

Arrest the Pest Hotline: Metro 651-201-MOTH, Greater Minnesota 1-888-545-MOTH

Gypsy Moth in Minnesota - Treatment: Mating Disruption

For more information on the gypsy moth, check: www.mda.state.mn.us/gypsy moth. You may also email a question or comment to: gypsy.moth@state.mn.us

ACTIVE INGREDIENT

Disparlure

TYPE OF PRODUCT

A natural pheromone is released by the female gypsy moth to lure in a mate. This product is synthesized to mimic the pheromone and has an equivalent effect on the male moths.

HOW MATING DISRUPTION WORKS

The female gypsy moth does not fly so she must attract the male moths to her. Her pheromone is irresistible to the male and he will track the scent to its source in order to reproduce. When synthetic pheromone floods the entire area the males are unable to locate the females because the real scent trail has been masked. Adult moths have limited energy reserves and will die without mating. Fewer matings reduces the number of caterpillars hatching the following year.

APPLICATION METHOD

By aircraft

APPLICATION RATE

The active ingredient will be applied between 6-30g per acre. The actual rate will depend on the carrier selected, but the range is about 1-2 flakes or 2-4 droplets per square foot.

APPLICATION TIMING

Mating disruption targets the adult moths so for maximum effect it is applied once just before adults start to emerge in late June to early July.

IS IT SAFE?

Pheromone is only detectable by gypsy moths, so no other species is harmed. Mating disruption is used where endangered or threatened species of butterflies and moths are present. It is also used at remote or inaccessible sites where it is difficult to get precise infestation boundaries. Humans and pets are not affected by the pheromone.

CARRIER—FLAKES

The active ingredient is sandwiched between two layers of extremely thin PVC plastic which is then chopped up into tiny pieces like this: []. The pheromone is slowly released from the flake after it is applied. Flakes will degrade over time and at such small amounts, have not been shown to accumulate in the environment

CARRIER—SPLAT

The active ingredient is mixed into a waxy matrix that is applied as a tiny droplet like this: O. The pheromone is released into the air after the droplet is applied. Wax will break down over time and has not been shown to accumulate in the environment.