

### **B-33 Efficacy of imidacloprid against spiralling white fly, *Aleurodicus dispersus***

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Spiralling white fly *Aleurodicus dispersus* Homoptera: Aleuroididae reported in Sri Lanka in 1989, has become a pest in many economically important plants. Effective and safer chemicals are needed to manage this pest. Imidacloprid is a low toxic insecticide which belongs to a new group of active ingredients, nitroguanidines. Efficacy of Imidacloprid was evaluated under plant house conditions, and a field test which was carried out on naturally infested guava plants. Guava plants were infested with spiralling white fly and treated with 0.01, 0.02 and 0.025% ai concentrations of Imidacloprid under plant house conditions and in the field test. Dimethoate was used as a comparison and a water check was used as a control.

Dimethoate treated guava plants showed phytotoxicity effects. Imidacloprid caused over 90% mean larval and pupal mortality in all concentrations tested under plant house conditions. In the control, the mortality was less than 10%. Adult populations were reduced by 68% in 0.01% ai concentration and 100% in both 0.02 and 0.025% ai concentrations of Imidacloprid with 2 repeated applications with 2 week interval in preliminary field test.

Imidacloprid could be a possible candidate for spiralling white fly management programmes. Also, it could be used as an alternative for Dimethoate to control spiralling white fly in early stages on Guava.