

Shatpada Dorsa-Delta, an efficient trap for mango fruit fly

Technology Description

A synergized volatile combination was impregnated in a delta trap. This showed very good attraction because of the interaction of olfactory and visual cues. This is very effective trap in male annihilation techniques.

Background

Mango fruit fly, *Bactrocera dorsalis* cause serious damage to the mango fruits and also a notorious quarantine pest, The adults visit the immature mango fruits and lays eggs. The larvae on hatching start feeding on the pulp of mango causing serious damage to fruit reducing its market value. The present technology at a rate of 5 per acre along with the bisexual attractant greatly reduced the damage by *B. dorsalis*.

Benefits /Utility

The formulation is plant based and hence totally organic. No insecticides are used for killing the pest. When used in yellow trap, the catches were significant due to synergistic combination of olfactory and visual cues. Besides, the traps also catch good numbers of mangohoppers additionally.

Scalability, business and commercial potential

The technology can be taken up at industrial scale. The formulation is being marketed now.



Dorsa Delta Trap

Target Market/ Customer

- Farmers
- Small Scale industries
- Self-help groups

Social Impact of the Technology

- Use of pheromone minimizes the need for pesticides use that causes health hazard to producers and end-users.
- Pheromone can be used in tandem with bio agents and their use does not harm the pollinators and nontarget organisms that provide ecosystem service.

A bisexual attractant for *Bactrocera dorsalis* in delta trap

Technology Description

Unlike the methyl eugenol, the dispenser attracts both the sexes of *B. dorsalis*, thereby increasing the effectiveness of the traps.

Background

Methyl eugenol is an effective para pheromone used for the management of *B. dorsalis*. However only males are attracted to the methyl eugenol traps. In the present trap both the sexes of *B. dorsalis* have been captured which makes the management of this pest on mango easy

Benefits /Utility

Since the females are also trapped, the establishment of next generation is greatly reduced. In combination with methyl eugenol traps, the management of mango fruit fly is very easy without insecticides or with minimal insecticides

Scalability, business & commercial potential

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