

THE NEW PHEROMONE DELIVERY SYSTEM FOR GYPSY MOTH MATING DISRUPTION

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ABSTRACT

A new gypsy moth (*Lymantria dispar* L.) (Lepidoptera: Lymantriidae) mating disruption formulation providing controlled release of Disparlure was developed by ISCA Technologies and used in both ground and aerial applications. The formulation, known as SPLAT (Specialized Pheromone & Lure Application Technology), was studied for its effect on mating success in gypsy moth populations as measured by male moth catches in pheromone-baited traps.

SPLAT was applied aerially at two dosages currently used for operational mating disruption treatments (15 and 37.5 g AI/ha). This flowable formulation, designed to be aerially applied using conventional equipment, is

simple to use, rainfast, and long lasting (trap shutdown no less than 10-11 weeks); it was shown to be as effective as the Hercon Disrupt II[®] plastic flake formulation applied at the same dosages.

Paintballs loaded with SPLAT were used for ground application studies. All dosages (15, 50, and 75 g AI/ha) tested during the 2005 and 2006 seasons effectively disrupted mating.

ISCA Technologies plans to market SPLAT for aerial application as an alternative to the Hercon plastic flake formulation, currently used in the U.S. Forest Service Slow-the-Spread (STS) of the Gypsy Moth Program.