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Diversity of worker ants collected from four Dysmicoccus brevipes Cockerell infested and uninfested pineappple fields in Attanagalla and a preliminary study on the association between Paratrechina longicornis Latreille and Dysmicoccus brevipes

Ants are known to contribute to spread the pineapple mealy bug, *Dysmicoccus brevipes* Cockerell in pineapple fields. Worker ants in four pineapple fields in Attanagalla were collected manually from two pineapple fields infested with *D. brevipes* and two fields without infestation. Ants were collected from the ground and the plants in April 2001 and preserved in 85% ethanol immediately and, identified using a low power microscope.

Worker ants belonging to eighteen genera and four Subfamilies, Dolichoderinae (04), Formicinae (06), Myrmicinae (07) and Ponerinae (01) were identified. Ant genera/ species *Anoplolepis gracilipes* F. Smith, *Camponotus* sp.1 Mayr, *Camponotus* sp.2, *Cardiocondyla* Emery, *Diacamma rugosum* Guillon, *Lophomyrmex* Emery, *Meranoplus bicolor* Guerin-Meneville, *Paratrechina longicornis* Latreille, *Pheidole* sp.1 Westwood, *Technomyrmex* Mayr and *Tetramorium* Mayr were observed in the fields with *D. brevipes* infestation. *Anoplolepis gracilipes*, *Camponotus* sp.1, *Cardiocondyla*, *Dolichoderus* Lund, *Lepisiota* Santschi, *Lophomyrmex*, *Meranoplus bicolor*, *Monomorium* Mayr, *Ochetellus* Shattuck, *Oecophylla smaragdina* Fabricius, *Pheidole* sp.2, *Tapinoma* Forester and *Technomyrmex* were identified in the fields not infested with *D. brevipes. Paratrechina longicornis, Tetramorium, Pheidole* sp.1, *Diacamma rugosum* and *Camponotus* sp. 2 were observed only in the fields with *D. brevipes* infestation during this study.

As *P. longicornis* was observed on both ground and plants of the *D. brevipes* infested pineapple fields, preliminary laboratory observations were made to study whether this species spreads *D. brevipes.* The experimental set up included an established *P. longicornis* colony and two pineapple fruits with mealy bug colonies. Each worker ant was allowed to enter a pineapple fruit and observations on its behaviour were recorded for fifteen minutes and this procedure was repeated for hundred individual workers. Eleven individual workers carried mealy bug nymphs either within the pineapple fruit or to the other pineapple fruit. Although the number of worker ants carrying *D. brevipes* was significantly lower (Chi squared test, $p > 0.05$), the results showed that *P. longicornis* workers contributed to the spread of *D. brevipes* nymphs among pineapple fruits.