

ARGENTINE ANTS DESTROY BEEHIVES

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Argentine ant (*Linepithema humile*) invasions are sweeping the North Island and causing severe apiary infestations. They strip hives of food stores, eat brood and both directly and indirectly damage bee health. This leads to **reduced honey yield, reduced bee numbers and ultimately hive death** through weakened recruitment and insufficient food storage.



Argentine ants are so successful due to the closely similar genetic makeup of seemingly-independent nests. Therefore, unlike many other species of ants, nests of Argentine ants seldom compete or attack each other. Individuals are able to move between nests undisturbed. This trait is called unicoloniality, and leads to the formation of "super colonies" with many thousands of reproducing queens - up to eight queens per 1,000 workers.

As well as being a horticultural and domestic pest, Argentine ants play hosts to many viruses. This includes Deformed Wing Virus, the infamous partner-in-crime of the varroa mite. This makes them a very serious threat to New Zealand's apiculture industry.

IDENTIFICATION

- Brown colour (not black or bright red)
- Workers all 2-3mm long
- Walk in structured foraging trails (not ponderous)
- Will scatter when disturbed
- Stinger absent
- Do not smell like formic acid when crushed



DO NOT SPREAD ANTS

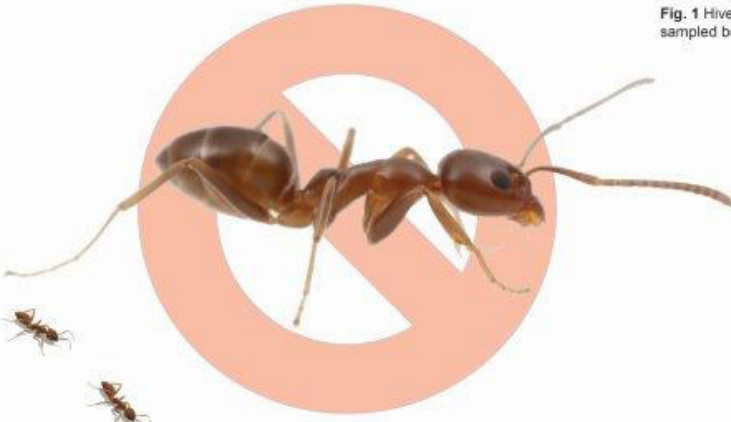
DO NOT place hives in places with high human thoroughfare. Ants are attracted to warmth and food supplies, both of which can be found at campsites, public parks or gardens.



DO NOT MOVE ant infested hives— it will not fix the problem. Ants spread extremely efficiently and moving hives will just cause proliferation of nests.

THOROUGHLY CHECK all hives for symptoms of ants:

- presence of ants inside or on the exterior of the hive box,
- foraging trails near the hive,
- large number of dead bees with no evidence of hive-hive fighting before relocating hives.

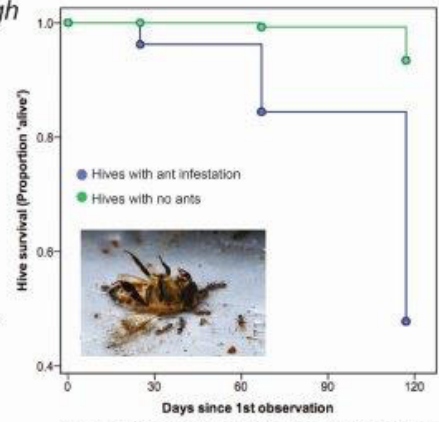


MANAGEMENT

There are options available to treat ant infestations, including baits and poisons in various applications. Some are more effective than others and can depend on your local climate.

For more information see <http://argentineants.landcareresearch.co.nz/>

HIVE MORTALITY



Recent surveys in the Northland region showed that hive mortality increased from approximately 10% (90% survival rate) to over 50% over a period of three months at sites with Argentine ant infestation.

Infested hives are visibly weaker than non-infested hives, often with fewer bees and ant-chewed brood caps. Ants will almost completely wipe out one hive before moving on to the next. Always check for ants in a site before moving hives. Ants may nest within the hive, attracted to the heat produced, or nearby in an underground nest, between 0 to 200 m away from the hive.

Fig. 1 Hive survival over 6 sites in the Northland region sampled between February and June 2016

MOVEMENT

Argentine ants spread quickly, exploiting new resources and adapting very quickly. Since their accidental introduction into Auckland in 1990, they have proliferated throughout the North Island and are found as far south as Christchurch (Fig 2). It is vital to prevent established colonies from spreading, especially to uncontaminated areas.

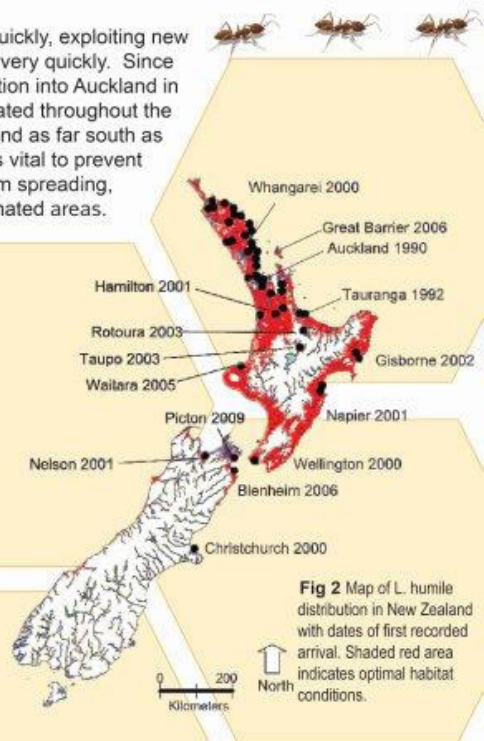


Fig 2 Map of *L. humile* distribution in New Zealand with dates of first recorded arrival. Shaded red area indicates optimal habitat conditions.