

## Review of the biology of the Australian genus *Meliboeithon* Obenberger, 1920 (Coleoptera: Buprestidae)

by Dr Trevor J. Hawkeswood\*

\*PO Box 842, Richmond, New South Wales, 2753, Australia (www.calodema.com)

Hawkeswood, T.J. (2006). Review of the biology of the Australian genus *Meliboeithon* Obenberger, 1920 (Coleoptera: Buprestidae). *Calodema*, 8: 3-4.

**Abstract:** A review of the biology and host plant records for two of the six described Australian species and one undescribed species of the genus *Meliboeithon* Obenberger, 1920 is provided here.

### Introduction

The genus *Meliboeithon* Obenberger, 1920 contains six described species of mostly dull black and/or purplish buprestids, the adults of which are known to be associated with stems of native *Juncus* spp. (Juncaceae). They are presently included in the subfamily Agrilinae, tribe Coraebini (unplaced) (Bellamy, 2003). A review of the biology of three species is provided here. I have provided authorities for plant species names where relevant as these were usually lacking in the original references.

### Biological Review

#### *Meliboeithon cylindricolle* Bellamy, 1988

Distribution: Australia (New South Wales, South Australia, Western Australia).

Larval host-plant: Not recorded.

Adult host-plant: Not recorded.

Biology: Bellamy (1988:437) speculated, because the majority of the type series was collected from pitfall traps, that this suggested a larval biology which utilises the root crown or stem base of the host plant, with emergent adults flying away very low to feeding and mating sites. The adult food plants are also unknown.

Life-stages: The egg, larva and pupa have not been described.

Published collection records with biological data: None available.

#### *Meliboeithon intermedium* (Kerremans, 1898)

Distribution: Australia (Queensland, New South Wales, Victoria).

Larval host-plant: Not recorded.

Adult host-plant: *Juncus* sp. (Juncaceae)(Bellamy, 1988).

Biology: Bellamy (1988:435) stated that adults of this species have been collected feeding on the stems of an unidentified *Juncus* sp. (Juncaceae)[incorrectly cited by Bellamy (1988) as Cyperaceae] especially where these plants were associated with *Casuarina glauca* Sieb. ex Spreng. (Casuarinaceae). The *Juncus* clumps from which adults were collected are inundated at the base by seasonal tidal movements; the stems of the *Juncus* sp. are too narrow to

accommodate the larvae, hence the larvae are either associated with a different larval host, or more probably, occupy the submerged root crown portion of the *Juncus* plants (Bellamy, 1988). Adult females were frequently found with sand grains caught amongst the ovipositor brushes, so that Bellamy (1988) speculated that eggs may be deposited at the soil-plant interface, and that the emerging larvae find the appropriate feeding site in the root crown. The adults have been found both in saltmarsh communities and where *Juncus* clumps occur as a narrow band between lower tidal limits and supra-tidal level vegetation, i.e. *Acacia* and *Casuarina*, and are often interspersed between mangrove plants (Bellamy, 1988).

Life-stages: The egg, larva and pupa have not been described.

Published collection records with biological data: None available.

Further comments: Bellamy (2003) perpetuated his 1988 error by continuing to cite *Juncus* as a member of the family Cyperaceae.

*Meliboeithon* sp.

Distribution: Australia (New South Wales).

Larval host-plant: *Oxylobium aciculiferum* (F.Muell.) Benth. (Fabaceae)(Turner & Hawkeswood, 1996).

Adult host-plant: Not recorded.

Biology: An unidentified *Meliboeithon* species has been collected from the swellings on the lower parts of the stems of *Oxylobium aciculiferum* (Turner & Hawkeswood, 1996).

Life-stages: The egg, larva and pupa have not been described.

Published collection records with biological data: None available.

## References

- Bellamy, C.L. (1988). The classification and phylogeny of Australian Coroebini with a revision of the genera *Paracephala*, *Meliboeithon* and *Dinocephalia*. *Invertebrate Taxonomy*, 2: 413-453.
- Bellamy, C.L. (2003). *Coleoptera: Buprestoidea*. In: Houston, W.W.K. (ed) *Zoological Catalogue of Australia. Volume 29.5*. CSIRO Publishing, Melbourne: 1-485.
- Turner, J.R. & Hawkeswood, T.J. (1996). A note on the larval host plants and biology of *Melobasis cupriceps* (Kirby) (Coleoptera: Buprestidae) from Australia. *Mauritiana*, 16: 81-86.