ENERGIZE YOUR FUNGICIDE
Optimized Fungicide Performance

SYNC is a unique, proprietary adjuvant technology proven to enhance the performance of both contact and systemic fungicides, and to lengthen disease control at reduced water volume on a wide variety of turf diseases.

Better Disease Control and Improved Turf Health

Additional research is available at www.precisionlab.com/sync
SYNC Outperforms Ordinary Adjuvants

The majority of adjuvants on the market today are simply not formulated to enhance the biological activity of fungicides.

Unlike these ordinary adjuvants, the SYNC technology is designed to effectively manage the complex interaction between host plant, fungus, fungicide, active ingredient and formulation.

A water droplet beads onto the plant surface with limited surface area. Adjuvants reduce the surface tension of water to increase the area of coverage.

Small contact area on leaf surface

Fungicide movement past cuticle

Limited translocation due to uptake

A water droplet beads onto the plant surface with limited surface area. Adjuvants reduce the surface tension of water to increase the area of coverage.

Fungicide may be trapped in spray deposit

Sticker adjuvants form a barrier on the leaf surface, entrapping the fungicide and preventing penetration through the cuticle.

Limited translocation due to restricted uptake

Spreaders increase the surface area of the spray deposit, but may dry too quickly for the fungicide to reach its target.

Improved coverage on leaf surface

Limited translocation due to restricted uptake

Super spreaders improve coverage, but they either carry fungicide off of leaf blades or they create a thin spray deposit that dries too quickly and traps fungicide, limiting penetration into the plant.

Maximized coverage but spray deposit may dry too quickly stranding fungicide on leaf surface

Crop oils may improve the uptake of oil soluble fungicides but have been shown to cause cellular damage under the spray deposit – which leads to reduced translocation and bio-efficacy of the fungicide as well as phytotoxicity to the host plant.

Limited translocation due to cellular damage

Cationic surfactants have been found to cause significant phytotoxicity to host plants, causing many universities to specifically recommend against their use. SYNC has never demonstrated risk of phytotoxicity in over 5 years of research.

Optimized translocation

Cationic surfactants have been found to cause significant phytotoxicity to host plants, causing many universities to specifically recommend against their use. SYNC has never demonstrated risk of phytotoxicity in over 5 years of research.

Cationic surfactants have been found to cause significant phytotoxicity to host plants, causing many universities to specifically recommend against their use. SYNC has never demonstrated risk of phytotoxicity in over 5 years of research.

Each SYNC component plays a critical role.
A non-ionic carbohydrate-based surfactant with excellent spreading, wetting and sticking properties decreases droplet surface tension. This creates a larger area of contact with the surface of the leaf for better coverage of contact fungicides, and greater uptake of systemic fungicides.

An amine polymer complex modifies the waxy surface of the leaf to ensure more rapid and efficient penetration of the fungicide into the intracellular plant tissue. This allows a targeted response to the disease without damage to the cellular structure of the leaf.

A buffer is present to optimize solubility, and ensure compatibility in the spray tank.

A Breakthrough in Adjuvant Technology

The fungicide activation process is complex. Balancing the efficacy of the fungicide with the formulation requirements frequently means a compromise to either uptake or stability.

That’s why SYNC was developed.
SYNC is the only multi-component, 100% active surfactant system, formulated to optimize the uptake and biological efficacy of a wide range of fungicides.

SYNC improves the viability of the spray droplet, keeping the fungicide in an available state for a longer period of time.

Improved coverage and adherence to leaf surface

Modification of cuticle for increased penetration of water soluble and oil soluble fungicides

Prevents cellular damage beneath spray deposit

Optimized translocation

USE RATE: Apply SYNC at 1 pint (16 fl. oz./473 ml) per 100 gallons (378.5L or 0.125 v/v) of spray solution.

SYNC multi-component surfactant system optimizes the uptake and biological efficacy of a wide range of fungicides.
SYNC Outperforms Ordinary Adjuvants

The majority of adjuvants on the market today are simply not formulated to enhance the biological activity of fungicides.

Unlike these ordinary adjuvants, the SYNC technology is designed to effectively manage the complex interaction between host plant, fungus, fungicide, active ingredient and formulation.

A water droplet beads onto the plant surface with limited surface area. Adjuvants reduce the surface tension of water to increase the area of coverage.

**Sticker Characteristics**
- Fungicide may be trapped in spray deposit
- Strong adhesion to plant surface
- Limited translocation due to restricted uptake

**Spreader Characteristics**
- Increased coverage on leaf surface
- Little fungicide movement past cuticle
- Limited translocation due to restricted uptake

**Super Spreader Characteristics**
- Limited translocation due to restricted uptake time
- Limited translocation due to restricted uptake

**Crop Oil Concentrate Characteristics**
- Cellular damage beneath spray deposit
- Limited translocation due to cellular damage

**Cationic Surfactant Characteristics**
- Cationic surfactants have been found to cause significant phytotoxicity to host plants, causing many universities to specifically recommend against their use. SYNC has never demonstrated risk of phytotoxicity in over 5 years of research.

**SYNC Characteristics**
- Improved coverage and adherence to leaf surface
- Modification of cuticle for increased penetration of water soluble and oil soluble fungicides
- Prevents cellular damage beneath spray deposit
- Optimized translocation

SYNC’s multi-component surfactant system optimizes the uptake and biological efficacy of a wide range of fungicides.

A Breakthrough in Adjuvant Technology

The fungicide activation process is complex. Balancing the efficacy of the fungicide with the formulation requirements frequently means a compromise to either uptake or stability.

That’s why SYNC was developed.

SYNC is the only multi-component, 100% active surfactant system, formulated to optimize the uptake and biological efficacy of a wide range of fungicides.

SYNC improves the viability of the spray droplet, keeping the fungicide in an available state for a longer period of time.

Each SYNC component plays a critical role.

A non-ionic carbohydrate-based surfactant with excellent spreading, wetting and sticking properties decreases droplet surface tension. This creates a larger area of contact with the surface of the leaf for better coverage of contact fungicides, and greater uptake of systemic fungicides.

An amine polymer complex modifies the waxy surface of the leaf to ensure more rapid and efficient penetration of the fungicide into the intracellular plant tissue. This allows a targeted response to the disease without damage to the cellular structure of the leaf.

A buffer is present to optimize solubility, and ensure compatibility in the spray tank.

**USE RATE:** Apply SYNC at 1 pint (16 fl. oz./473 ml) per 100 gallons (378.5 L or 0.125 v/v) of spray solution.

**ENERGIZE YOUR FUNGICIDE**

Get the facts for yourself. University research is available at www.precisionlab.com/sync

Turn it On.
Over 40 Years on Technology’s Cutting Edge

Since 1962, Precision Laboratories has been known as a leader in surfactant chemistry with the most widely researched and field-tested products in the industry. It is with this expertise and the company’s commitment to high quality, best-of-class technology that SYNC Fungicide Activator was developed.

SYNC, a unique, proprietary adjuvant technology gives turf professionals:

- Maximized fungicide performance against a wide range of turf diseases
- Greater longevity of disease control
- Improved turf health
- Optimized playing conditions
- Ability to reduce water volume, application time, labor, and interference with play