New Species of the Trapdoor Spider Genus Misgolas Karsch (Mygalomorphae: Idiopidae) with a Review of the Tube-building Species

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ABSTRACT. Four sympatric species of *Misgolas* Karsch are studied: *M. hubbardi* n.sp., *M. dereki* n.sp., *M. kirstiae* n.sp., and *M. robertsi* (Main & Mascord, 1974). The male paratype of the tube building spider *M. robertsi* (originally *Dyarcyops robertsi*) from Dorrigo, NSW is removed from that species and designated as the holotype of *Misgolas mascordi* n.sp. The species *M. robertsi* is reconsidered and its male is identified and described. Biological notes are included.

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From field studies and examination of specimens held by the Australian Museum it appears that the idiopid trap-door spider genus *Misgolas* Karsch, 1878 may be represented in the Sydney-Illawarra region by at least seventeen species of which only six have been described: *M. rapax* Karsch, 1878, *M. biroi* (Kulczynski, 1908), *M. elegans* (Rainbow & Pulleine, 1918), *M. gracilis* (Rainbow & Pulleine, 1918) and *M. robertsi* (Main & Mascord, 1974). Apart from *M. rapax*, the type species of *Misgolas*, the other species were originally described in either the genera *Arbanitis* Koch or *Dyarcyops* Hogg (Main, 1985a,b). Only *M. robertsi* has a male description the remaining species' descriptions being based on less reliable female characters such as eye pattern and dorsal abdominal pattern.

Specimens held in the Australian Museum and attributed to *M. rapax* by Main (1985a,b) were examined, together with specimens of *M. elegans* (Rainbow &

Pulleine, 1918). From morphological differences between these specimens and those collected from the remnant forest at "Scalloway", Gerringong (34°44'11"S, 150°47'23"E), it is concluded that the Gerringong specimens represent four sympatric distinct species, three of which are newly described in this paper and the one remaining is the tube building spider *M. robertsi* (Table 1 [see Appendix]).

Main & Mascord (1974) suggested that although disjunct populations of tube-building species of *Misgolas* might be one or several species, it was most appropriate to consider them to represent the one species, *Dyarcyops robertsi* Main & Mascord, 1974. A female from southern NSW was described as the holotype and a male from northern NSW as a paratype. In this paper I show that subsequent examination of males from both northern and southern locations, confirm that there are at least two species in this tube-building group.