



TECHNOLOGIES

Pest Management Tools & Solutions

SPLAT: A New Pheromone Dispensing Technology

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Abstract: SPLAT (Specialized Pheromone & Lure Application Technology) is a proprietary base matrix formulation of biologically inert materials used to control the release of semiochemicals and/or odors with or without pesticides. This product is a valuable weapon in the IPM arsenal that can be used against many economically important pests. Splat is a revolutionary product that facilitates and automates the dispensing of semiochemicals and attractants; by simplifying the delivery of these chemicals in the field. Mating disruption with splat is now a viable and extremely effective pest management strategy. Designed to optimize and modulate the release of odors over time, splat works with any labile and/or volatile compound. Although originally designed for the dispensing of semiochemicals, short lived environmentally friendly toxicants can also be incorporated in splat to increase their field life and efficacy creating an Attract & Kill pest management strategy.

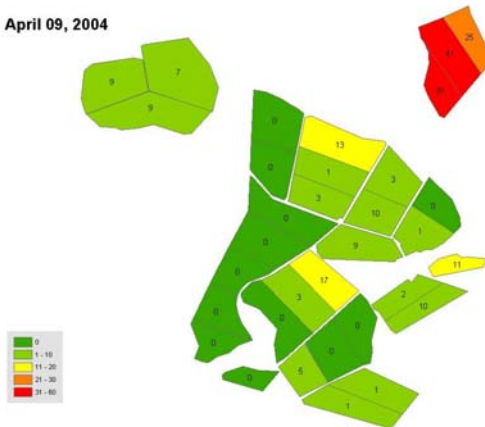
Mating Disruption: Mating disruption is a pheromone mediated control strategy used on lepidopterous insects (moths) that prevents the mating and reproduction of adult pests. Since the worm or larva is the stage that damages fruit, prevention of this stage is the goal in any pest management program. This control strategy requires the use of dispensers which provide a sustained release of the pheromone a long time interval. These dispensers are placed throughout an orchard so as to saturate the area with the pheromone scent. Male insects normally cue in on a plume of pheromone emitted by an unmated female. By saturating an area with the same scent, males are prevented from locating the females and mating never takes place.



Hand Applied SPLAT



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Mechanically Applied - Air



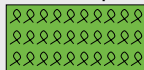
SPLAT vs. Traditional Pheromone Dispensers

ISCA's proprietary SPLAT formulation offers many advantages over traditional dispensing technologies:

- **Multiple methods of application:** Having a wide range of viscosities and application methods (e.g. applicator sprays, aerial applicator sprays, caulking gun type tubes, etc.) SPLAT increases productivity by mechanizing the application of pheromone dispensing points.
- **Easy Application for Small-scale & Large-scale Operations:** The amorphous and flowable quality of this highly adaptable product allows for an easy transition from small-scale manual applications to large-scale mechanical applications.
- **Adjustable Strategies Same Amount of AI:** A fixed quantity of this material can be applied differently depending on the pest population pressure. The application of this matrix can be tailored by the user to best match the pest distribution and density in the field. Using a fixed amount of SPLAT per area, one can choose:
 1. A high density of small point-sources, thus maximizing the mating disruption effect (recommended for high pest pressure).
 2. A low density of larger point-sources, thus increasing the longevity of the application (recommended for lower pest population pressure).
- **Rain Fast Formulation:** Once cured, SPLAT will not wash off of vegetation
- **Season-long Protection & More:** SPLAT can remain effective in managing pest populations up to a six month duration.
- **Mixes with Kairomones and Feeding Stimulants:** SPLAT can be mixed with a variety of feeding stimulants or attractants including liquids, solids and oils to enhance attraction or stimulate feeding.

Traditional Dispensers

Change # dispensers –
Changes amount of AI per
acre



SPLAT Dispensers

Increase # dispensers for
high pest pressure: AI per
acre remains constant



Decrease # dispensers for
low pest pressure / longer
duration: AI per acre
remains constant



Mechanically Applied SPLAT - Ground

