

Case Study

GRAPES & STONE FRUIT IN DORMANCY



This case study highlights the efforts of Craig Calandra, a farmer from San Joaquin Valley, California, who wanted to improve the yield of his **Autumn Royal grapes**. Dormancy is a challenging stage for these grapes, and Craig wanted to explore whether NanoCrop could help in this regard. He had previously used PureCrop NanoTech, a base chemistry of all WCA Products, with success and decided to compare NanoCrop against the non-ionic surfactant he typically used to treat his grape vines during dormancy.

NanoCrop + Dormex (PGR)



Non-Ionic Surfactant + Dormex (PGR)



KEY TAKEAWAYS

- 🌿 Spray earlier — only one spray needed
(Case study spray period: Feb. 11-14th)
- 🌿 Safe for use around beneficials, bees & other pollinators
**when used as directed*
- 🌿 No Phytotoxicity
- 🌿 Rainfast in 2 hours
- 🌿 Reduces abiotic stress
- 🌿 Uniform bloom
- 🌿 Increase yield

Craig began with a dosage of 12-16 oz. of NanoCrop mixed with Dormex (PGR) per 100 gallons of water, ensuring complete solution coverage. He observed that using NanoCrop resulted in a more uniform bloom, translating into **better yields and more produce to market**. Craig also noted that using NanoCrop in his dormancy program helped control pests like scale, mites, and Alternaria spores, which can be problematic during this stage. In contrast to non-ionic surfactants, **NanoCrop did not cause issues like clogged plant stomata**, phytotoxicity, or the need for multiple applications.

DILUTION RATES

Craig diluted 12-16 oz. of NanoCrop with Dormex (PGR) per 100 gallons of water.

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

“If you want to increase your bloom uniformity and overall crop quality, then I urge you to run a NanoCrop trial on your farm.”



- Craig Calandra, Uvas Inc.

Craig found NanoCrop to be an effective and versatile solution for treating various issues related to dormant grape vines. Its use led to improved plant health, decreased incidence of fungal infections and pests, and uniform growth, all contributing to more fruit on each vine and increased yields and revenue for farmers. Those interested in using NanoCrop as a dormant spray on their crops can contact the sales team to learn more.



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.

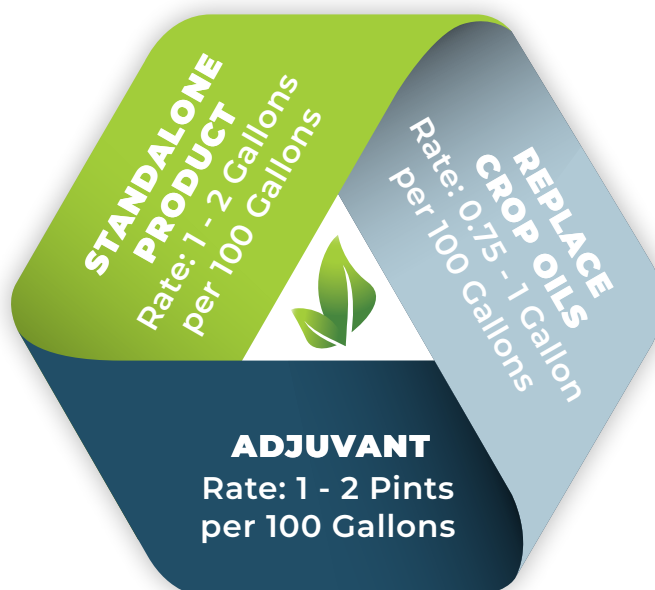
BIOSTIMULANT

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.

