

Common Spiders in the Darwin Area

D. Chin¹, T. Churchill², G. R. Brown¹ and J. Webber³

¹ Plant Industries, DoR, Darwin

² Formerly with the Tropical Ecosystems Research Centre, CSIRO, Darwin

³ Formerly with the Cooperative Research Centre for Tropical Savannas Management, CDU, Darwin

INTRODUCTION

Spiders are invertebrate animals belonging to a group called arachnids (which includes mites, ticks and scorpions). All spiders are predators and feed on insects, or other invertebrates, and may sometimes capture small frogs or lizards. Spiders have a variety of habits depending on where they live and how they feed. Some spiders build webs to capture flying insects while others may actively hunt for prey. Amongst ground-dwelling spiders, some live in burrows where they ambush crawling insects, whereas others may hide under rocks and leaf litter and search for prey at night. Spiders living on plants have a variety of ways to catch insects and other prey and are useful in agriculture where they help in controlling insect populations in fruit, vegetable and field crops. In households and backyards, they may be useful in keeping down pest populations such as cockroaches, silverfish, flies and moths.

This Agnote discusses selected species that have been commonly collected and submitted to the Entomology Section at the Berrimah Farm. Please note that this Agnote is only a guide to some of the common spiders in the Darwin area. There are many other common spiders that are not listed. Positive identification generally requires collecting and submitting a specimen.

REDBACK SPIDERS (*Latrodectus hasseltii*), family Theridiidae

Redbacks are found throughout Australia, and are more abundant in drier parts of the country. Specimens brought to the Entomology Section by enquirers have been generally encountered in undisturbed areas of buildings (such as under window eaves, in corners of verandahs and in wall

crevices), under car bodies, under timber or other items that have been left undisturbed for long periods. The webs are loosely structured, strong and have sticky basal strands.

The female spiders rarely bite unless they are touched or handled. Although no fatalities due to bites have been recorded since the introduction of anti-venom in 1956, bites are painful and must be treated as potentially dangerous. The male spider is much smaller and is not considered dangerous. Redbacks have a spherical abdomen, black legs and a black cephalothorax (where the legs are attached). The female usually has a red stripe on the top side (dorsal side) of the abdomen and an hourglass shaped red mark on the underside (ventral side) of the abdomen. The white or cream coloured egg sac is round with a smooth surface and is about 6 mm in diameter (Figure 1).



Figure 1. The redback spider, *Latrodectus hasseltii* (female)



Figure 2. The brown widow spider, *Latrodectus geometricus* (female)

BROWN WIDOW SPIDERS (*Latrodectus geometricus*), family Theridiidae

The introduced brown widow spiders are related to the redback and are not considered dangerous. They are usually brown, grey or sometimes dark brown in colour with markings on the abdomen. Some specimens of brown widows and redbacks may look similar to untrained eyes. Examining the egg sacs can help distinguish between the two species. Although egg sacs of both species are white or cream in colour, those of the redback have a smooth surface and those of the brown widow have a rough surface (Figure 2).

NORTHERN MOUSE SPIDERS (*Missulena pruinosa*), family Actinopodidae

The northern mouse spider is dark brown to black in colour with shiny black legs and cephalothorax. Females are about 30 mm in body length and are larger than the males, which are about 18 mm in body length. The males have a distinctive white or bluish-white patch on the top of the abdomen. Males are often seen wandering in search of females from August to December. Females rarely leave the burrow and are usually not encountered unless their burrows have been flooded after heavy rainfall or they have been disturbed by gardening or earth works. No fatalities have been recorded from bites of this species although the bite can be painful and cause headache and nausea (Figures 3 and 4).



Figure 3. The northern mouse spider, *Missulena pruinosa* (male)



Figure 4. The northern mouse spider, *Missulena pruinosa* (female)

BARKING SPIDERS (also known as bird-eating or whistling spider, *Selenocosmia* spp.), family Theraphosidae

Barking spiders are usually encountered in Palmerston and the rural area, and less frequently in Darwin suburbs. Specimens stored at Berrimah Farm indicate that these spiders were common in the residential areas of Darwin between 1964 and 1974. Some species of barking spiders include the largest spiders (in body size) known in Australia. They are brown to dark brown in colour with short hairs on the body giving them a furry appearance. Barking spiders live in burrows and emerge at night to catch prey such as insects, lizards, geckos, spiders or small birds. These spiders are generally not aggressive unless provoked. The venom is not considered dangerous although the bite can be painful (Figure 5).



Figure 5. The barking spider, *Selenocosmia* sp.

HUNTSMAN SPIDERS (family Sparassidae)

Huntsman spiders are sometimes seen on walls and floors inside houses, especially in the wet season. These spiders may appear frightfully large with their legs spread out. They are fast moving and have a flattened body, which allows them to hide in cracks and crevices inside houses and under bark. They often prefer vertical surfaces.

The most common huntsman spider species in the Darwin area is *Heteropoda* sp. which is mottled brown in colour. Other species occur and range from yellowish-brown, pinkish-brown to greyish-brown with markings on the underside of the abdomen and

bright bands on the underside of the joints of the legs (Figure 6).



Figure 6. The huntsman spider, *Heteropoda* sp.



Figure 7. The golden orb web spider, *Nephila insignis*

GOLDEN ORB WEB SPIDERS (*Nephila insignis*), family Tetragnathidae

The golden orb web spider builds enormous circular webs in gardens, orchards and rainforests (monsoon vine thickets). Webs are built by the female and are made of golden yellow silk which is quite strong and effective in catching flying insects. The female is up to 45 mm in body length. The cephalothorax (the united head and thorax) is black in colour while the abdomen is brown to olive brown. The female has black legs with yellow or orange bands at the joints. The male is much smaller, about 6 mm in length and is orange with large palps. Despite her size, the female is very gentle and rarely bites (Figure 7).

