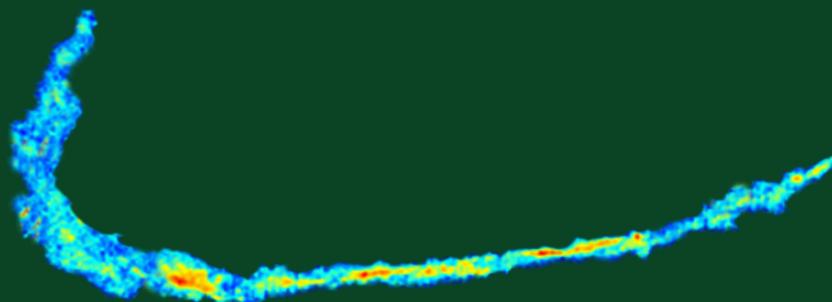


# OROBOOST<sup>®</sup> SPRAY GUIDE



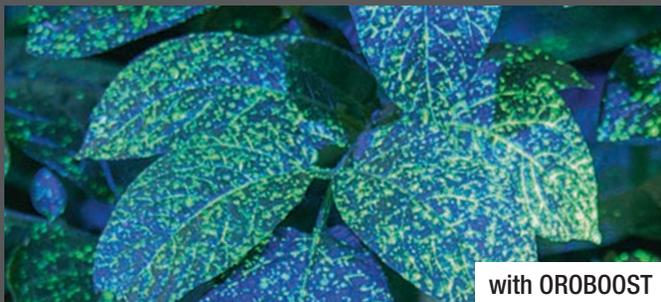
OROBOOST® is a WSDA-registered adjuvant for use in organic agriculture\*. It is compatible with, and will improve the performance of, foliar-applied organic and conventional insecticides, fungicides, herbicides and nutrients. The proprietary OROWET® technology used to formulate OROBOOST provides flexibility in how it functions as an adjuvant. At lower rates, 20-32 ounces/100 gallons of spray solution, it is a superior spreader that gives contact pesticides excellent coverage on the leaf surface. When OROBOOST is used at higher rates of greater than 32 ounces/100 gallons it penetrates the leaf surface allowing its patented TransPhloem® technology to move systemic pesticides and nutrients throughout the plant for rapid translocation.

\*OROBOOST is registered organic only when tank mixed with at least one other registered organic pesticide.

## HOW OROBOOST IMPROVES PESTICIDE AND NUTRIENT PERFORMANCE

### 1. SUPERIOR SPREADING

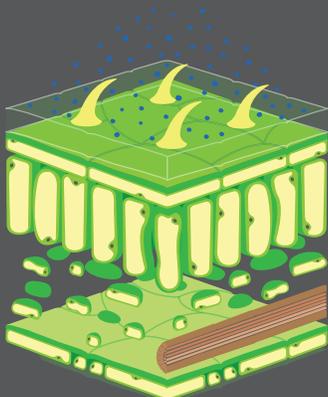
The critical first step in foliar-applied pest control is getting good coverage of the leaf surface with your pesticide spray. OROBOOST, with OROWET technology's superior surface tension reduction property, provides excellent wetting and coverage of the leaf surface. It delivers a greater number of droplets and a more uniform droplet size compared to other adjuvant types that also contributes to its excellent spray coverage. Without complete leaf surface coverage the efficacy of contact pesticides will be severely reduced.



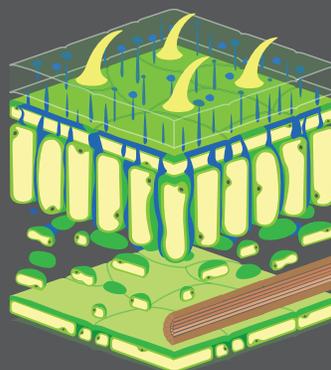
### 2. SUPERIOR PENETRATION

When applying systemic pesticides it is important to get rapid penetration into the leaf. OROWET technology, with its proprietary adjuvants and formulation, opens channels in the epicuticular wax layer below the leaf surface. This allows the pesticide solution to move into the plant's vascular system to be translocated throughout the plant.

