



# Insecticide in Citrus

## Technical Overview: California

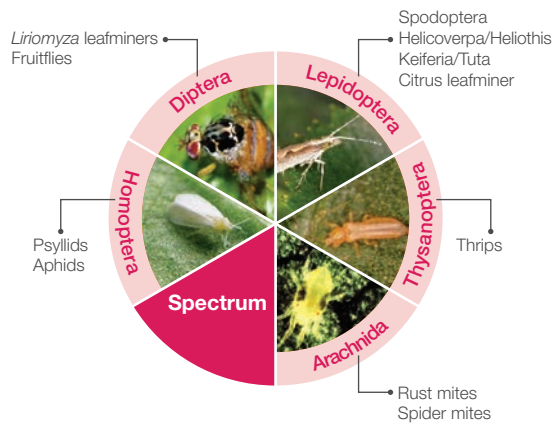
Minecto™ Pro insecticide, the premix formulation of cyantraniliprole and abamectin, offers control of key citrus pests, including Asian citrus psyllids, mites, citrus thrips and leafminers.

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

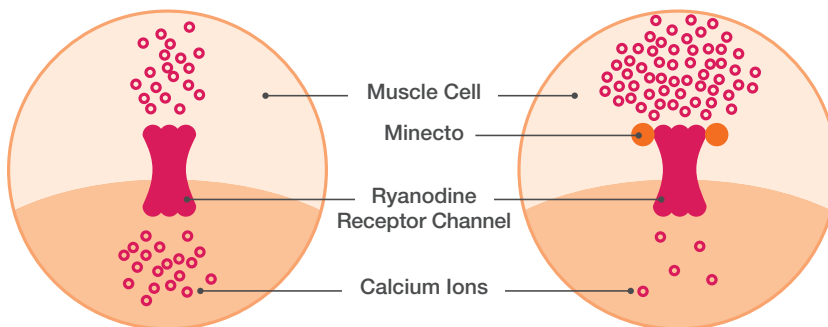
- Broad-spectrum, foliar-applied product for specialty and vegetable crops
- Two complementary modes of action
- A ratio of mixture partners that allows for full targeted rates of individual active ingredients
- Mite control equivalent to abamectin
- Protection against problematic sucking/rasping pests like mites, psyllids and thrips

### 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**.

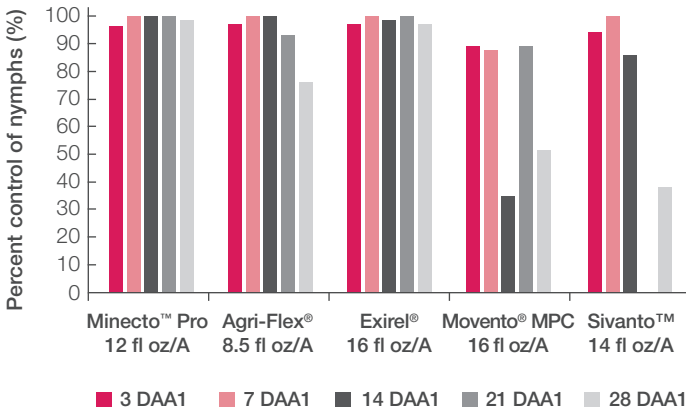


## Insects controlled

Citrus leafminers  
 Citrus rust mites  
 Asian citrus psyllids  
 Broad mites  
 Citrus bud mites  
 Citrus thrips  
 Cotton aphids  
 Twospotted spider mites

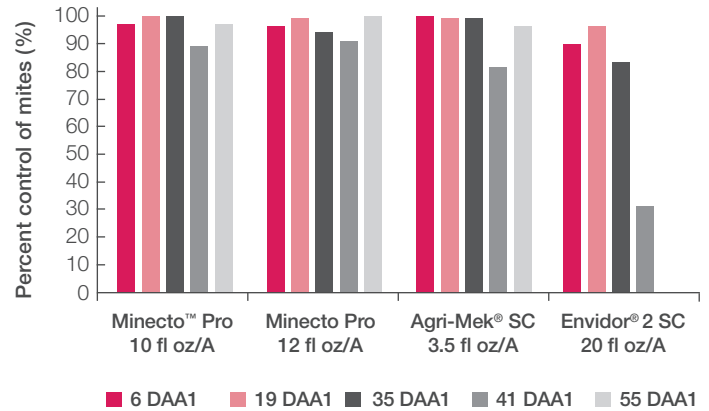


### Asian Citrus Psyllid Control (nymphs)



Foliar application: One application on August 3, 2015; Cooperator trial, FL  
 All treatments included an MSO/NIS blend adjuvant at 0.25% w/v.  
 Number of nymphs/10 flushes in check:  
 3 DAA1 – 229.3; 7 DAA1 – 333.4; 14 DAA1 – 70.2; 21 DAA1 – 41.2; 28 DAA1 – 270.1  
 DAA= Days after application

### Citrus Rust Mite Control



Foliar application: One application on June 6, 2015; USVE010062015 – Internal Syngenta trial, FL  
 All treatments included Hort Oil at 2% w/v.  
 Number of mites/10 lens fields in check:  
 6 DAA1 – 512.5; 19 DAA1 – 1117.5; 35 DAA1 – 243.8; 41 DAA1 – 72.5; 55 DAA1 – 66.2  
 DAA= Days after application

 **Minecto™ Pro**

 **syngenta®**

©2016 Syngenta. **Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local extension service to ensure registration status. Minecto Pro is not currently registered for sale or use in the U.S. and this is not an offer for sale. Upon registration, Minecto Pro will be a Restricted Use Pesticide. Agri-Flex and Agri-Mek SC are Restricted Use Pesticides.** Agri-Flex, Agri-Mek SC and Minecto Pro (upon registration) are highly toxic to bees exposed to direct treatment on blooming crops and weeds. Do not apply these products or allow them to drift onto blooming plants while bees are foraging adjacent to the treatment area. Agri-Flex®, Agri-Mek®, Minecto™, the Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. All other trademarks are the property of their respective owners.