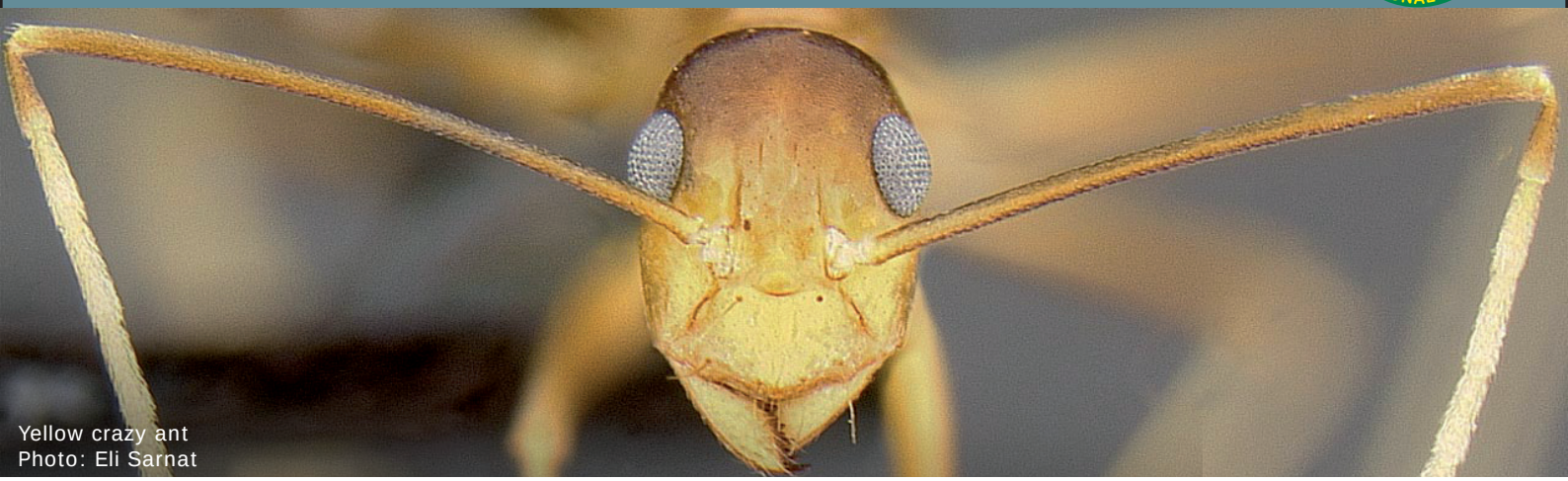

Yellow crazy ant
Photo: Eli Sarnat

Christmas Island National Park

Independent scientific research shows that crazy ant bait does not accumulate in Christmas Island's environment

Independent scientific research carried out by CESAR Consultants has confirmed that Fipronil ant bait, which is used to control highly invasive crazy ants on Christmas Island, has not accumulated in the environment.

The research investigated the effect of Fipronil bait on Christmas Island's environment and native species before, during and after the last crazy ant aerial baiting program undertaken in September/October 2009. The key findings of this research were:

- The Fipronil aerial baiting program was effective at controlling crazy ants, with over a 98% reduction of crazy ants at baited crazy ant supercolony sites
- Scientific analysis of the samples and data collected for the research provided no evidence that Fipronil is accumulating in the environment (soil, water, or invertebrates)
- No evidence was found that the Fipronil aerial baiting program caused significant negative impacts on invertebrate fauna

Why crazy ant supercolonies are baited

Crazy ants are listed as a key threatening process to biodiversity on Christmas Island because they can form high density supercolonies, which particularly threaten the island's iconic red crabs, which maintain the health and structure of Christmas Island's unique rainforest ecosystems. This is why Christmas Island National Park baits crazy ant supercolonies.

Even after baiting, crazy ant supercolonies can re-emerge within a few years, making their control a long-term challenge as additional baiting may be necessary. Continued baiting with Fipronil will be difficult and expensive but currently there are no alternative and effective agents for controlling crazy ants. This was recognised by the scientific Expert Working Group, that was established by the Minister for Environment, Heritage and the Arts in 2009 to advise the Minister on biodiversity conservation issues on Christmas Island.

The research conducted by CESAR Consultants and the Expert Working Group's recommendations provide a scientific basis for continuing to control crazy ants with Fipronil until alternatives can be developed.

Researching alternative crazy ant control options

Given the long-term challenge of controlling crazy ants by baiting supercolonies, research is being undertaken on other control options for crazy ants. The Director of National Parks is funding Latrobe University to undertake research for the biological control of crazy ants. The research focuses on controlling the scale insects, as scale insects secrete sugars that crazy ants feed on, which helps maintain crazy ants at supercolony densities.

The targeted Fipronil baiting program and research for biological control alternatives is conducted under the advice of the Crazy Ant Scientific Advisory Panel, which provides scientific and technical advice for Christmas Island National Park to inform crazy ant management. The Panel includes scientists with expertise in invasive ant ecology, rainforest ecology and related biodiversity conservation fields.

The long term control of crazy ants is critical for protecting Christmas Island's unique ecosystems and native species, particularly red crabs, which are ecologically significant and a major drawcard for tourists and nature enthusiasts from around the world.

For further information

The study, Monitoring of the 2009 aerial baiting of yellow crazy ants (Anoplolepis gracilipes) on non-target invertebrate fauna on Christmas Island, as well as other information about Christmas Island National Park can be found at environment.gov.au/parks/christmas/index.html

The yellow crazy ant