (Coleoptera: Buprestidae) as a valid species

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### Abstract

*Julodimorpha saundersii* Thomson 1879 is reinstated as a valid species, having been a junior synonym of *J. bakewellii* (White 1859) since 1892. A lectotype is designated for *J. saundersii* and color photographs of the types, labels and additional character states of both species are given.

**Key words:** Coleoptera, Buprestidae, *Julodimorpha*, *J. bakewellii*, *J. saundersii*, reinstatement, Australia

### Introduction

One of the largest, and oddest, members of the Australian buprestid fauna, is *Julodimorpha bakewellii* (White, 1859). More recently known for the peculiar habit of the males to be attracted to, and attempt to mate with, discarded beer bottles (Gwynne & Rentz, 1984, 1984), this species, as presently defined, is known to occur over a large expanse of diverse habitat from arid western Victoria to Western Australia. However, there remain questions about whether there is a single species over that large expanse of habitat, or if there might be more than one species. The diversity of plant communities over such a large range is not something to detail herein, but suffice it say that from a botanical perspective things are far from uniform. Botanical associations for these beetles are few. It is unclear if the larvae are free-living in the soil or bore within the roots and lower trunks of their host plants. Carter (1929) recorded the observations of Mr. John Clark: “the larvae are found in the trunks as well as in the roots of the stunted *Eucalyptus* trees (mallee) of inland Australia. In the latter case, they would have to bore through hard soil to emerge.” Hawkeswood & Peterson (1982) recorded from label data on a single female specimen that it was “ovipositing 2.5 cm below the ground in damp sand near the base of *Calothamnus* sp. (Myrtaceae).” Allen Sundholm (in litt.) wrote that he didn’t think that the adults even fed, and that males were attracted and flew to stationary females perched in foliage and releasing pheromones.

Questions about how many species, their respective distributions and biologies of the species will require a larger effort than presented here, with the need to compile data from specimens collected across Australia. Here we address the issue of valid species. Since there are two available names, we decided to reassess the validity of these two taxa. We cannot find any discussion in the literature that states any reason for the synonymy of *J. saundersii* Thomson, 1879 under *J. bakewellii*. It seems as though it was simply listed as such by Kerremans in his 1892 catalogue and followed by all subsequent authors. Despite the remaining work needed to more fully define the genus and its species, the taxonomic act proposed herein is presented now to be available for inclusion in the world catalogue of Buprestoidea that will be published later this year (Bellamy, in prep.).