A plant volatile based attractant for enhanced attraction of fruit fly

Bactrocera dorsalis

Technology Description

Scientists worldwide have been looking for a robust attractant than methyl eugenol. In this context, the present technology has a cocktail of volatiles identified from host plants which attracted 3 times more than the methyl eugenol. The attractant efficiency has been proved in the field trials.

Background

Mango is a major crop in India with high export potential. Among the several pests infesting mango, fruit flies are considered as important. The oriental fruit fly, *Bactrocera dorsalis* is a direct pest on mango. The fruit loss in mango was estimated to be around 16%. Methyl eugneol has been used for the management of *B. dorsalis* through male annihilation technique. The *B. dorsalis* and other species of *Bactrocera* are attracted to the methyl eugenol. Efforts were made to improve the catches through the volatile mixtures and for sustained release for a long period. This will ultimately reduce the number of traps per unit area.

Benefits /Utility

In the present technology higher number of *Bactrocera* was caught than methyl eugenol used in isolation. It's used for trapping fruit flies infesting mango, guava and other fruit crops.

Scalability

The technology can be extended scalable depending on the infrastructure available.

Business and commercial potential

The lures will have more attraction than the methyl eugenol.

The lures have longer duration of field efficacy than the methyl eugenol

The number of females caught was comparatively more than the methyl eugenol alone.

Fruitflies infesting mango

Target Market/Customer

- All the commercial producers of pheromones/lures. This technology commercialized to one firm.

Social impact of the technology

- The technology will reduce the number of traps needed per unit area and also with sustained release, the lures can be effective in field for longer period and thus need of change of lures for farmers is minimised. The technology can be an effective tool in the male annihilation technique.