



Syngenta
Actara®



In 2009, the citrus industry obtained a powerful tool to control some of its toughest pests. Actara® insecticide, a second generation neonicotinoid insecticide, provides an alternative foliar option for control of Asian citrus psyllid, citrus leafminers and many other damaging insect pests.

The Actara Advantage

Citrus growers are well aware of how devastating Asian citrus psyllid and citrus leafminer can be to a grove. Actara offers another option for control of these pests as well as many others, including:

- Aphids
- Citrus root weevil adults
- Soft and armored scales (e.g., snow, black, California red scale)
- Thrips

Actara serves as an important and effective component of comprehensive psyllid and leafminer control programs because of its multi-pest spectrum, excellent crop safety and integrated pest management (IPM) compatibility. Actara is labeled for use in non-bearing and bearing citrus trees.

Second Generation Neonicotinoid

Actara contains thiamethoxam, which is a second generation neonicotinoid insecticide and a member of Insecticide Resistance Action Committee (IRAC) Group 4A. This means citrus growers can count on Actara to provide broad-spectrum control of sucking and chewing insect pests through both contact and ingestion activity. Plus, its rapid

trans-stemic movement into leaves forms a reservoir of active ingredient within the leaf, providing long-lasting control of damaging pests.

Actara Application Options

Strategic use of Actara or Actara/Agri-Mek® miticide/insecticide tank mixes will ensure that these products will continue to be effective for years to come. Promote resistance management practices by integrating these products into a comprehensive insect control program that rotates Actara and Agri-Mek with other products with different modes of action.

Actara and Agri-Mek are highly toxic to bees exposed to direct treatment on blooming crops and weeds. Do not apply or allow these products to drift onto blooming plants if bees are foraging in the treated area. This is especially critical if there are adjacent groves that are blooming. (Refer to Recommendations to Avoid Spray Drift for additional information.)



Actara Application Instructions

Actara may be used at the following rates to control a number of pests, such as:*

- Aphids, Leafhoppers: 3.0 to 4.0 ounces per acre
- Asian Citrus Psyllid, Leafminer, Soft Scale: 4.0 to 5.5 ounces per acre
- Armored Scale, Citrus Root Weevil (adults), Thrips: 4.5 to 5.5 ounces per acre

For control of Asian citrus psyllid, leafminer and other insects, apply Actara at 4.0 to 5.5 ounces per acre. Apply Actara before pests reach damaging levels, in the spring, summer or fall as part of a comprehensive insect control program; these applications should be timed with leaf flushes. For scales, time the Actara application to coincide with the crawler stage. Scout and re-treat fields if populations rebuild to potentially damaging levels.

Apply the higher rates for heavy infestations. The use of a spray adjuvant may improve coverage but is not required. Use sufficient water volume to ensure thorough coverage of foliage.

*Please see the label for complete application guidelines.

Tank Mix for the "Trifecta" of Pest Control

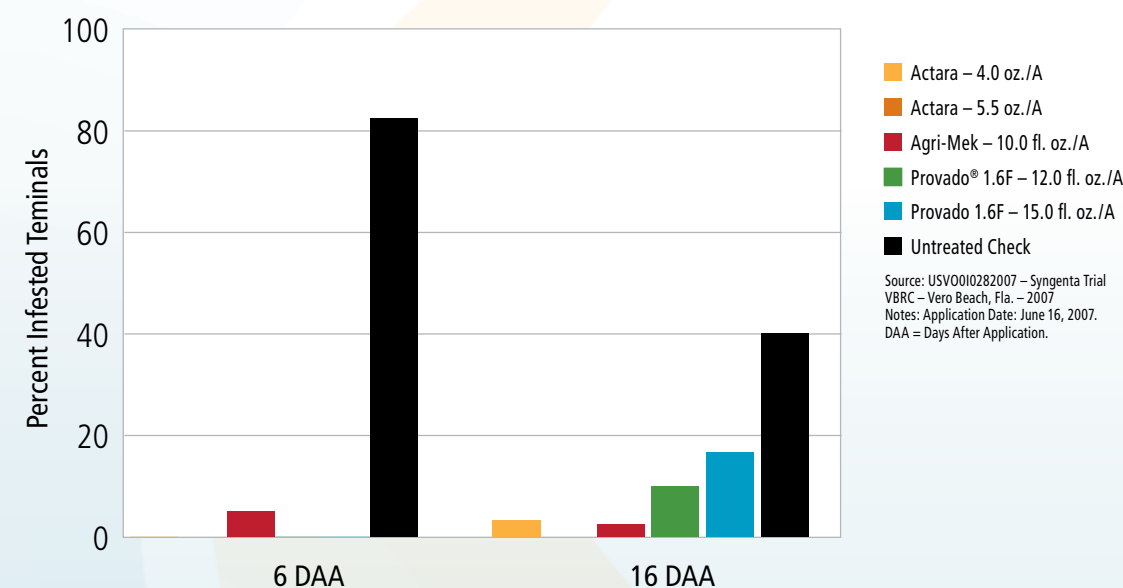
To achieve optimal control of Asian citrus psyllid, citrus leafminer and citrus rust mite – three of the most damaging citrus pests – growers should tank mix Actara with Agri-Mek and horticultural spray oil. Combining these two products allows growers to attain maximum control of these pests while getting the resistance management benefits that come from using multiple modes of action simultaneously.

