Insect Lures

**Pheromone traps** are used to monitor and/or disrupt the mating activity of certain pest insects. A pheromone is a nontoxic species-specific scent produced by the female insect to attract the male. This scent has been laboratory duplicated for particular insects and concentrated in time-release “lures” which attract the male to a sticky glue trap. Lures and traps are purchased separately or in trap kits and arrive with full instructions for assembly and use. Three different-shaped traps, Delta, Intercept A and Wing, are available in bulk and each is recommended for use with particular lures, as specified. If you purchase extra lures, store them in freezer until needed.

**Pheromone Confusion Lures** Highly effective, confusion lures use pheromones to flood the orchard with female scent, preventing the male from locating a female and mating. Traps are only needed for monitoring.

**Pheromone Glue Traps** Pheromone glue traps are used by orchardists, grain merchants and home gardeners to “trap out” male insects thus preventing mating and reducing the egg-laying capacity of the female. Trapping out has proven useful for Codling Moth, Oriental Fruit Moth, Peach Twig Borer, Grain Moths (especially in storage areas) and others. Use 1–2 traps per tree in the home orchard. Commercial growers, please ask about volume discounts.

**As Monitoring** Pheromone traps are most often used commercially to monitor and anticipate the mating activity of insects. By counting the insects trapped over a given period and using data provided about the pest insect’s cycles, you can determine the best time to release beneficial insects or apply protective sprays. For monitoring use 1–3 traps per orchard. To monitor grain moths, use 1 trap/30,000 cu. ft. of storage area.

**Proper Handling Matters** For best results, users should avoid touching the lures directly with dirty, oily, fingers or hands washed with scented soap. When storing lure packets inside baggies it is a good idea not to mix. For instance, Flea Beetle, Plum Curculio, and Rhagoletis (Deciduous Fruit Fly) lures are strong scents that leave behind their smell on the plastic baggies. Those baggies should be discarded once empty.

**Shelf Life** Lure packets should only be unsealed when lures are deployed. Lure shelf life is relative to how sealed packets are stored. Depending upon the pheromone (species) lures stored in manual defrost freezers can remain fully active for from 3 to 7 years. In auto-defrost freezers approximately 2 to 3 years. At average indoor room temperatures 1½ to 2 seasons. In outdoor summer temperatures (not in direct sun) 1 to ½ seasons. Prolonged storage in enclosed spaces that reach temperature extremes, like a car trunk that hits 130°+ on hot days, may reduce shelf life down to less than 6 months. There is no set number, no lure life guarantee. This is a rule of thumb that will vary depending upon climatic conditions. It remains the user’s responsibility to use common sense storing lures.

**Fouling** Traps and lures withstand a lot of weather, UV rays, wind, rain. Again, however, common sense comes into play. Blasting away or drowning the trap or lure with a sprinkler or garden hose may compromise the effectiveness of the product.

**Attraction** Lures attract insects when the time is right for each insect species. Mating pheromones attract males of a species when they are interested in mating. Other scented lures attract, usually when an insect species is interested in feeding. Capture rates will vary according to species life cycle and external elements like host weeds, other nearby host crops, moisture and soil conditions, etc. This is why it is important to help customers have a total strategy that includes traps and lures, weed control, good crop rotation, good watering and fertilizing practices, introduction of beneficials and protection of existing beneficials, and manual pest harvesting with certain species (by hand, water blast, vacuum).

**These are situations that can cause the lures not to work.**
- Plants that act as natural repellants might throw attraction off if near the baited traps.
- Hand lotion, especially scented, on hands could compromise lures.
- Frequent heavy watering that strikes baited traps might reduce attraction.
- Smell does not necessarily guarantee lures are still attracting.
- Lures stored at outdoor temperatures all season, prior to opening packet, may have reduced shelf life of 12 months or less.
- Lures exposed to extreme heat for a period of days or weeks, such as inside a vehicle trunk or uninsulated shed, could lose attractiveness.