Trapdoor Spiders of the Genus Misgolas (Mygalomorphae: Idiopidae) in the Sydney Region, Australia, With Notes on Synonymies Attributed to M. rapax

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ABSTRACT. This paper reports on the species of the Idiopid trapdoor spider genus *Misgolas* Karsch, 1878 found in the Sydney Region of New South Wales, Australia. They comprise seven new species: *M. lynabra* n.sp., *M. cliffi* n.sp., *M. trangae* n.sp., *M. wayorum* n.sp., *M. rodi* n.sp., *M. beni* n.sp. and *M. michaeli* n.sp.; and four species which are rediagnosed or redescribed here: *Arbanitis gracilis, Dyarcyops maculosus, D. melancholicus* and *Megalosara villosa*. The latter two species, plus *Arbanitis fuscipes, Dyarcyops ionthus, Dyarcyops montanus* and *Arbanitis chisholmi* are removed from synonymy with *M. rapax*. Their current or revised status is listed. This latter species, popularly known as the Sydney Brown Trapdoor Spider, is shown not to occur in the Sydney Region. A key for males of species within the region is presented, as well as distribution maps and comments on taxonomy and natural history.

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Trapdoor spiders of the genus *Misgolas* are burrowing ground-dwellers which rarely have a trapdoor at the burrow entrance [*M. kirstiae* Wishart, 1992 and *M. gracilis* (Rainbow & Pulleine, 1918) are exceptions]. Two species have the burrow entrance as an aerial tube attached to rocks or vegetation [*M. robertsi* (Main & Mascord, 1974) and *M. mascordi* Wishart, 1992]. The spiders are sedentary and, with the exception of the mature male, nocturnal, they wait at the burrow entrance for foraging opportunities. Different entrance structures possibly indicate differences in foraging behaviour. Tree-dwelling *Misgolas* species are unknown.

The genus is distributed along the entire eastern coast of Australia to Tasmania and South Australia. Raven (1985) synonymized the New Zealand genus, *Cantuaria* Hogg, 1902, with *Misgolas* but this is under review. Colouration varies from light tan to dark brown and in some large species

the male is almost black (Wishart & Rowell, 1997). Most species have carapace and some limb segments covered with shining golden hair and many have dark brown blotches on lateral limb surfaces. The most consistent generic characters are (a) ocular area not more than twice as wide as long, and (b) low somewhat elongated carapace. There is much variation in size ranging from body length (including chelicerae) of 8.7 (AM KS5679) to 39.5 (AM KS51817).

The holotype specimen of *M. rapax* Karsch, 1878 (examined) was studied by Main (1985a) who, because of its poor condition, found it difficult to distinguish many useful features. The type locality is specified as "New South Wales", a large area not helpful in identifying the animal. Recently DNA analysis has shown that *M. rapax* and *M. hubbardi* Wishart, 1992—a species not present in the Sydney Region—are conspecific. Consequently *Misgolas*