

The prevalence of three endosymbiotic bacteria in the invasive yellow crazy ant (*Anoplolepis gracilipes*)

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Eligible for student prize

Invasive ant species, such as the yellow crazy ants (*Anoplolepis gracilipes*), are a global issue causing both economic expense and ecological damage. We screened populations of yellow crazy ants for the presence of three known endosymbionts (*Wolbachia*, *Arsenophonus* and *Rhizobiales*) from four sites in the Pacific Islands and five in Australia. The same genotype of *Wolbachia* was found in all samples with a high prevalence. *Arsenophonus* was detected in six out of the nine populations with a maximum prevalence of 51% in Arnhem Land, Australia. *Rhizobiales* was found at a prevalence of less than 15%, and in only three sites. We suggest that the introduction of different strains of *Wolbachia* or *Arsenophonus* could form part of a management program in highly infected sites as individuals infected by different strains of these bacteria cannot reproduce.

