

Mating Disruption/SIR

Microencapsulated Pheromones: Alternative for Integrated Pest Management

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3M, in collaboration with growers and academic researchers, has undertaken a program aimed at the controlled delivery of insect pheromones for use in Integrated Pest Management. 3M's proprietary microencapsulation technology is considered an appropriate delivery method for such products, and to date three main classes of Lepidopteran pheromones including acetates, alcohols, and aldehydes are being encapsulated.

Through extensive field trials in a number of insect/crop systems, 3M sprayable, water-based formulations have been demonstrated to be effective Integrated Pest Management (IPM) tools. However, in order to make these products a valuable cost effective addition to the IPM program, a number of parameters including release rate, rainfastness, tank-mix compatibility, and phytotoxicity must be more fully understood.

To that end, we will provide an update on recent laboratory developments in product characterization and their correlation to product performance as measured by trap-catch, mating disruption and crop damage.