

ABSTRACT

Ant - Psyllid Interactions on Leucaena

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This study was aimed at testing the hypothesis that ants visiting the extrafloral nectaries of leucaena, form a significant part of the natural enemy complex of the leucaena psyllid, *Heteropsylla cubana* Crawford. The ants present included *Wasmannia auropunctata*, *Zacryptocerus* sp., *Camponotus* sp., and *Pseudomyrmex* sp., where *Wasmannia* was the dominant ant, representing 80 - 86 per cent of the total ants present. These ants showed little variation in diel activity, however *Wasmannia* and *Zacryptocerus* increased in numbers as the season progressed. *Wasmannia* was also positively correlated with relative humidity. There were no statistical correlations between numbers of *Wasmannia* and nectar production; and nectar flow and reproductive status of leucaena. *Wasmannia* fed on a wide range of food items, the leucaena psyllid comprising 29 per cent of this. *Wasmannia* may also remove 1440 psyllids on a daily basis per tree. However, contrary to the hypothesis, the ants, especially *Wasmannia*, did not significantly impact on psyllid populations. The numbers of psyllids on branches to which ants had access as compared with those on branches to which ants were excluded were not found to be significantly different.