

## **Biological Synergist Works with Insecticides** to Better Manage Hard-to-Control Pests

Alluma™ is a high-potency broad-spectrum, plant-based essential oil that acts as an insecticide, insect repellent and miticide – a powerful new tank mix option to make insecticides more effective.

## **Labeled Pests**

 Mites and soft bodied, piercing and sucking insect pests. Many Lepidoptera, Thrip and Weevil species

## **Quick Facts**

- Insecticide and miticide 2-in-1
- Innovative formulation works as a contact repellent and trans-laminar product, as well as a feeding and oviposition deterrent
- High repellence action
- Compatible with most biological control agents
- Easily incorporates into existing programs
- 25B exempt, certified USDA NOP organic, WSDA Organic Listed
- Suitable for resistance management

An innovative formulation that works as a contact repellent and trans-laminar product, Alluma also acts as a feeding and oviposition deterrent. It performs best as a synergist added to growers' existing insecticide programs to target hard-to-control pests like mites, thrips and lepidoptera.

Alluma works on contact through interference with the sensing faculties of pests, disguising the odor signal emitted by crops and thus preventing females from laying eggs. It also has a direct effect on the pest, acting through ingestion as a chitin inhibitor. Alluma's trans-laminar effect contributes to the control of mites, thrips, lepidoptera and soft-bodied insects.

It is an ideal solution to increase the efficacy of other insecticides, whether in a tank mix or in rotation programs enhancing overall insect control. Trial work with Cinnerate and azadirachtin insecticides has shown a high synergy and increased pest spectrum and control. Alluma provides a strong tool to increase efficacy on some of the more difficult to control pests in conventional and organic-grown crops.

Alluma leaves no residue and will not affect harvest quality or flavor. It can be applied any time, even the day of harvest. Studies show that Alluma provides high efficacy to reduce crop damage and high young larvae control using low per acre rates, thanks to the increased bioavailability of its active ingredient.

## **Application Guidelines**

- Start applications at the first appearance of pests
- Apply any time up to and including the day of harvest
- Spray in early morning or late afternoon.
- Repeat as needed, minimum interval of 5 days





