



Almonds: Western Flower Thrips in the Nursery

Description Of The Pest

Western Flower Thrip adults are minute insects, about 0.762 mm long, with two pairs of fringed wings. The adult has three color forms that vary throughout the year. There is a pale form that is white and yellow, with slight brown spots or blemishes on the top of the abdomen; an intermediate color form with an orange thorax and brown abdomen; and a dark brown form. The intermediate form is present throughout the year, but in spring the dark form predominates while the pale form is most abundant at other times throughout the year.



First-instar nymphs are opaque or light yellow, turning to golden yellow after the first molt. The nymphal stage lasts from 5 to 20 days.

Damage

Flower Thrip nymphs hatch and feed in numbers on apical tips, often under the emerging leaves. Their feeding causes the tip to stop growing. When the apical tip stops growing, the lateral shoots grow, causing a multi-branched and disfigured trees which has lower value.

Management

Western flower thrips overwinter as adults in weeds, grasses, alfalfa, and other hosts, either in the orchard floor or nearby. In early spring, thrips often migrate to flowering trees and plants and deposit eggs in the tender portions (e.g. shoots, buds, and flower parts) of the host plant.

Cultural Control. Do not disk cover crops or weeds between trees when trees are in bloom, as thrips move from the weeds to the trees. Plow open, weedy land adjacent to the nursery before weeds become established. If possible, avoid planting wheat or grain crops adjacent to the nursery. .

Pesticides

Apply pesticides when thrips are first found on shoot tips. Repeat when found again. Rotate pesticides at each application to avoid pesticide resistance. Always read and follow manufacturers recommendations.

SPINOSAD

(Entrust)#

20.23 ml – 29.54 ml / hectare

(Success)

71 ml – 95.5 ml / hectare

Precautions: Do not apply more than 0.3472 Liter /hectare/year of Success or 0.1076 Liter /hectare/year of Entrust.

Avoid development of insect resistance by varying products applied. Control may be improved by addition of an adjuvant.

METHOMYL*

(Lannate) 90SP

91.78 grams – 183.56 grams / hectare

Precautions: Restricted entry interval is 72 hours.

FORMETANATE HYDROCHLORIDE

(Carzol) 92SP

183.56 grams / hectare

Prepared by John Driver, Corky Lovin, Louise Ferguson and Mark A Bell.

This publication has been produced with the support of the European Union, Perennial Horticulture Development Program, Almond Industry Development Project, Contract: ASIE/2007/135-504, Roots of Peace, Kabul, +93 (0) 794-677-212, zach@rootsofpeace.org. The contents of this publication are the sole responsibility of UCD and can in no way be taken to reflect the views of the European Union.
Copyright © UC Regents Davis campus, 2009. All Rights Reserved.

