Caterpillar Parasites Fact Sheet & Release Instructions

(Trichogramma Wasps)

Trichogramma "wasps" kill off over 200 kinds of destructive caterpillars, making them the most popular bio-control in the world. Although they're called wasps, they never sting, and they're so tiny (1/50" from wingtip to wingtip) you'll probably never even notice them. They work by laying their eggs inside moth eggs that would have become caterpillars, killing them before they can even hatch. In its place, another trichogramma wasp hatches out instead, going on to repeat the cycle.

Trichogramma development typically takes 8-10 days (from egg - adult), and they live another 8-10 days as adults. During this period, each trichogramma female may parasitize (kill) as many as 100 pest eggs.

For best results, trichogramma should be released when the moths are first seen, with further releases continued weekly or bi-weekly while the moths are present. Trichogramma come packaged as eggs ready to hatch, 3,000 eggs glued to a small piece of cardboard. The eggs, extremely tiny, hatch within a few days, usually all at once. (A 16X magnifier will help to see these.) To delay hatching, they may be kept refrigerated for a couple of days, while keeping them in a warm room will speed hatching. As soon as they've hatched, the cups or the cards can be wedged among the plant foliage, or stapled to leaves or branches. (Early morning or evening is the best time to do this.) They'll fly out from there, searching a large area. If many cards of 3000 eggs are used, space them evenly throughout the crop area.

SUGGESTED RELEASE RATES: Since moths hatch out over a period of time with usually a large peak halfway through this period, it's best to make several releases spaced during this period. Weekly releases are recommended, although with low pest densities releases every other week may be adequate. Many home gardeners make a single release, early in the season.

Field Crops:
-Low infestations: 3,000-12,000/acre, repeat every other week.
-Low-medium infestation: 3,000-12,000/acre, repeat weekly.
-Medium-high infestation: 12,000-25,000/acre, repeat weekly.
-High infestation: 25,000-50,000/acre, repeat weekly.

Orchards:
-3,000 for every 3-10 trees, repeat weekly.

Releases can be adjusted to the pest situation. Start early in the season with a relatively low number of trichogramma per acre, and increase as more and more moths hatch. Once the peak has passed, releases can be decreased and eventually halted.

We are currently shipping Trichogramma brassicae, an excellent all-purpose control for both field crops as well as orchards and other crops with foliage ranging from ground to tree height.

Some important pests known to be parasitized by trichogramma wasps: armyworm, brown-tail moth, fall armyworm/budworm, carpenter moth, peach borer, codling moth, European corn borer, gypsy moth, squash borer, lo moth, imported cabbageworm, Oriental fruit moth, spring/fall cankerworm, wax moth, alfalfa worm, regal moth, tent caterpillar, rosy maple moth, redbanded leafroller, tussock moth, corn earworm, lappet moth, tomato fruitworm, skipper, cotton bollworm/leafworm, angoumis grain moth, tobacco/tomato hornworm, fall webworm, grassworm/sod webworms, prominanta/datanas, bean/fruit tree leafroller, swallowtail, yellow woollybear (tiger moth), giant silkworm moths, cabbage looper, plume moths, California oak worm, and many more.