

# Surround®

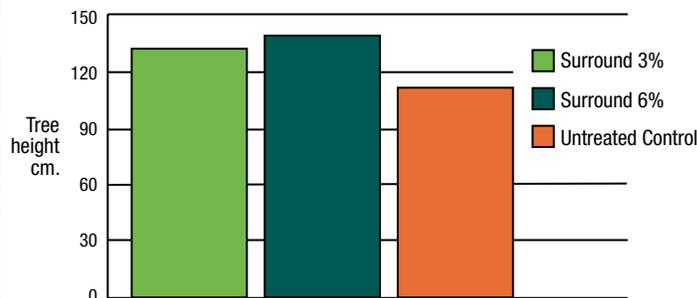
## Crop Protectant

### Improve Transplant Establishment

Successful transplanting of annual vegetables or permanent crops such as trees, vines and ornamental plants can depend on a number of factors such as plant type, quality of nursery plants, field preparation, handling during the planting process and environmental factors. The plant's ability to regenerate roots that are damaged during transplanting and its return to normal growth can be greatly impacted by water stress, especially when the new environment is one of greater light intensity and higher heat.

Nursery plants are often grown in closely planted beds and flats where growing conditions are optimized. These close nursery plantings often provide some shade for the individual plants, creating a microclimate of less light penetration and higher humidity. Once planted in an open field where they are susceptible to full sunlight, wind and less humidity, transplants often suffer from "transplant shock." Even when transplants are properly "hardened-off," the additional sunlight intensity can, under high-heat conditions, often delay establishment.

Surround Crop Protectant provides a proven solution to these environmental factors that contribute to transplant shock. The kaolin particles in Surround reflect the damaging infrared and ultraviolet radiation that increases plant surface temperatures. A cooler plant surface reduces heat stress and sunburn, improves transplant establishment and improves the efficiency of water used during the transplanting period. And, unlike anti-transpirant type products, Surround does not block leaf stomata, allowing the plant to continue its photosynthetic processes and achieve the maximum root regeneration possible.



*Effect of biweekly Surround particle film applications on transplanted citrus trees (Valencia/Carrizo). Trees planted March 1999 at Ft. Pierce, FL; Growth data collected January 2001.*

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## Suppress Insect Pests and Protect Plants From Wildlife Feeding Damage

Surround is an EPA-registered and OMRI-approved product that suppresses certain insect pests that feed on newly transplanted crops and can reduce stand establishment.

For ornamental plants, Surround has shown effective suppression of feeding from deer and rabbits that can impact the establishment of young transplants.

## The Benefits of Protecting Your Transplants With Surround

- Faster plant establishment;
- Fewer replants;
- Suppression of insects and wildlife feeding; and,
- Quicker establishment can mean earlier production, potentially providing an opportunity to take advantage of earlier market prices.

## Recommendations for Transplants

Apply Surround WP to new transplants in the field to reduce transplant shock and heat stress. Re-apply Surround every 5-7 days depending on rainfall/irrigation, plant growth and type of crop. Emerging green tissue should be protected from sunburn and heat stress.

Concentration: Use at 6.25 to 37.5 lbs (depending on transplant size and crop) of Surround WP per acre in sufficient water for complete coverage. Small seedlings will need less water and a lower amount of Surround applied in a band spray. Adjust the volume of water, spray nozzle positioning and rate used for larger, more mature plants to uniformly coat plant surfaces.

## Application Tips:

- Avoid foliage run-off. Apply to achieve near-drip coverage. Surfactants may improve spreading.
- Best results are usually achieved at 37.5 lbs per 100 gallons of water.
- Consult the specimen label for instructions on aerial application.
- Surround can be applied with most other insecticides, miticides and fungicides. See Surround Spray Guide for more information on application techniques.
- Do not apply Surround through any type of overhead irrigation system.
- Do not dip transplants into Surround solution.

For more information on Surround, visit [www.novasource.com](http://www.novasource.com).

**Important:** Always read the label before buying and follow label instructions when using this product. The use of Surround 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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