

Weaver ants as potential controlling agent of the mangrove apple fruit borer

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Abstract

The pulp of the fruit of the Mangrove Apple, *Sonneratia caseolaris* (L.) Engl., is tasty and nutritious and hence, can be used to prepare a fruit drink. However, it has not been commercialized, or even practiced widely at homes, due to the fact that fruits of mangrove apple are frequently infested by a fruit borer. If this pest problem can be solved, the fruits can be used for small scale industry motivating mangrove dwellers to protect this species that is destroyed now at alarming rate. Ants of the genus *Oecophylla*, which are commonly named 'weaver ants', are predators of other insects and are able to protect a variety of terrestrial plants against pest insects. However, observations on the ecology of these ants in Sri Lankan mangrove forests are lacking. A study of *Oecophylla smaragdina* was carried out in *S. caseolaris* vegetations in wet zone of Sri Lanka to determine if these ants can protect their host plant (*S. caseolaris*) from the fruit borer that is unique to *S. caseolaris* fruits. Fruit damage and the number of colonies of *O. smaragdina* ants were measured on trees at three sites. At all sites, the results showed a negative correlation between number of weaver ant colonies in mangrove apple trees with the abundance of the fruit borer eggs laid on fruits as well as with the percentage damage of fruits. These data indicate that promoting weaver ant colonies might be effective in controlling the *fruit borer*.

Keywords

Oecophylla smaragdina, *Sonneratia caseolaris*, fruit borer, Sri Lanka