# Tropilaelaps mite



Tropilaelaps mites (Tropilaelaps clareae and T. mercedesae) are external parasites of adult honey bees, drone and worker bee brood. They are native to Asia and are considered a high priority bee pest to Australia.

Tropilaelaps mites are considered exotic to Australia. For the latest information on the status of tropilaelaps mites, visit your relevant State or Territory agriculture agency website.

### What do tropilaelaps mites look like?

Adult mites are red-brown and around 1 mm long and 0.5-1 mm wide.



Tropilaelaps mite on honey bee pupa.

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Tropilaelaps mite.

### What can they be confused with?

Tropilaelaps mites can sometimes be confused with braula fly (*Braula coeca*), pollen mites (*Mellitiphis alvearius*) and varroa mites (*Varroa destructor* and *V. jacobsoni*).

### How is it spread?

Tropilaelaps mites can spread through the movement of carriers such as bees, swarms, bee nests or hives, apiary equipment and hive products.

# What are the potential impacts of tropilaelaps mites?

If tropilaelaps mites were to become established in Australia, they would cause significant losses to managed and feral honey bee colonies. This would ultimately lead to less honey and an adverse impact on a wide range of pollination-dependent crops that support primary food production.

### What can beekeepers do?

Beekeepers are encouraged to regularly inspect their hives for signs of tropilaelaps mite.

Techniques such as drone uncapping or alcohol washing are quick and effective methods for detecting the presence and monitoring the level of tropilaelaps mites within a honey bee colony.

Factsheets and a training video that provides information on alcohol washing are available on the Bee Pest Blitz website.

# What should I do if I suspect tropilaelaps mite?

If you see anything unusual, keep the sample and report the finding immediately to the relevant state/territory agriculture agency through the **Exotic Plant Pest Hotline 1800 084 881.** 

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# Where in the hive would you find tropilaelaps mites?

Tropilaelaps mites complete their life cycle in the brood area and can be observed in both drone and worker bee brood.

Examining the brood involves uncapping brood to check for dark mites in the cell against pearly white bodies of developing brood.

Tropilaelaps mites can rarely be observed on adult worker bees and drones.

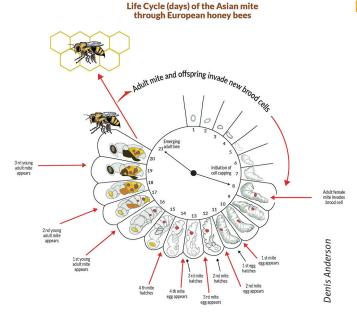
## What are the signs and symptoms of infestation?

Tropilaelaps mite infestation causes severe damage to honey bee colonies such as deformed pupae and adults (stunting, damaged wings/legs/abdomens), parasitic mite syndrome and colony decline.

The colony may also swarm or abscond, further spreading the mite to new locations. Tropilaelaps mites can also spread viruses which further affect the colony's health and disease susceptibility.

### Life cycle

Female tropilaelaps mites will enter the worker and drone brood cells that are in the process of being capped and lay 1-4 eggs. The development from egg to the adult mite takes approximately 1 week and the adult mite will emerge from the brood with the emerging young adult bee.



Life cycle of tropilaelaps mites on European honey bee.



Tropilaelaps mite on honey bee pupa.



Tropilaelaps mites on European honey bee pupae, and a deformed honey bee resulting from infestation.

Biosecurity is everyone's responsibility, play your part and check your hives.



If you see anything unusual, call the Exotic Plant Pest Hotline