For processed citrus, tank mix 5.0 ounces per acre of Actara with Agri-Mek at a rate of 5.0 ounces per acre. For fresh market citrus, tank mix Actara at a rate of 5.0 ounces per acre with Agri-Mek at 10.0 ounces per acre.

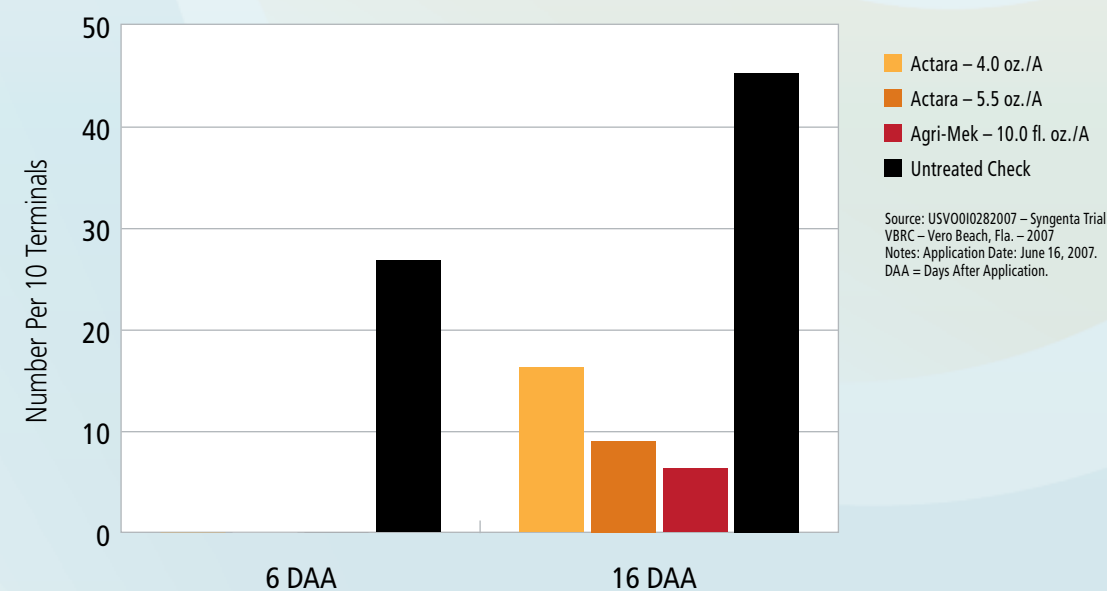
Apply Agri-Mek with horticultural oil to ensure maximum control of target pests.

Actara Results

ASIAN CITRUS PSYLLID (*DIAPHORINA CITRI*) Control in Oranges



CITRUS LEAFMINER (*PHYLLOCNISTIS CITRELLA*) Control in Oranges



ACTARA DIRECTIONS FOR USE

Application Methods	Ground, aerial*
Preharvest Interval (PHI)	Zero (0) days
Single Application Rate	3.0 – 5.5 oz./A depending on target pest
Minimum Interval Between Applications	7 days
Maximum Amount Per Growing Season	11.0 oz./A (0.172 pound active ingredient per acre) of Actara or 0.172 pound active ingredient of thiamethoxam-containing products per acre per growing season
Minimum Gallons Per Acre (GPA)	Ground: 10 GPA Air: 5 GPA
Pollinator Precautions	<ul style="list-style-type: none"> • Do not apply Actara during pre-bloom or bloom when bees are actively foraging. • After an Actara application, wait at least five days before placing beehives in the treated grove. • If bees are foraging in the ground cover and it contains any blooming plants or weeds, always remove flowers before making an application. This may be accomplished by mowing, disking, mulching, flailing or applying a labeled herbicide. • Consult cooperative extension services or state agencies responsible for regulating pesticide use for additional pollinator safety practices

*Aerial application may result in slower activity and reduced control compared to ground applications.



For more information, visit these Syngenta Crop Protection Web sites: www.syngentacropprotection.com or citrus.farmassist.com, or call the Syngenta Customer Center at 1-866-SYNGENT(A) (796-4368).

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Agri-Mek is a Restricted Use Pesticide.