## Redescription of *Calohelcon* Turner (Insecta: Hymenoptera: Braconidae), Description of a New Species, and a Reappraisal of the Significance of Certain Character States in the Helconinae

## D.L.J. QUICKE<sup>1\*</sup> & G.A. HOLLOWAY<sup>2</sup>

<sup>1</sup> Department of Animal Biology, University of Sheffield, Sheffield, England, S10 2TN

\* Australian Museum Visiting Fellow

 <sup>2</sup> Division of Invertebrate Zoology, Australian Museum, 6-8 College Street, Sydney, NSW 2000, Australia

ABSTRACT. Calohelcon obscuripennis Turner is redescribed and illustrated for the first time. Calohelcon roddi n.sp. from New South Wales is described, illustrated and differentiated from C. obscuripennis. The hindwing of C. roddi possesses a distinct transverse vein m-cu, a feature unknown in any other Helconinae but present in many members of the 'cyclostome' subfamilies Doryctinae and Rogadinae, and in the apparently related Alysiinae, Betylobraconinae, Gnamptodontinae, Histeromerinae, Opiinae and Telengaiinae. The presence of hindwing vein m-cu is interpreted as a plesiomorphous character state in the 'cyclostome' assemblage, but it is suggested that the presence of m-cu in some Calohelcon, represents a re-expression of genetic information, the expression of which had been previously suppressed. The phylogenetic significance of a number of other features of Calohelcon, and of Helconinae in general, are discussed.

QUICKE, D.L.J. & G.A. HOLLOWAY, 1991. Redescription of *Calohelcon* Turner (Insecta: Hymenoptera: Braconidae), description of a new species, and a reappraisal of the significance of certain character states in the Helconinae. Records of the Australian Museum 43(2): 113–121.

Recently major advances have been made in our understanding of the phylogenetic relationships between the subfamilies of Braconidae (Capek, 1970; van Acterberg, 1984; Sharkey, personal communication), although there is as yet no clear consensus of opinion, and several subfamilies are problematical. Application of Hennigian cladistics (Hennig, 1966) has proved invaluable in that by consistently differentiating between