Insecticide in Tree Nuts

Technical Overview

To be marketed as Minecto™ Pro insecticide upon registration, the premix formulation of cyantraniliprole and abamectin offers broad-spectrum control of a wide range of pests, including navel orangeworms, peach twig borers and spider mites in tree nuts.

Its complementary active ingredients broaden the activity spectrum compared to other stand alone products. With two translaminar modes of action, Minecto Pro creates a reservoir of active ingredients, offering extended residual control of pests. Insects and mites that consume the leaf ingest the active ingredients, stop feeding, and die within one to several days.

Technical features

• Broad-spectrum, foliar-applied product for specialty and vegetable crops
• Two complementary modes of action
• A ratio of mixture partners that allows for full targeted rates of individual active ingredients
• Lepidopteran control equivalent to chlorantraniliprole
• Reliable performance against spider mites

Activity Spectrum

Mode of Action

Calcium is released, muscle contracts

Cyantraniliprole is a ryanodine receptor modulator. It binds to the insect’s ryanodine receptor in muscle cells and causes the channel to open. This results in a flow of calcium ions from internal stores to the cytoplasm causing muscle paralysis, cessation of feeding and ultimately insect death.
**Insects controlled**

- Codling moth
- European red mite
- Hickory shuckworm
- Oblique-banded leafroller
- Oriental fruit moth
- Pacific spider mite
- Peach twig borer
- Pecan nut casebearer
- Strawberry spider mite
- Twospotted spider mite
- Navel orangeworm
- Walnut aphid

**Peach Twig Borer Control in Almonds**

(*May spray* timing)

![Graph showing the average number of shoot strikes/tree for different treatments.](image)

- **Foliar application:** One application May 1, 2015, USWD020422015 – Cooperator trial, CA
- All treatments included an MSO/NIS blend adjuvant at 0.125% v/v.
- DAA= Days after application

**Almond Lep Complex* Control**

(*hull-split* timing)

![Graph showing the percent nuts damaged for different treatments.](image)

- **Foliar application:** Two applications on a 14-day interval, 1st at 1% hull-split, USWC00022015 – Internal Syngenta trial, CA
- All treatments included an MSO/NIS blend adjuvant at 0.13% v/v.
- DAA= Days after application

*The lep complex included navel orangeworm, peach twig borer and oriental fruit moth.