

Biological Control of Mimosa

NESSIE

Leaf Feeding Flea-Beetle

January 2018

Nesaecrepida infuscata is the scientific name of the flea-beetle commonly known as nessie. It is a tiny golden brown beetle native to Mexico which was introduced into the Northern Territory in 2007 after two years of quarantine testing.

Adults are small, about the size of a large flea. They can fly, but they also jump like fleas, and live for about three months in their adult form.

Nessie adults feed on mimosa leaves, reducing the plant's ability to grow and produce seed. The feeding impacts of both the nessie larva and adult beetles also make mimosa more susceptible to disease and other control measures. In some instances nessie can cause seedling death. It is now flourishing across the Northern Territory in a number of isolated locations where it is reducing plant health and seed output of mimosa.



Mimosa impacted by Nessie



Nessie Adult

Adult females lay eggs in the soil at the base of a mimosa plant or seedling. After seven days the eggs hatch into small larvae. The larvae feed on the roots underground for about 14 days. They then pupate in the soil for seven days before emerging as an adult. The lifecycle takes approximately 28 days from egg to adult.

One of the limitations is nessie's habit of remaining within its local area. To address this land managers are encouraged to collect nessie beetles from existing wild populations, and introduce them to unaffected mimosa stands, where they can establish new populations. Contact the Weed Management Branch for more information on how to do this.



Eggs



Larvae



Newly emerged adult

For more information contact **Weed Management Branch**

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