



TREATMENT: PHEROMONE-BASED PRODUCTS

Type of products

Two pheromone-based mating disruptors are used in Wisconsin: (1) pheromone flakes, tiny pieces of plastic treated with the female gypsy moth pheromone; and (2) SPLAT, small waxy droplets infused with female gypsy moth pheromone. Both synthetic and organic formulations of SPLAT are used.

How pheromone products work

When an area is treated with either flakes or SPLAT, the scent of the female moth floods the area and confuses male gypsy moths so they cannot find females. Because the gypsy moths are at the end of their life cycle, they die without reproducing. Neither product actually kills moths; they just carry the scent and prevent reproduction.

What pheromone flakes look like

They are flat, green, flake-like pieces of plastic baited with synthetic female moth pheromone, the scent that attracts male moths. The flakes are very small—about 1/8 inch by 1/16 inch—about the size of a grain of rice. About 1/4 to a 1/2 cup of flakes per acre is applied, which is equivalent to one or two flakes per square foot of leaf canopy.

What SPLAT looks like

SPLAT is a relatively new product that serves as an alternative delivery system for female gypsy moth pheromone. It involves aerial application of small, waxy droplets that have been infused with the pheromone and dropped into the forest canopy. About seven ounces of the product are used per acre. Like the plastic flakes, the wax will break down over time.

Application timing

One application between late June and late July, just before moths emerge from cocoons. Applications start in southern Wisconsin.

Application method

Both pheromone-based products are applied by airplane. Flakes are mixed with an adhesive material, similar to white school glue, so they stick to tree leaves. For SPLAT, the pheromone is mixed with a waxy matrix which sticks to the leaves.

Why we use pheromone products

- The pheromone is detectable only to gypsy moths; no other species are impacted.
- Used where endangered or threatened species of butterflies and moths are feeding during spray season.
- Both products are only effective in areas with low gypsy moth populations.

Spraying program information

Spray program information, including maps of the proposed spray sites, is available online at www.gypsymoth.wi.gov. Information is also available by calling 1-800-642-MOTH or by emailing gypsymoth@wisconsin.gov.

**For more information, call 1-800-642-MOTH
or visit Wisconsin Gypsy Moth on the Web at <http://gypsymoth.wi.gov>**