

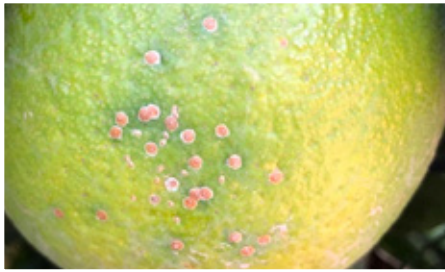
# Fact Sheet

## CALIFORNIA RED SCALE



California red scale is a significant pest of citrus crops. This study evaluated the effectiveness of NanoCrop, *powered by PureCrop NanoTech*, in controlling California red scale on young oranges compared to a Spirotetramat and a Pyriproxyfen product.

The laboratory tested four treatments: NanoCrop at 0.5% and 1% v/v dilutions, and the conventional insecticides. Three applications of NanoCrop were made at the crawler stage. Populations were monitored before and after treatments. Statistical analysis was used to compare effectiveness.



### KEY TAKEAWAYS



Effective on soft scales, armored scale, citrus thrips, and mites.



Utilize as a biostimulant to help increase Brix and calcium levels.



NanoCrop an organic product, provided nearly the same protection as leading conventional treatment.

NanoCrop significantly reduced California red scale populations compared to the control, with 1% v/v having the highest efficacy. **No negative impacts on tree health or fruit quality** were observed. The Spirotetramat product and Pyriproxyfen product also reduced populations, but to a lesser extent than NanoCrop.

The lab concluded that **NanoCrop is highly effective in controlling California red scale** on young oranges and can be a promising alternative to conventional insecticides.

**“Applied at 0.5% and 1% v/v [NanoCrop] showed good red scale control (about 80%).”**

- Stephen Deitz  
Research Biologist  
Sawtooth Ag Research Inc.

### DILUTION RATES

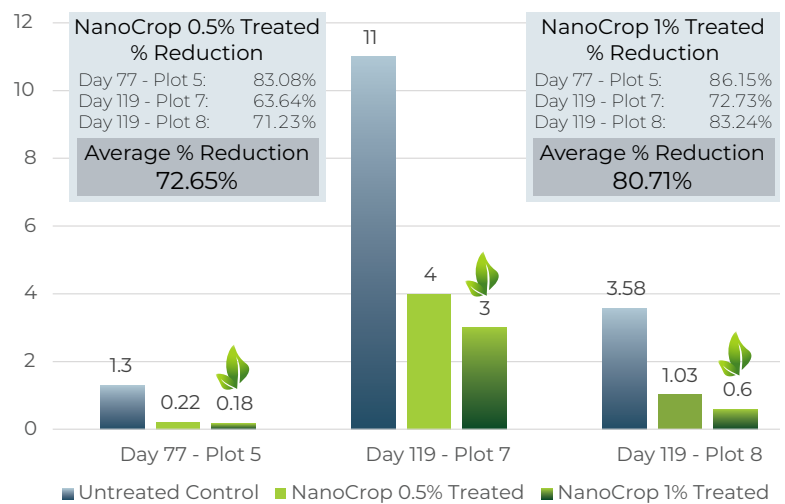
**Preventative care:**  
0.75% rate of NanoCrop once every 10 - 14 days.

**Curative treatment:**  
1% rate of NanoCrop until control.

\*FREQUENCY AND DILUTION RATES DEPEND ON THE VARIATION IN CROPS, GROWING METHODS, CLIMATE, AND GEOGRAPHY. ADJUST YOUR IPM PROCESS BASED ON YOUR SPECIFIC NEEDS.



### Average Scale Per Fruit



\*All references to "NanoCrop" in this fact sheet and referenced data refer to and reference PureCrop1 data, results, and application. NanoCrop's formula is based on PureCrop NanoTech and is optimized for commercial agriculture application. Results will be comparable.



Scan the QR Code to read more about this study!

See these results in **YOUR** fields  
Call our team today! +1.707.972.5650

# NanoCrop Label Summary



OPTIMIZED FOR COMMERCIAL AG  
POWERED BY PURECROP NANOTECH

## Modes of Action

### INSECTICIDE

Eliminates sap-sucking insects by interfering with their digestive enzymes, causing constant micelle expansion and rupturing the insect. NanoCrop — Powered by PureCrop NanoTech — is safe for use around beneficial insects, such as honey bees, predatory mites and wasps, and ladybugs.

### FUNGICIDE

Contains surface acting agents that physically remove mold and mildew from the leaf's surface. The micelle encapsulates and biodegrades spores, while also preventing reattachment and growth for up to ten days due to its translaminar properties.

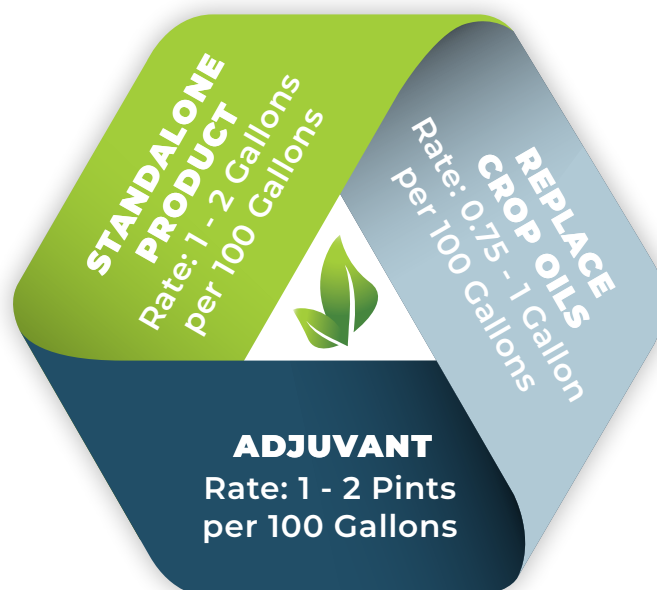
### BIOSTIMULANT

NanoCrop is made of long-chain fatty acids that the plant converts into amino acids, which reduces interfacial tension, and enhances mesophyll conductance and ion transfer capacity—resulting in the ability to respond to abiotic stress, maximizing water and nutrient utilization and improve overall plant health.

### SUPRA-MOLECULAR SURFACTANT

NanoCrop utilizes surfactant molecules, micelles, to lower the surface tension of water. They enable NanoCrop to spread and adhere to leaf surfaces uniformly, while dispersing evenly in water and mix indefinitely. Micelles do not clog or flood the stomata due to their size and are compatible with most products, except other surfactants.

## NanoCrop Uses



### PESTS & DISEASES

*Including, but not limited to:* Aphid, Asian Citrus Psyllid, Broad Mite, Citrus Rust Mite, Spider Mite, Russet Mite, Thrips, Whiteflies, Lygus, Stink Bug, Leaf-Footed Plant Bug, Mealybug, Scale, Snail, Botrytis, Fusarium Wilt, Downy Mildew, Powdery Mildew, Alternaria, Anthracnose, Bacterial Blast, FireBlight.

### BUFFER RECOMMENDATIONS

Buffer water to pH 5.5-5.8 with citric acid before adding NanoCrop. Do not buffer with ammonia sulfates or sodium based buffers.