ST. ANDREW'S CROSS SPIDERS (*Argiope* spp.), family Araneidae

The St. Andrew's cross is a garden spider that is usually seen in a circular web with a cross pattern in the centre. The female spider is about 15 mm in body length. The carapace is silver grey and the abdomen has bands of yellow, red, white and black. The male is much smaller (about 5 mm) and is black and greyish. When the female spider is at rest in the middle of the cross in the web, it has its legs paired so that each pair rests on a strand of the cross. Flying insects such as flies, butterflies, damselflies, bees, and moths are trapped by the web. The spider rarely bites (Figure 8).

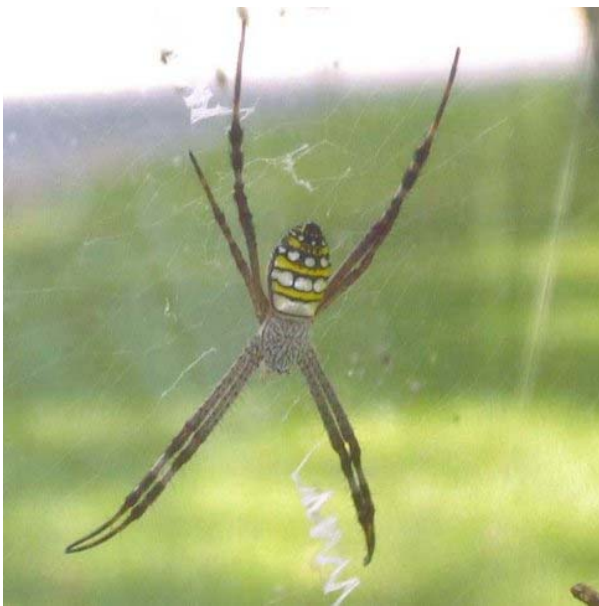


Figure 8. The St. Andrew's cross spider, *Argiope* sp. (female)

WOLF SPIDERS (family Lycosidae)

Wolf spiders are efficient hunters of insects and other prey on the ground. They are extremely fast runners and capture prey such as crickets, cockroaches and other spiders. Some species make their own burrows while others utilise abandoned holes made by other spiders or insects.

These spiders are generally brown or grey with radiating bands on the carapace which may be shades of black, grey or brown. The carapace is higher at the front. The spider has good eyesight and is well adapted for foraging at night.

Wolf spiders are not considered dangerous but if handled or provoked they may give a painful bite (Figure 9).



Figure 9. The wolf spider, *Lycosa* sp.

JUMPING SPIDERS (family Salticidae)

Jumping spiders are usually small (about 10 mm in length). They are easily identified by their running and jumping habit and large eyes. Salticids are diurnal and are often seen foraging on garden plants during the day. Jumping spiders found inside houses are generally brown, black or grey, whereas those found outside in gardens are often brightly coloured. Reported bites of salticids in the Northern Territory have produced only mild pain.

The northern green jumping spider *Mopsus mormon* is the largest salticid in Australia (measuring up to 18 mm in length for the female and 12 mm for the male). The male is green with long strong front legs with black or brown coloured femora (first long segment of the leg), the other legs are light brown with green femora. The female is green and does not have black markings on the two front legs. The area around the eye spots is patterned with red and white (Figure 10).



Figure 10. The northern green jumping spider, *Mopsus mormon* (female)

SPIDER BITES AND FIRST AID

Spiders will generally not bite unless threatened. If a spider bite occurs and you are concerned about any symptoms please seek medical advice immediately. If possible, please collect the spider, without risking further injury. The specimen can then be identified and spider bite information forwarded to researchers.

SUBMISSION OF SPECIMENS FOR IDENTIFICATION

Specimens requiring identification can be forwarded to the Entomology Section, BAL Building, Berrimah Farm, Makagon Road, Berrimah, NT 0828. The Section will then forward specimens from spider bite cases to a specialist for data collection and research purposes.

FURTHER INFORMATION

For further information related to this Agnote phone (08) 8999 5511 or email: insectinfo.drdpifr@nt.gov.au

A full colour version of this Agnote is available from the departmental website at www.nt.gov.au/d/publications

FURTHER READING

Isbister, G.K., Churchill, T.B., Hirst, D.B., Gray, M.R. and Currie, B.J. (2001). Clinical effects of bites from formally identified spiders in tropical Northern Territory. *Medical Journal of Australia*. **Vol 174**: 79-82.

Raven, R.J., Baehr, B.C. and Harvey, M.S. (2002). Spiders of Australia. Interactive Identification to Subfamily. (CD ROM). CSIRO Publishing. Victoria, Australia.

Walker, K.L., Yen, A..L.. and Milledge, G.A. (2003). Spiders and scorpions commonly found in Victoria. Royal Society of Victoria. Melbourne, Victoria, Australia.

Reference for first aid of spider bites:

St John Ambulance Australia (1996). Macdonald and Verhoeven (eds). Australian First Aid. Second Edition. Volume 1.

Photographs used in this Agnote were taken by Deanna Chin, Graham Brown, Michael Neal and Dermot Wait.

Please visit us at our website:

www.nt.gov.au/d

© Northern Territory Government
ISSN 0157-8243
Serial No. 822
Agdex No. 611

Disclaimer: While all care has been taken to ensure that information contained in this document is true and correct at the time of publication, the Northern Territory of Australia gives no warranty or assurance, and makes no representation as to the accuracy of any information or advice contained in this publication, or that it is suitable for your intended use. No serious, business or investment decisions should be made in reliance on this information without obtaining independent and/or professional advice in relation to your particular situation.