

Releasing Fly Parasites

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Putting parasites out

These parasitic wasps arrive developing inside the fly pupa. When fully grown, they cut a hole in the pupa case and exit as adults searching for more fly pupa. The date on the bag is an estimated emergence date.

A small handful or spoonful of the parasitized fly pupae in wood shavings is sprinkled either on manure or in furrows and lightly covered to protect from birds. Place the parasites where they will not be trampled by animals and in dryer areas near fly breeding sites (where you find maggots). The maggots move from wet spots to dryer areas nearby to pupate. The widest possible dispersal is best.

Release Stations

Release stations provide a protected area where the fly parasites can emerge from their pupas safe from being trampled by animals, eaten by birds, ground beetles and soil mites, or rotting in decomposing food or manure. Release stations help you get the most from the parasites you buy. Rincon-Vitova produces a semi-rigid plastic mesh cylinder that can be hung or strapped to posts or fences. You can also use cans, flower pots, plastic tubs, or mesh bags. You want the station to shed water, drain water and have holes for the fly parasites to leave (1/16 inch minimum). When your fly parasites arrive, hold them until they are hatching, then place a small amount in each release station.

Priority release sites are in and around coops, kennels, barns, stables, and stalls, with special attention to hospital and calf pens on dairies, below mangers in horse stalls, and around feed bunks on feedlots. Place also around corral posts, fence lines, paddock areas, and other dropping sites, at the edges of manure piles, pits or carts, and wherever manure accumulates. Other fly-breeding areas are near (but never directly in) water sources, and near decomposing matter, garbage cans and septic tanks.

Handling of parasites

Fly parasites must not be left in direct sunlight or hot areas. If ordered fresh, they may be held at 70° to 80° F, increasing to 85° F for more rapid emergence; otherwise, they are emerging and ready to release within a day or two. Cold storage shortens life and may harm reproduction. Avoid chemical sprays within 48 hours of release. Rincon-Vitova offers screen mesh packaging for hanging in barns where floors are washed regularly or predation by rodents is likely.

Monitoring effectiveness

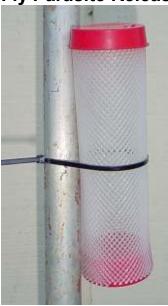
To assess the parasitism of fly pupae in manure, fly pupae can be separated from the manure by flotation. Agitation will float the pupae to the surface. Pupae that are old enough to have been exposed to parasitic wasps change from reddish to dark brown. Up to ten percent of these will not develop into flies. Those yielding flies have the end of the pupal case broken off. Neatly cut escape holes are evidence of parasitism. Check 100 dark brown pupae in a week for parasitism and dead intact pupae to get parasitism rate and possible parasite-induced mortality rate.

Since adult flies are the pests, a reduction in the number of adult flies is the best measure of a successful integrated fly control program. Fly tapes hung to attract and count changes in adult fly population work best. Also placement of plain 3 X 5 index cards near fly nesting areas (as indicated by specking) can be used to monitor relative changes in fly populations. Date card and change at regular intervals such as weekly.

To release the fly parasites, keep them in a warm place, about 70 to 80 degrees, and check for them hatching by simply opening the paper bag and looking for the ant sized parasites moving around the bag. The parasites should emerge within 7 days.

When you see several crawling inside the bag, sprinkle the contents in the fly breeding area, usually in manure piles or moist areas. Fly parasites are packaged in 'colonies' of 10,000 or minimum orders of 5,000. Most customers receive shipments at intervals of 2 to 4 weeks.

Fly Parasite Release Station



- provides protected container for fly parasite wasps to emerge from pupae (emerge over 3 week period)
- protects parasites from trampling or being eaten by birds scratching in manure
- fly parasites exit through plastic mesh
- · made of tough plastic mesh resists weather
- low risk of animal injury

Place release stations every 50 to 100 feet.

Attach with tape or strap to pole or post, or hang 3-5 feet above ground. Lift lid, place a tablespoon or two of bulk fly parasites into the container each time shipment arrives.

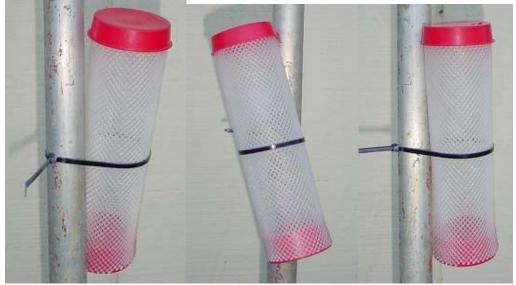
When release station is full, empty it and start over.

If ants find the station, coat the post with a 2 inch band of Stikem ant barrier above and below the station.

Mounting Notes



hook bail through a cross beam on fence post, hook on nail on wall, use wire hook on nail or screw on wall



Use strap to bind to post or fence. Lid can be easily removed and for periodic dumping, slide mesh cylinder through cable tie.