

# Surround

## **Crop Protectant**



# **Suppress Insect Pests**

- 1. Repellency
- 3. Reduces feeding
- 4. Impedes grasping
- 5. Restricts movement
- 6. Camouflage the host - prevents host recognition
- 7. Alters behavior
- 8. Induces paralysis
- 9. Causes mortality

# **Nine Ways Surround May**

- 2. Impedes egglaying

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## **Repel Damaging Insects From Olive Trees**

Developed in conjunction with the United States Department of Agriculture (USDA), Surround® Crop Protectant is formulated to suppress insect activity and can be a valuable tool in olive IPM programs. Surround is an EPA-registered insecticide that can help reduce the damage caused in olives by the olive fruit fly, thrips and other insect pests. In addition, Surround may be used



Olive Fruit Fly Maggot

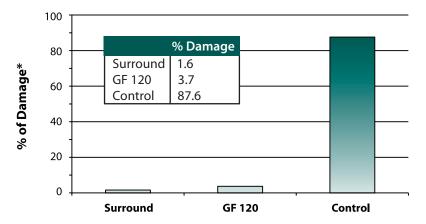
to maximize the effectiveness of conventional insecticides by avoiding their overuse, thus minimizing the likelihood of insect resistance.

Surround functions best when used as a preventative program, applied to the tree before the pest appears. The use of Surround will reduce pest pressure and may eliminate the need for additional treatments. If pest pressure reaches an economic damage threshold, a knockdown insecticide should be used. Surround may be tank mixed with most crop protection products.

Surround may suppress beneficial insect activity. Closely monitor and employ a typical control program for scale and mite.

### **Effect of Surround on Reduction of Damage From Olive Fruit Fly**

P. Vossen; California, 2004



\*Mean % damage at harvest, SEP 16 to NOV 12, 2004; in 19 different locations

### **Application Timing:**

Surround -Jun 24, Aug 4 GF 120 - weekly or every other week

Rate: Surround - 50 lb/A









#### RECOMMENDATIONS FOR OLIVES

Volume: For 20-foot trees, use 200 gallons of water per acre. Large trees require up to 300 gallons per acre.

Concentration: Use 25 to 50 lbs per 100 gallons of water.

Pest	Lbs/Acre	Application Instruction
Aphids, crickets, flea beetles, fruit flies, grasshoppers, leafhoppers, leafrollers, olive fruit fly, thrips, white fly	25-50	Suppression only*. Start prior to infestation. Spray every 7–14 days throughout infestation.
*If complete control is needed, consider using supplemental controls.		

#### **Application Tips**

- Apply Surround to near-drip. Avoid foliage run-off.
- Change the direction of travel on alternate applications for best coverage.
- Surround can be tank mixed with most pesticides. When tank-mixing, always
  add Surround to the tank first. A pre-mix tank is suggested for sprayers
  without mechanical agitation.
- Aerial application of Surround is not recommended for insect suppression as adequate coverage of large trees is difficult to achieve.

#### Post-Harvest

Traces of Surround may remain on treated olives after harvest, but these have been demonstrated not to affect the quality of table olives or olive oil.

Important: Always read the label before buying and follow label instructions when using this product.

The use of Surround® WP in agricultural crop protection applications is covered by US Patents 6,027,740; 6,069,112; 6,110,867 and 6,156,327.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Failure to strictly follow label directions may cause injury to crops, animals, man or the environment. Tessenderlo Kerley, Inc. (TKI) warrants that the product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use when properly applied in normal weather conditions. TKI makes no other warranty or representation of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose. The exclusive remedy against TKI for any cause of action relating to the handling or use of the product is a claim for actual out-of-pocket damages, and in no event shall TKI be liable for special, indirect, incidental or consequential damages or expense of any nature, including, but not limited to, loss of profits or income, whether or not based on the negligence of TKI, breach of warranty, strict liability in tort, or any other cause of action. TKI and the seller offer the product, and the buyer and users accept it, subject to the foregoing conditions of sale and limitations of warranty, liability and remedies.

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