Nest of rare ant T. rex found in Singapore

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In profile view, the largest T. rex worker (TL 4.52 mm) in the current collection. Credit: *Asian Myrmecology*, 9: e009007 (1-4) DOI: 10.20362/am.009007

(Phys.org)—A pair of researchers with Singapore Botanic Gardens and the National University of Singapore has found and studied a nest of Tyrannomyrmex rex, a first for the rare species of ant. In their paper published in the journal *Asian Myrmecology*, Mark Wong and Gordon Young describe how they found the ant nest and what they discovered after they brought it back to their lab for study.

T. rex, the ant, was first discovered back in 2003 in Malaysia—its name derives from the odd shape of its head and short forearms. That initial finding was a single dead ant. Since that time, other researchers have found examples on leaves, but until now, no one had ever found a nest. Wong and Young report that they found the nest after investigating a small piece of land that had recently been uprooted by military exercises in Mandai, a part of Singapore just north of the Singapore Zoo. They note that earlier in the century, the area had been used as a rubber plantation.

After confirming that the species was, indeed, the elusive T. rex, the pair dug up the nest and brought it back to their lab for study. They found that it was made up of 13 worker ants, eggs, larvae and pupae—but no queen. They also found that the ants did not have metapleural glands, which other ants use to secrete an antiseptic compound, which was odd, considering the place where they lived—underground in some rotting wood, which also offered a clue as to why they have been so hard to find.

Wong and Young report that the ants appeared to be nocturnal and non-aggressive—they froze when faced with other insects then ran away, though one of them did sting a millipede that attempted to enter the nest. Also, they could not figure out what the ants ate—other than a male that hatched—despite offering them a wide variety of options. The researchers studied the ants for 10 days and then killed them, preserving their bodies for further study. They also returned to the site where they

found the nest looking for other signs of the ants, but found none.

More information: Notes on the habitat and biology of the rare ant genus Tyrannomyrmex (Fernández, 2003), *Asian Myrmecology*, 9: e009007 (1-4) DOI: 10.20362/am.009007 , www.asian-myrmecology.org/doi/ … 20362/am.009007.html

Abstract

The rare myrmicine ant genus Tyrannomyrmex Fernández, 2003 comprises three species of tropical ants restricted to the Oriental region. This study presents information on worker size, specific habitat, food and behaviour of Tyrannomyrmex rex.