

Effect of five insecticides on cashew stem and root borer *Plocaederus ferrugineus* L.
(Coleoptera: Cerambycidae)

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Cashew stem and root borer *Plocaederus ferrugineus* is a devastating pest of cashew trees. It attacks roots and stems, and makes tunnels inside trees. Its damage retards the growth, and severe damage may destroy the entire tree. Current control methods for this pest include the removal of larvae and the affected bark, and painting the stem with burnt engine oil. There are several insecticides recommended for the management of *P. ferrugineus* but restrictions on their use warrant alternative insecticides. This experiment was conducted to test the efficacy of five insecticides against *P. ferrugineus*. The experiment was laid out in a Completely Randomized Design. Cashew trees in the Puttalam plantation having severe and low damage due to *P. ferrugineus* were selected by visual observations and used for the study. In the first study, six trees from each damage category were sprayed with Tebufenozide, Novaluron or Phenthoate. In a second study, another batch of trees was treated with Chlorantraniliprole, Deltamethrin, Novaluron or Phenthoate in a similar manner. Each insecticide was applied at its label rate. As the control, water was sprayed to six cashew trees in each damage category. Two weeks following the application of insecticide or water, the tree barks were cut open and the dead larvae were counted. The results were analysed using logistic procedure in SAS and the significance was tested at 0.05. In the first experiment, the cashew trees treated with Tebufenozide, Novaluron and Phenthoate had more dead larvae than in the control trees treated with water. In contrast, Chlorantraniliprole and Deltamethrin showed no significant difference compared to the control trees. Thus the study highlights that Tebufenozide, Novaluron and Phenthoate are successful alternative insecticides for the management of Cashew stem and root borer *P. ferrugineus*.

Keywords: Cashew, Insecticide, *Plocaederus ferrugineus*