

FUNCTIONAL SOILS

FS-TURF

Functional soils (FS) microbial products offer a simple, cost effective solution to improving your turf health, efficiently.

FS products are multi faceted, using specifically chosen fungal endophytes which will benefit your turf, fields and parks.

FS products are safe for your end users and staff. Our proprietary blend is a key mechanism to effectively improve your turf grass.

FS-TURF will be the best new tool in your toolbox.

Microbial Functions

Enhanced Nutrient Uptake

- Increased natural nutrient cycling means fertilizer is used effectively.
- Larger, healthy root mass allows for more effective nutrient uptake and moisture utilization.

Thatch Control

- Soil fungi consume carbon accumulations in the root zone.

Stress Reduction

- **FS-TURF** utilizes microbes that help plants tolerate and adapt to environmental stress

Phosphorus Utilization

- Soil fungi are integral to nutrient cycling and solubilizing phosphate minerals which increase phosphate availability to the plant.

Fungicide Support

- High populations of well supported beneficials compete against pathogens. Well timed applications of **FS-TURF** can reduce the use of fungicides and improve the efficacy of your current program.



With FS-TURF

Without FS-TURF

Components

Micronutrients

- Integral supply of mineral elements.
- Many of these nutrients are not included in traditional fertilizers and can become depleted over time.
- **FS-TURF** treatment products include complex minerals, providing a natural source of required Micronutrients.

Microbial Stimulants

- Included multiple low molecular weight organic compounds (LMOs) enhance plant growth.
- LMOs encourage root growth, increase stress tolerance and moisture/temperature extremes.
- Additional stimulation of the native microbial community is provided by concentrations of carbohydrates and other complex organic compounds.

Ingredients

Active:

- Microbes Trichoderma species (4 strains: Beneficial fungal endophyte that solubilizes phosphate and more),
- Penicillium species (1 strain: Rhizosphere organism that solubilizes calcium and aluminum phosphates),
- Variovorax species (1 strain: Endophytic bacteria known to promote plant growth).
- Broad spectrum microbial additives are included for increased soil function

Microbial Inoculants

Our proprietary blend of microbial inoculants offer a multi-faceted approach to improving turf health, productivity, and tolerance to environmental stress.

We incorporate four types of ingredients into **FS-TURF** inoculants with the goal of growing the healthiest turf possible through the establishment of a healthy soil microbiome.



Without FS-TURF

With FS-TURF

Non-Active:

- A diverse range of soluble mineral nutrients, including many micronutrients
- Low level nitrogen sources to assist with microbial establishment
- Soil wetting agents to help with microbe sorption into soil
- Other low molecular weight compounds to help with plant stress responses
- Soluble sugars to promote microbial growth in soil