ANTS – GENERAL INFORMATION

Note: DPIPWE has also published fact sheets on Pest ants How to identify pest ants Argentine ants

Ants in general

Ants are important parts of ecosystems. In dry parts of Australia they are more important than earthworms for aerating the soil and recycling nutrients.

Australia has a very diverse ant fauna by global comparisons, but most of Tasmania has a relatively poor fauna (about 140 species), richest in the warm, open country of the north east and poorest in shaded forests.

Only a handful of the species found in Tasmania are nuisances in Tasmanian homes and gardens. However, some of the *Myrmecia* species (jack jumpers, jumpers, inchmen, bulldog ants, bull ants) can cause serious allergies, requiring urgent medical attention in some individuals.

Ant society

Ants live in communities with social organisation. A community occupies a nest which is made up of a number of tunnels and galleries. Depending on the species, nests may be located in soil, masonry or dead trees.

Castes are the basis of ant society. Each caste is built for a particular job.

Worker ants are the most numerous caste. They gather food for the nest and do other jobs in the nest. They cannot breed but are conspicuous as they forage back and forth, often along scent trails.

In some species, the workers also protect the colony from attack but in other species this is done by the soldier caste. Soldier ants are usually larger than ordinary workers and have big heads and powerful jaws.

Queens are a rare caste who remain in the nest and lay all the eggs. For many ants there is only one queen per nest. Another reproductive caste includes winged males and females who fly off at certain times to find mates and establish new nests.

The eggs hatch into grubs that are fed by the workers. When the grubs are fully fed they transform into soft, white pupae that many people mistake for 'eggs'. The pupae then emerge as worker, soldier or reproductive ants.

Ants and people's health

Several of the *Myrmecia* species (the large inchman ants and the smaller jumper ants) will invade gardens but they are more likely to harm the gardener than the garden. They are very aggressive and can inflict a severe sting to which some people are allergic. Tasmanian species seem worse than mainland species in allergenicity and allergic people should know in advance what to do if they are stung – don't wait until after you are stung before seeking medical advice.

The only effective way of controlling inchman or jumper ants is to treat their nests with a dust or sandy formulation of a registered insecticide. Because inchmen and 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. The entrance may be surrounded by pebbles in the case of jackjumpers. Like scorpions, they are more common in newly established gardens than in old suburbs. Regular soil disturbance reduces their numbers, just as happens in regularly cultivated paddocks.

If you are stung *multiple* times by many *small* ants in Tasmania you may have been the first person to encounter <u>red imported fire ant</u> (RIFA) locally. RIFA is a notifiable pest so please report it to quarantine authorities without delay. In Australia, RIFA has only occurred around Brisbane so far, where it is subject to an eradication campaign.



Ants in houses

In the home or any place where food is kept the most troublesome species is the white-footed ant, *Technomyrmex jocosus*, which is black with white feet. Another pest is the <u>Argentine ant</u>.

Other nuisance ants include a tiny, honey-brown seed-harvesting ant, *Pheidole liteae*, commonly seen at left over pet food, and a small black ant belonging to the genus *Iridomyrmex* which likes to forage in eucalypt trees but also enters houses.

Seed-harvesting ants like food that is rich in protein such as bacon, milk and cheese. Others, including Argentine ant, like sugary foods such as jam, syrup and cakes. For this reason, poison bait formulations vary in attractiveness and efficacy.

Australia has large black ants of the genus Camponotus that will nest in rotten house timber such as window sills decayed by dampness. However, unlike their large American relatives, the carpenter ants (which are exotic to Australia), these native species do not attack sound timber.

Ants in the garden

Ants are seldom troublesome in Tasmanian gardens although some species of the small, brown, seed-harvesting ants have been known to rob seedbeds.

Species of *Iridomyrmex* are sometimes seen tending scale insects on lemon trees. In doing so, they prevent natural enemies from controlling the scales. Ants can be important predators in gardens.

Argentine ants can be a nuisance by their large numbers in gardens and at barbeques.

Workers of the large (12mm long) black and brown nocturnal sugar ant *Camponotus consobrinus* emerge at dusk. They are harmless but sometimes resented for building untidy soil mounds along paths. They are also sometimes mistaken for the red imported fire ant, which has similar colour but is much smaller (2-6mm long).

Ants that aren't ants - blue ants

Blue ants, *Diamma bicolor* (22mm long) are not ants but wingless females of a wasp that search out and parasitize mole crickets in the soil. However, they have a painful sting. They live as individuals rather than in large social groups.

Ant control

Storing food in sealed containers and following strict cleanliness prevents ants establishing foraging trails.

The next best way to control an invasion of ants in the home is to find and treat the nests. You can sometimes do this by tracing ant trails back from feeding places or points of entry into a room. If there are only a few nests, dust lightly around them with one of the proprietary garden dusts. Repeated application may be needed to achieve full effect.

Borax baits have an advantage over sprays and dusts because they make the ants work for you by carrying the bait back into their nests.

Outdoor ant nests can be sprayed or dusted.

If necessary, seed-harvesting ants can be controlled by dusting or spraying.

For information on Argentine ant control, please refer to DPIPWE's webpage on Argentine ants

Insecticides

Household packs of proprietary sprays, dusts and baits registered for ant control are available at most garden supply centres and supermarkets.

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. If you want more information about officially registered products, visit the APVMA website and click on 'search PUBCRIS for registered chemicals'.

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