Redback Spider and Brown Widow Spider

Fact Sheet



Adult female Redback. Image: QM, Jeff Wright.

Redback Spider Latrodectus hasseltii

The Redback Spider is best known from the adult female which has a smooth, black body with a broad red stripe above and a red hourglass shape or two triangles below.

This typical pattern can vary. The spider may be light or dark brown, and its red stripe, of varying length and width may be pink or light orange. In one variation the spider is almost entirely a light yellow-brown, obscuring and almost masking an orange stripe. The hourglass-shaped marking on the underside is almost always present and is diagnostic of most widow spiders (*Latrodectus* spp.) of which the Australian Redback Spider, the Brown Widow, and the American Black Widow are examples.



Adult Redback Spider, *Lactrodectus hasseltii*. Image: Robert Raven.

An adult female Redback has an abdomen the size of a pea and legs that may span a 50 cent coin. As egg laying approaches her abdomen expands to about 10 mm in diameter and the red stripe tends to fade.

The adult males are considerably smaller, do not have an upper stripe, and may be white to brown with red and white markings. They are rarely seen. Small Redbacks suspected to be males are usually young females. When newly hatched, the young are a dirty-white colour with some patterning. The hourglass-shaped marking is white. The sides of the abdomen of an immature spider can be entirely white, cream, or brown with white diagonal stripes. As a female matures, her body darkens and the hourglass marking and the stripe become orange or red.

The eggs are wrapped in tough layers of silk to form a sac. These spherical, fawn-coloured sacs are hung near the back of the web where the female guards them. Each sac contains 40-300 eggs, and three to five sacs are laid at any one time. The young emerge after about 14 days; if conditions are suitable they disperse. Each spiderling produces a long thin thread of silk, enabling it to be blown by wind to another site where it will settle down and build a web.



Adult female Redback Spider with egg sac. Image: QM.

Redbacks will build almost anywhere with access to a plentiful supply of food and out of the direct effects of the weather: on buildings; under steps; tables and chairs; in grass; under logs; around pot plants; and in crevices of bricks. The web consists of an untidy, irregular tangle of fine, strong silk. Often there are leaves and the remains of insects caught in the web. The back portion of the web forms a funnel-shaped retreat, where the egg sacs are also placed. They prefer locations with the outer portion of web exposed to some sunlight and the inner funnel in a sheltered, dark recess.

Redbacks occur throughout Australia, but are common where the natural environment has been disturbed. They are a particular problem in newly settled suburbs.

Symptoms of a Bite

Most bites are caused by females or young females misidentified as males. The initial bite is often felt but is apparently painless. Puncture marks are not always evident. In most bites, intense local pain is experienced about 5 minutes after the bite.



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Common symptoms (about 40 per cent of cases) include sweating, muscular weakness, paralysis, stiffness, tremors and loss of coordination. Less common symptoms (about 10 per cent of cases) include nausea, vomiting, local redness and swelling, dizziness or fainting, rapid or irregular heartbeat, insomnia, rigours, fever and muscle spasms. The venom is slow acting and serious symptoms should not develop for about 3 hours.

IN THE EVENT OF A SUSPECTED BITE, SEEK MEDICAL AID.

In the meantime, the first aid recommended by St John's Ambulance is to apply a cold pack or compress over the bitten area, but do not freeze or damage the unprotected skin. Do not use a pressure immobilisation bandage. The best action is to transport the person immediately and without panic to medical aid. An antivenom has been available since 1956 and since then only one death has occurred from Redback bites. Prior to this, 13 deaths were recorded.

Control

Redbacks are hardy spiders, able to withstand high temperatures and prolonged dry periods. Within the web they construct a deep retreat where they will hide if disturbed. The entrance to the retreat usually opens downwards and this, combined with the spider's timid behaviour, limits the effectiveness of chemical sprays. Even if the adult spider is killed, the eggs are likely to survive within their tough sac and hatch later to recolonise the area.

Even if a 'total kill' is achieved, spraying must be repeated frequently, as one breeze will carry a new batch of young spiders in from elsewhere.

Chemical sprays are indiscriminate, killing all spiders including the harmless ones that help control Redbacks. As Redbacks are rapid colonisers, spraying may favour them and lead to an increase in their numbers.

The most effective method of Redback control could be termed 'informed vigilance'. Learn to recognise Redback Spider's webs. Take a stick or small brush. Push it quickly into the back of the web as far as it will go and roll the spider, her eggs and web onto the stick. Crush the spider and thoroughly crush the egg sac. Areas that have been infested should be checked regularly for any survivors or new infestations. The time for best results is winter when Redbacks are most vulnerable, surviving only where there is sufficient warmth from sunlight. Garden furniture, and under steps and windowsills are favoured places.

The roof cavity of homes may act as a reservoir for repeated infestations. Inset lights provide warmth and attract insects. Gaps in the roof and ceiling allow spiders to enter the house. Repeated chemical treatments may be necessary for effective control.

The most formidable natural enemies of Redback spiders appear to be other spiders. Black House Spiders (*Badumna* spp.), Whitetailed Spiders, (*Lampona* spp.) and Daddy Longlegs (Pholcidae) are known to capture and consume Redbacks. If a harmless spider is already in residence, it is difficult for a Redback to settle and establish. Essentially, the best control is to encourage other spiders and physically remove Redbacks.

Brown Widow Spider Latrodectus geometricus

The Brown Widow is similar in shape to a Redback and may be slightly bigger. It lacks a stripe of any colour down the back. The body and legs vary in colour from fawn to black. In most specimens there are lighter coloured markings along the sides of the abdomen. The hourglass-shaped marking on the underside is yellow.

The egg-sac of the Brown Widow is unusual and is often the most easily recognised difference between Redbacks and Brown Widows. It is fawn-coloured and spherical, with many points radiating from the surface, rather like a World War II marine mine.



Adult female Brown Widow Spider. Image: QM.



Brown Widow Spider and egg-sacs. Image: QM, Gary Cranitch.

The web is an untidy, irregular tangle of strong silk, formed into a deep, tough scoop. The spider rests with its egg-sacs at the back of the web. As yet, Brown Widows have only been found in association with human structures: under tables and chairs; in car bodies; among paper work on desks; and in the bases of pot plants.

The Brown Widow is the most actively reproducing widow species, producing up to 5000 young per female per season. It appears not to be as adversely affected by winter and has the potential to become a considerable pest.

Symptoms of a Bite

IN THE EVENT OF A SUSPECTED BITE, SEEK MEDICAL AID.

Apparently, the bite of the Brown Widow does not cause the same severe reactions as that of the Redback. The bite is extremely painful, with pain lasting for up to 3 days. Bites to young babies, people prone to allergies, and the elderly should be given medical attention immediately.

Contro

Both Redbacks and Brown Widows live in the same types of places and behave in very similar ways. Their control is the same. However, Brown Widows are much rarer now probably as a result of competition with Redbacks.

Further Information

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