



22. Mass rearing technique of *Trichogramma* spp for Insect Pest Management

Name of Inventor

Dr. Jamal Ahmad & Dr. Sajad Mohiudin

Type: New

Year of development: 2013-2014

Patent: NA

Description of Technology

The technique facilitates mass production of *Trichogramma* spp producing sufficient quantity of different species of *Trichogramma* like *Trichogramma brassicae*, *T. cacaoeciae*, *T. chilonis* and *T. embryophagum* for distribution to farmers for the purpose of management of different insect pests. *Trichogramma cacaoeciae* and *T. embryophagum* are used against Codling moth, *Cydia pomonella* in Ladakh, whereas *T. chilonis* is used for the management of a number of pests like maize stem borer, tomato fruit borer, Diamondback moth, and *T. brassicae* shows promise against cabbage butterfly. Technology was improved towards production of healthier wasps, their cold storage to increase shelf life and safer field release mechanisms.



(Clock wise) : *Trichogramma cacaoeciae* and *T. chilonis* use of Tricho cards against Codling moth, *Cydia pomonella* in Ladakh and maize stem borer, *Chilo partellus*

Impact

Use of *Trichogramma cacaoeciae* against Codling moth, *Cydia pomonella* infesting apple in Laddakh has been popular and acceptable without any social taboo. Its incorporation as biological component in the integrated pest management of Codling moth has been outstanding. *Trichogramma chilonis* is equally important against a number of insect pests and being tried in the valley against a number of insect pests such as maize stalk borer and tomato fruit borer.

Commercial applicability

Large scale production of *Trichogramma* spp through development of bio-control laboratory into bio factory can be of enormous commercial applicability and importance to farmers.