Jack Jumper Ants

Myrmecia pilosula complex of species (also known as jumper ants or hopper ants)



photograph © Alex Wild 2005

Jack jumpers (also known as jumper ants, hopper ants, jumping jacks) are medium sized ants, 8-10mm long with a black body but pale jaws and legs. They can jump 10cm repeatedly when defending themselves. They are related to the larger, less aggressive and less active inchman ants which are 3cm long.

There are many species of both jack jumpers and inchman ants in <u>Australia</u>. However, some members of the small <u>Tasmanian</u> fauna (*M. pilosula* and its close relatives) have achieved notoriety because of their sting and, more importantly, the allergic reaction some people have to their stings (see below). It is worth noting that some mainland species can also cause severe allergic reactions.

The natural habitat of jack jumper ants is woodland and open forest in south-eastern

Australia, including Tasmania. They also occur in open habitats, including pastures, gardens and lawns that have not been much cultivated and are near light bush, such as around new housing. They prefer fine gravel and sandy soil. They like to forage for food near eucalypts, wattles and the native understorey bushes associated with those trees. They collect small insects, honeydew from sap-sucking bugs and nectar to take back to their nest where it is fed to ant grubs.

Jack jumper nests contain hundreds or thousands of ants, but this is considerably less than many smaller pest ants. In the nest the queen, who lays all the eggs, can survive a decade. The worker ants can live a couple of years. The entrance to the nest is often surrounded by a pile of sand and pebbles 6cm in diameter with a central hole 1cm diameter.

The only effective way of controlling jumper ants is to treat their nests with a dust or sandy formulation of one of the registered insecticides*, some of which are also registered for use against lawn grubs. Because jumper ants do not form trails, their nests may be hard to find. Look for them under fallen logs, stony areas, rock walls or in open ground where the vegetation is sparse.

When a jack jumper stings

Jack jumpers are aggressive when disturbed. They grasp a victim with their jaws and inject

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venom from their tail end. This causes mild reactions in most people – the sting is usually quite painful and local swelling is common.

However, about 3% of Tasmanians develop a severe allergy, which is twice the rate for allergy to bee stings. A systemic allergic reaction to a jack jumper sting can make you unwell and can sometimes be severe (anaphylaxis), which is potentially life-threatening. There were four recorded deaths from jack jumper stings in Tasmania between 1980 and 2000.

If you are stung by a jack jumper it is important to watch for signs of anaphylaxis. More information is available in the <u>Action Plan for Anaphylaxis</u> (Insect allergy).

If you show signs of an allergic reaction to jack jumper sting, you should seek medical advice.

The Royal Hobart Hospital offers a desensitisation program for people who have had a severe allergic reaction to jack jumper sting.

Venom immunotherapy has proven to be extremely successful in desensitising allergic patients to jack jumper venom. It is recommended that any person who has suffered a significant reaction to a jack jumper sting discuss referral to the Jack Jumper Allergy Program with their general practitioner. Venom immunotherapy significantly reduces the risk of an allergic person having a life threatening reaction to a jack jumper sting.

Venom immunotherapy can significantly improve an allergic person's quality of life, particularly those who partake in higher risk

activities eg. Bush walking, gardening, working in remote locations.

While carrying an EpiPen can treat a reaction, venom immunotherapy can prevent the reaction occurring in the first place.

It is important to note that sometimes allergic people don't react to a sting. However this can be due to differences in the amount of venom injected with each sting, or because the sting was from a different species with different venom, or due to fluctuations in responsiveness by the patient, the reasons for which are not fully understood. The message remains the same however, do not be lulled into a false sense of security if you react then don't react...you could still run into problems with the next sting.

For more information on the Jack Jumper Allergy Program, contact the Royal Hobart Hospital (03) 6222 7599.

*Important note on chemical use: Agricultural chemicals, including insecticides, are not to be used for any purpose or in any manner contrary to the label unless authorised under appropriate legislation. Before using a chemical, read and adhere to the instructions for use on the label. For information on registered chemicals and current off-label permits, visit the APVMA website (www.apvma.gov.au).

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