



INTRODUCING

The CIVITAS TURF DEFENSE™ Turf Management Triangle

The well-known disease triangle is formed by the three agronomic factors involved in plant disease: a suitable host plant, the presence of an infectious pathogen (a microorganism that causes the disease), and suitable environmental conditions for the pathogen to infect and grow. To effectively control plant pathogens, these three factors need to be managed so the disease is less likely to develop.

Two sides don't tell the whole story

Current IPM practices for managing turf disease focus mainly on modifying environmental conditions or reaching for "go-to" fungi-toxic fungicides to control the pathogen. Until now, managing **The Plant** side of the disease triangle has usually required sodding, seeding or sprigging to renovate to better turf types.



Sodding • Seeding • Change Turf Type

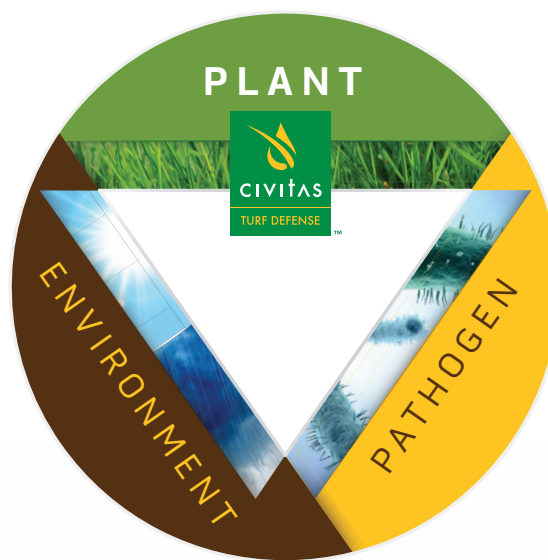
CIVITAS TURF DEFENSE is turning turf management on its head

The CIVITAS TURF DEFENSE Turf Management Triangle is an approach to agronomic practices that impacts the third side of the disease triangle: **The Plant**.

A unique Mode of Action in CIVITAS TURF DEFENSE is Induced Systemic Resistance (ISR). CIVITAS TURF DEFENSE products impact **The Plant** and work to both treat diseases and prevent them from taking hold in the first place. This lessens the time and effort previously required to physically change **The Plant** itself.

In addition, CIVITAS TURF DEFENSE smothers insects and provides a barrier that helps prevent insects and pathogens from accepting or using the host plant.

Utilizing the CIVITAS TURF DEFENSE Turf Management Triangle approach, you can enhance your IPM program so that you can achieve healthier, high quality turf that is less receptive to stresses.





The CIVITAS TURF DEFENSE Turf Management Triangle

The CIVITAS TURF DEFENSE Turf Management Triangle framework can be applied to disease control and a variety of turf challenges.

Environment:

Assess and employ cultural practices

- Soil: fertilization, aeration, topdressing
- Water: irrigation, drainage, dew removal
- Micro-Climate Modifications: shade, airflow, traffic patterns
- Minimizing thatch layer to reduce fungal inoculum

Pathogen:

Control pathogen growth and reproduction

- Application of fungi-toxic fungicides
- CIVITAS TURF DEFENSE smothers insects and provides a barrier that helps prevent insects and pathogens from accepting or using the host plant

Plant:

Improve overall turf health and quality

- A unique mode of action in CIVITAS TURF DEFENSE is Induced Systemic Resistance (ISR)
- Including CIVITAS TURF DEFENSE in your IPM program delivers effective protection against threats to your turf health
- CIVITAS TURF DEFENSE helps turf become healthier and less prone to stress

Use the CIVITAS TURF DEFENSE Turf Management Triangle to complete your IPM program

CIVITAS TURF DEFENSE products impact **The Plant** and through proven disease and insect control promote turf health and plant protection.

CIVITAS TURF DEFENSE products are best utilized as the foundation of a preventative fungicide program. With no known fungicide resistance risk or maximum yearly application restrictions, CIVITAS TURF DEFENSE can be used consistently throughout the growing season, alone or in a tank mix.

CIVITAS TURF DEFENSE PRE-MIXED is OMRI* listed for use in organic turf management.

Always read and follow product label instructions. Use of the product that varies in any way from the product label instructions is a violation of federal and state law.

*OMRI = Organic Materials Review Institute

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