

A Record of *Thomisus spectabilis* Dolesch 1859 (Araneida: Thomisidae) Feeding on a Scarab Beetle.

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Little has been documented on the food of Australian spiders, although it is generally known that many native spiders commonly feed on other spiders, soft-bodied insects (including flies, butterflies and moths), while some large spiders (e.g. Theraphosidae) may attack and feed on small reptiles, amphibians and birds.

This note records one observation of a thomisid spider, *Thomisus spectabilis* Dolesch (Araneida: Thomisidae) feeding on the fluids of a cetonid beetle, *Cacochroa decorticata* (Macleay) (Scarabaeidae: Cetoniinae) at Townsville, north Queensland on 23 November, 1981.

The Thomisidae are a large group of spiders occurring throughout the world. Australia has about 112 species (Musgrave, 1965, p. 239), although the number of known species will probably be higher when the tropical species are fully studied. A majority of spiders belonging to this family are characterized by having legs (the first two pairs of which possess ventrally paired spines), which are able to move forwards or sideways (i.e. laterigrade), in a manner similar to that of crabs; hence the popular vernacular name of "crab spider" for the group. Thomisid spiders do not construct a web, but rely on concealment, attractive coloration or resemblance (mimicry) to their prey, in order to capture their prey (Clyne, 1969). This has resulted in a myriad of forms and colours amongst the Thomisidae. A majority of the light-coloured species await in ambush at the centres of flowers, below petals and whole inflorescences, tips of leaves etc., with their anterior legs extended typical-

ly sideways and forward to form a half circle (Clyne, 1969).

The sub-family Misumeninae, to which most of the Australian species belong, are characterized by having legs I and II much longer and thicker than the two posterior pairs with leg II being slightly longer than leg I. These are adaptations for capturing prey whilst resting on their ambush sites.

There is only one species of *Thomisus* Walckenaer in Australia (Clyne, 1969, p. 59; Mascord, 1970, p. 48), namely *T. spectabilis* Dolesch. The genus is found in warmer latitudes of the world and also occurs from India to New Guinea (Clyne, 1969, p. 59). *Thomisus spectabilis* (Fig. 1) is a slow-moving, medium-sized spider which prefers to wait in ambush on pale yellow or white flowers. It is characterized by having a triangular abdomen which is broadly truncate behind and a broad cephalothorax extended laterally above the clypeus into two horns (Clyne, 1969). Musgrave (1965, p. 232a) illustrates the species in colour (as *T. pustulosus*). Clyne (1969, p. 112) and



Fig. 1. *Thomisus spectabilis* Dolesch (Araneida: Thomisidae). Bar indicates 5 mm. (Photograph by P. Finch).

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Mascord (1970, p. 49) also illustrate in colour, females of *T. spectabilis*. Mascord (1970, p. 48) notes that the males are smaller than the females (♂, c. 6.2 mm, ♀, c. 10 mm, body length) and that the species feeds on other spiders and other small insects.

Whilst observing insects feeding on open flowers of *Acacia bidwillii* Benth. (Mimosaceae) on 23 November 1981, I noticed a large female of *T. spectabilis* which had captured a male of the cetonid beetle *Cacochroa decorticata* (Macleay). The spider was clinging to the top of an *Acacia* inflorescence, 1.5 m above the ground, by the two posterior pairs of legs and was grasping the beetle around the head and pronotum with the two pairs of anterior legs. The beetle was dead and dangling, abdomen downwards, with the functional wings unfolded beneath the elytra. The spider was apparently feeding on the muscular tissue between the head and thorax. Unfortunately I did not have a camera in order to take a field photograph, so the predator and prey were captured for later identification and photographed in the laboratory.

Cacochroa decorticata (Macleay) (Fig. 2) is one of the more common species of beetle visiting the flowers of *Acacia bidwillii* at Townsville (Hawkeswood, pers. obs.). It is a wary beetle and usually flies away rapidly at the least disturbance. *C. decorticata* is a distinctive black beetle, measuring 1.2–1.5 cm in body length, with the sides of the pronotum in the male white and with pale yellow to cream blotches on the elytra. Macleay (1862, p. 17) first described this insect from Port Denison (Bowen) in north Queensland. Lea (1914, p. 140) recorded the species from Queensland only. Nothing has been written on its biology.

It is remarkable that the spider was able to capture and kill such a large and strong flying beetle as *C. decorticata*



Fig. 2. *Cacochroa decorticata* (Macleay) (Coleoptera: Scarabaeidae). Bar indicates 5 mm. (Photograph by P. Finch).

without allowing the beetle to escape. I have recorded the jewel beetles (Buprestidae) *Stigmodera (Castiarina) picta* L. & G. (Hawkeswood, 1980) and *Cisseis scabrosula* Kerremans (Hawkeswood, 1981) as prey for two spiders (*Araneus* sp., Araneidae and *Uloborus* sp., Uloboridae, respectively), but in these cases, the prey was smaller than the spiders.

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