

Crop Protection :: Parasite Production Methods

Trichogramma egg parasite production

Trichogramma egg parasites are produced in laboratories in the eggs of the rice moth called Corsyra. Multiplication of rice moths is very important for uniform parasite production.

Rice moth production system

Select a dry millet that has been thoroughly dried in the sun and is free from the residual residue of pesticides. It is broken by grinding machines.

Mix 2.5 kg of broken pearl millet with 100 g of powdered coal, 5 g of wet sulphur powder and 5 g of enzyme powder in a uniform manner. Spray Streptomycin sulphate 0.05% mixture and mix well. This mixture should be filled with plastic trays of 16" diameter x 16" height. Sprinkle water and turn the granules over. Sprinkle 0.5 ml of rice moth eggs on the top of the food mixture (1 ml egg contains about 16,000 to 18000 eggs). In case of plastic plates, cover with thick gauze cloth and tie it with rubber tape with rope.

The larvae hatch from the eggs in 3-4 days and build nests in the rye embryos and start feeding. The larval period is 26-28 days and the pupal stage is 5 days. The adult moths emerge from the pupae and live for only 6-7 days. After 35 days from the trays, the moths are caught in a glass test tube 6"x1" or with a designated air absorber and transferred to a zinc foil mating cage.

Since there is an iron wire net at the bottom of the mating cage, the eggs laid by the mother moths come down and fall on the collection tray. To get the largest number of eggs, mix 5 ml of honey in it and mix it with a vitamin-E capsule, dip it in cotton and hang it with a thread inside the mating cage. Thus once transferred to the mating cage. The moths lay eggs continuously for up to 4 days. Each cage can accommodate 2500 to 3000 moths. To collect eggs, spread an enamel plate or cardboard at the bottom of the mating box to collect clean eggs later.

The eggs are mixed with moths' wings, scales, broken legs, pellets and excreta. These can be obtained through plastic filters or with the help of moths, eggs and scale extractors, dust-free pure eggs. A total of 2500 to 2800 moths emerge from a tray filled with food mixture in 90 days. After 90 days, remove the granules and clean the plates with formalin sodium hypochlorite mixture.