

A record of *Eriophora transmarinus* (Keyserling, 1865) (Arachnida: Araneidae) feeding on the large cetonid beetle, *Diaphonia dorsalis* (Donovan, 1805)(Coleoptera: Scarabaeidae)

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Hawkeswood, T.J. (2007). A record of *Eriophora transmarinus* (Keyserling, 1865) (Arachnida: Araneidae) feeding on the large cetonid beetle, *Diaphonia dorsalis* (Donovan, 1805)(Coleoptera: Scarabaeidae). *Calodema Supplementary Paper No. 17*: 1-2.

Abstract: A record of the arboreal, web spinning net spider, *Eriophora* (= *Araneus*) *transmarinus* (Keyserling, 1865)(Arachnida: Araneidae) feeding on the diurnal nectar-feeding cetonid beetle, *Diaphonia dorsalis* (Donovan, 1805)(Coleoptera: Scarabaeidae) is provided from observations made at Kellyville, New South Wales, during February 2007.

Introduction and Observations

During February 2007, on an weed-infested property off Windsor Road, at Kellyville, New South Wales, I observed a specimen of the large brown and black cetonid beetle *Diaphonia dorsalis* (Donovan, 1805)(Coleoptera: Scarabaeidae: Cetoniinae) which had been very recently captured in an aerial web of the common garden spider *Eriophora* (= *Araneus*) *transmarinus* (Keyserling, 1895)(Arachnida: Araneidae). The web of the spider had been constructed between a fence and a side wall of an abandoned shed and the centre of the web was situated about 1.5 metres above ground level. The spider was observed feeding on the beetle between the pronotum and the elytra. The beetle measured approx. 25 mm long while the spider measured 20 mm body length. The beetle was wrapped in silk. No other insects were captured in the web apart from a few small flies, several bees and some small insects resembling mosquitoes. No other beetles had been captured apart from the single *Diaphonia dorsalis*. No other *Eriophora* spiders were observed in the vicinity.

Discussion

The widespread almost cosmopolitan spider *Eriophora* (= *Araneus*) *transmarinus* (Keyserling, 1865) is one of the most common species of spider in Australia but very few observations have been undertaken on its general biology and prey items. General textbooks on the Australian spider fauna, such as those of Mascord (1980), Clyne (1969) and Hawkeswood (2003), note generally that *E. transmarinus* feeds on soft-bodied insects such as moths, flies and other small insects but there is little or no specific details on the actual species recorded. This is the first time I have observed a freshly captured and almost live specimen of *Diaphonia dorsalis* in the web of this spider and indicates that even large strong-flying beetles such as *D. dorsalis* are capable of being captured and consumed from time but given the rarity of this beetle in relation to other insects such as flies and moths, the actual capture of *Diaphonia dorsalis* in spider webs must be regarded as a rare event. However, I have recorded other beetles as prey of Australian spiders (Hawkeswood, 1980, 1982).

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Froggatt (1907) briefly noted that *Diaphonia dorsalis* often occurred flying around residential gardens with a large humming sound and sometimes flew indoors. Tillyard (1926) and McKeown (1942) both noted the species was common, but in my opinion, the species is now rather scarce. It was one of the first insects to be collected and named from Australia [as *Cetonia dorsalis*] by E. Donovan in 1805, where it must have been a prominent insect in the new colony. Previous biological observations on the species include Froggatt (1914) and Alderson (1976).

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