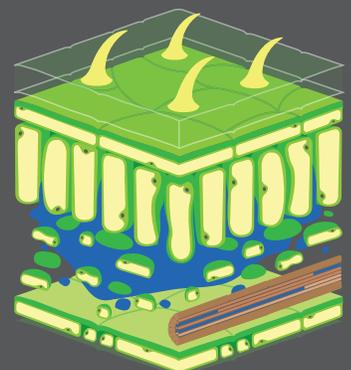
PRODUCT DEPOSITION



MOVEMENT THROUGH THE EPICUTICULAR WAX



TRANSLOCATION MOVEMENT



### 3. SUPERIOR TRANSLOCATION

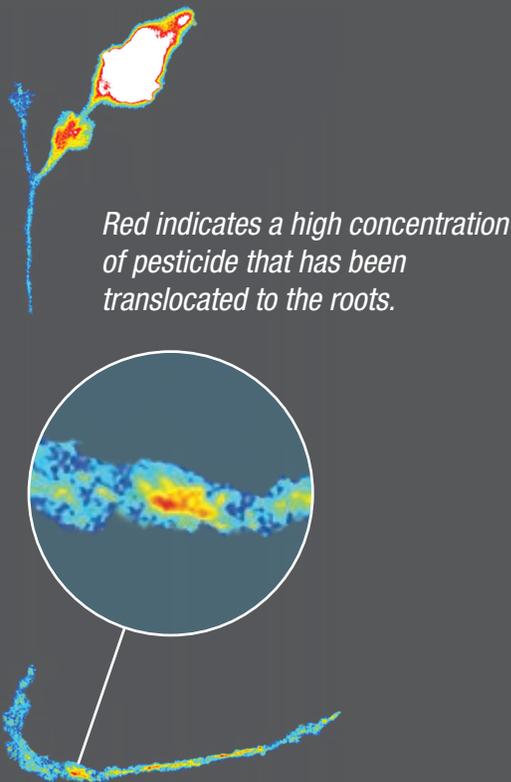
TransPhloem technology improves the translocation of a systemic pesticide and adjuvant solution when it moves into the main stem of the plant. University research has shown OROBOOST translocates a higher concentration of applied pesticide, more quickly, throughout the plant compared to the systemic pesticide alone or when it is mixed with other adjuvants.



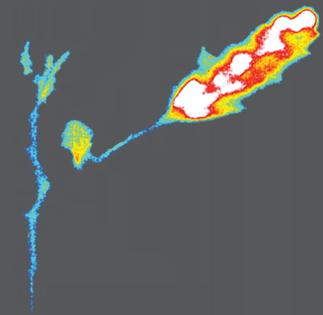
**TransPhloem technology accelerates the movement of systemic pesticides and nutrients into a plant's phloem for rapid translocation throughout the plant.**

Oro Agri commissioned a study by the University of Illinois utilizing a  $C^{14}$  radioactive isotope in the spray solution. The study concluded OROBOOST-treated applications are absorbed into the leaf quicker, and move a greater percentage of the systemic pesticide to the roots (this specific pesticide's active site for its mode of action) faster than the pesticide alone.

SYSTEMIC PESTICIDE WITH OROBOOST



SYSTEMIC PESTICIDE ALONE



*The absence of the plant stem or root images indicate the systemic pesticide has not been translocated to this portion of the plant.*

These lambsquarter weeds were treated with a systemic herbicide, with and without OROBOOST adjuvant. Only those parts of the plant that have some concentration of the  $C^{14}$  solution show up in the image. Red areas indicate high concentrations, green areas show medium concentrations, and blue areas show low concentrations of the radioactive isotope solution.

The OROBOOST-treated plant shows better absorption and translocation than the non-OROBOOST treated plant. Most importantly, the ORO-BOOST plant shows a well-defined root system with clearly visible areas of red (high concentration). This indicates high concentrations of the systemic herbicide has been translocated to its roots in 12 hours versus the systemic herbicide alone.

**TransPhloem technology, combined with the superior spreading and penetrating properties of OROBOOST, can improve your systemic pesticide's performance and give you a better return on your pest control program investment.**

## GENERAL INFORMATION

OROBOOST is a spreader, wetting aid and penetrant to improve distribution and efficacy of miticides, insecticides, fungicides, herbicides, and nutrients. OROBOOST is a WSDA-registered material for use in organic agriculture when combined with other organic pesticides.

## DIRECTIONS FOR USE

Prior to use, read all the directions on this label and on the label of the manufacturer's insecticides, miticides, fungicides, plant growth regulators, dormant oils and/or nutrients being used with this product. The manufacturer's label for specific usage and restrictions has precedence over directions for use referred to on the OROBOOST label. To ensure thorough mixing, it is suggested that you recirculate mini tanks and bulk tanks or shake containers before using. Ensure spray equipment is thoroughly cleaned before using OROBOOST. Coatings on inner tank and spray lines, from previous chemicals sprayed, may be dissolved by OROBOOST, thereby releasing it into the mix about to be sprayed. If in doubt, applying as directed, add 20 ounces of OROBOOST to 20 gallons of water circulate through system for 20 minutes, spray to waste. Thereafter, mix as prescribed for regular spraying. Treat a small area and observe results. If the results are satisfactory, proceed with a complete application.

## PRECAUTIONS

- **WARNING:** Do not apply to fruiting stages of pome fruit, cherries, table grapes or other sensitive or stressed crops without first consulting your Oro Agri distributor or representative.
- Test for compatibility when combining in tank mixes with EC products, copper and/or chlorpyrifos on sensitive crops.  
NOTE: OROBOOST reduces dew formation for up to 7 days and therefore may increase the risk of frost damage in frost prone areas.  
NOTE: **NOT FOR AQUATIC USE.**

## MIXING

Fill tank one-half full with water. Add the required amount of other tank mix products while agitating. Add remainder of the water. Add the recommended amount of OROBOOST last and continue agitation until completion of spraying. For best results, use within 24 hours of mixing. Antifoam and buffering agents may be used if required.

## RECOMMENDED RATES

### IN SEASON

#### ■ INSECTICIDES, MITICIDES, FUNGICIDES, HERBICIDES, NUTRIENTS AND PGRS:

- Use 20-100 fl. oz. OROBOOST per 100 gallons of tank - mix spray solution
- Chemigation\*: (such as: pivot or overhead sprinklers) 10-20 fl.oz. per acre - \*Not approved in CA

### POST HARVEST, DORMANT AND DELAYED DORMANT

#### ■ INSECTICIDES, MITICIDES, FUNGICIDES, HERBICIDES, NUTRIENTS, PGRS AND/OR DORMANT OILS:

- Add 1 to 3 Quarts of OROBOOST per acre in sufficient tank - mix spray water volume to adequately wet target.



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