Insecticide in Tree Nuts

**Technical Overview**

Minecto® Pro insecticide 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, cyantraniliprole and abamectin, broaden the activity spectrum compared to other standalone 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

**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.

**Activity Spectrum**

- **Diptera**
  - Spodoptera
  - Helicoverpa/Heliothis
  - Keiferia/Tuta
- **Lepidoptera**
  - Liriomyza leafminers
  - Fruit flies
- **Homoptera**
  - Aphids
- **Trombidiformes**
  - Spider mites
- **Coleoptera**
  - Flea beetles
  - Weevils
**Minecto Pro**

**Peach Twig Borer Control in Almonds**  
(*May spray* timing)

**Almond Lep Complex* Control**  
(*hull-split* timing)

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**Insects Controlled**

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

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**Foliar application:** One application May 1, 2015, USWD02042015 – Cooperator trial, CA  
All treatments included an MSO/NIS blend adjuvant at 0.125% v/v.  
DAA= Days after application

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**Foliar application:** Two applications on a 14-day interval, 1st at 1% hull-split, USWC020022015 – 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.