Fact Sheet

DOWNY MILDEW

DATE: September 2020 **LOCATION:** California





The BAAR Scientific Research Farm conducted a study testing the effects of NanoCrop, *Powered by PureCrop NanoTech*, against downy mildew on basil. The study concluded that NanoCrop significantly reduced infection and provided longer protection against downy mildew compared to the biological standard of a beneficial bacteria product. Therefore, the scientists concluded that "PureCrop [NanoTech] should be recommended as a product that can be incorporated into a commercial downy mildew management program [...]"

KEY TAKEWAYS



Prevents mold, mildew, and bacteria growth for up to ten days.



NanoCrop attaches to hyphae to prevent regrowth.



Combats fungi by membrane disruption, causing leaky cells and desiccation.

A 2% v/v rate of NanoCrop showed **75% less infection** compared to grower's standard of a beneficial bacteria product. 1% v/v of NanoCrop showed **50% less infection** than compared to grower's standard.

DILUTION RATES

Preventative care:

1% v/v rate of NanoCrop every 10-12 days

Curative treatment:

1%-2% v/v 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

ON YOUR SPECIFIC NEEDS.

Downy Mildew % On Leaf Area 20.0 40.0 50.0 0.0 10.0 30.0 70.0 9.5 15.0 30.0 40.0 35.0 9.18.20 37.5 50.0 65.0

*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.

■ NanoCrop - 1%

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

Biological Standard



Scan the QR Code to read more about this study!

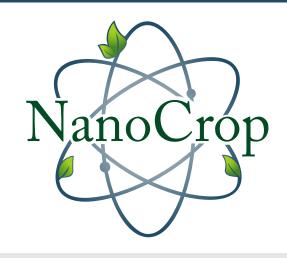


NanoCrop - 2%

■ Control

NanoCrop Label Summary

OPTIMIZED FOR COMMERCIAL AG
POWERED BY PURECROP NANOTECH



Modes of Action

NanoCrop Uses

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.



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.

