

BIOPESTICIDES

1. **Tree PAL^H** is a biopesticide product which has been developed as an alternative to chemical pesticides for the management of insect pests of forestry importance. Use of Hydnocarpic acid as biopesticide is first of its kind and combination with neem oil and essential oil of Lantana is a new approach. It is found to be very effective against insect pests of teak, *Hyblea purea* and *Ailanthus*, *Eligma narcissus* and *Atteva fabricella*.



- ✦ Currently Neem formulations are the only oil based biopesticides available in the market. No other oil based biopesticide has been successfully developed.
- ✦ The present product, "Tree PAL^H" is an alternate to neem formulation, which is cost effective and has very high efficacy.

Tree PAL^H – Tree borne seed oil based biopesticide (100 ml of Tree PAL^H may be mixed with 10 L of water for foliar spray i.e., 1% concentration).

2. **Crawl clean** is an ecofriendly plant based insecticide comprising of leaf powder of *Melia dubia* (Malai vembu), *Pongamia pinnata* (Pungam), *Aristolochia bracteata* (worm killer), *Adhatoda vasica* (Adhatoda) and *Vitex negundo* (Vitex). It has been developed exclusively for the **management of Papaya mealybug, Paracoccus marginatus on papaya**.



Investigation on the use of leaf powders of *Melia dubia* (Malai vembu), *Pongamia pinnata* (Pungam), *Aristolochia bracteata* (worm killer), *Adhatoda vasica* (Adhatoda) and *Vitex negundo* (Vitex) to manage papaya mealy bug, *Paracoccus marginatus* revealed that the bioactive compounds present in the leaf powders have insecticidal properties, which have not been utilized, earlier.

Crawl clean - An ecofriendly plant leaf powder based insecticide (250gm of this powder is mixed in 25 litre of hot water, cooled, filtered and applied as foliar spray).