# Microbial Soil Amendment

## **GUARANTEED ANALYSIS Contains Non-Plant Food Ingredients ACTIVE INGREDIENTS**

| Microbial Ingredients  Bacillus subtilis  Bacillus pumilus  Bacillus lichenformis  Bacillus megaterium  Bacillus amyloliquefaciens  Trichoderma harzanium | 1 x 10° cfu/g<br>1 x 10° cfu/g<br>1 x 10° cfu/g<br>1x 10° cfu/g<br>1 x 10° cfu/g |
|---|--|
| Microbial Nutrients  47.5% Maltodextrin 47.5% Sucrose   | 9  |
| INERT INGREDIENTS   | 4%   |

4% Diatomaceous Earth

## Pathogen Free - Heavy Metals Free - GMO Free

Available Size:

5 LBS. Container

## PLANT PROBIOTIC INGREDIENTS AND THEIR BENEFITS:

#### Bacillus (bacteria)

- Enhance plant growth
- Decompose organic matter and pesticide residues nutrient cycling
- Nitrogen fixation
- Increase resistance to environmental extremes
- Solubilize minerals (including phosphorous) for plant
- Produce natural plant hormones
- Improve soil structure
- Enhance seed germination and viability of emerging seedlings

#### Trichoderma (fungi)

- Increase resistance to environmental extremes
- Produce natural plant growth hormones

# Brings your soil to life!

Nature's Source® Plant Probiotic is a unique complex of beneficial microorganisms. It promotes the establishment and enhances the growth of greenhouse and nursery crops, landscape plants and specialty crops, in all types of soils and growing media. Beneficial microbe populations are essential to creating the ideal soil environment for healthy plant growth.

Over the past 500 million years, plants and beneficial microorganisms have developed a symbiotic relationship. When a plant photosynthesizes it releases carbon exudates into the soil or growing media, which microorganisms use as a food source. The microbes in the rhizosphere surround the root to get this food source. In return, these microorganisms protect the plant roots from nematodes and pathogens, recycle nutrients, improve the surrounding soil structure and make minerals available to the plant. Unfortunately, today many soils are grossly out of balance and are virtually devoid of beneficial microbial populations. This is due primarily to the use of soilless media in greenhouse and nursery production, and to overreliance on pesticides and synthetic fertilizers to treat the symptoms rather than the cause of the problems. These chemicals adversely affect the beneficial microbial populations found in healthy soil. Nature's Source Plant Probiotic is formulated to reestablish beneficial microbial populations that provide the soil with the necessary components to promote healthy growth and reduce plant stress.

## BENEFITS OF NATURE'S SOURCE **PLANT PROBIOTIC:**

- Overall healthier plants strengthens plants' natural immunity
- Aids in nutrient breakdown, availability and absorption; reduces nutrient leaching
- Improves soil structure
- Promotes faster, stronger rooting
- Reduces planting/transplant shock (better plant establishment)
- Easy to use and environmentally beneficial
- Increases resistance to environmental stress

Use of a fertilizer that contains organic elements, such as Nature's Source Plant Food, will effectively feed your plants, and also serve as a food source for the microorganisms in Plant Probiotic.



## Nature's Source® Plant Probiotic Grower's Guide

## **Application Rates**

#### FOR COMMERCIAL USE ONLY

## **GREENHOUSE/NURSERIES**

#### FOLIAR APPLICATION\*/SOIL DRENCH\*\*:

#### Tank Mix:

Dissolve 1/2 lb. of Nature's Source Plant Probiotic and 32 oz. of Nature's Source Plant Food in 100 gallons of water. Spray on foliage and growing media or apply as soil drench.

## **Injector Application:**

Can be mixed in a stock tank with Nature's Source Plant Food, with injector set on 1:100. Dissolve 1/2 lb. of Nature's Source Plant Probiotic and 32 oz. of Nature's Source Plant Food per gallon of stock tank solution.

\*1/2 lb. of Nature's Source Plant Probiotic per 20,000 sq. ft. every 2 to 3 weeks.

## \*\*Application Key:

(Finished solution 1/4 lb. per 50 gallons)

- 6-in. pots and smaller 1.5 oz. finished solution multiplied by pot size.
- (Example: 4-in. pot = 6 oz. of finished solution)
- Gallon pots and larger 10 oz. finished solution per gallon size container.
- (Example: 2-gal. container = 20 oz. of finished solution)
- Plug trays 100 gallons finished solution covers 1,000to 1,200 sq. ft.
- Potted/Young Trees 1-5 gallons of finished solution per pot/container 3-4 times during growing season.

#### **SOIL BLENDING AMENDMENT:**

1/4 lb. of Nature's Source Plant Probiotic per cubic yard of growing media. Dissolve with water based on amount of water being added per cubic yard.

#### Jar Test:

Nature's Source Plant Probiotic is tank mix compatible. Jar testing is still recommended to ensure nutrient solutions and water do not cause coagulation.

**Shelf Life:** 12 to 18 months when stored in a cool, dry environment.

## **AGRICULTURE**

Initial Colonization/Pre-plant or Initial Watering: Inject or spray 1/4 to 1/2 lb. of Nature's Source Plant Probiotic with 64 oz. of Nature's Source Plant Food per acre.

Microbial Maintenance Program: Inject or spray 1/4 lb. of Nature's Source Plant Probiotic with 32 oz. of Nature's Source Plant Food per acre monthly.

## ORNAMENTAL INSTALLATION, LANDSCAPE AND TRANSPLANTING

#### INSTALLATION:

Dissolve 1/2 lb. of Nature's Source Plant Probiotic and 32 oz. of Nature's Source Plant Food in 50 gallons of water. Soak root ball prior to backfilling. At planting, utilize 32 oz. of the finished product for every 5 gallons.

#### TREE/LANDSCAPE AND MAINTENANCE:

Per 1,000 sq. ft. of coverage, dissolve 1/16 lb. of Nature's Source Plant Probiotic and 3 oz. of Nature's Source Plant Food in a minimum of 5 gallons of water or soil drench trees and shrubs with 5 grams of Nature's Source Plant Probiotic in 1-5 gallons of water 3 to 4 times during growing season.

## TURF GRASS/COMMERCIAL LANDSCAPE APPLICATION AND MAINTENANCE:

Dissolve 1 lb. of Nature's Source Plant Probiotic and 64 oz. of Nature's Source Plant Food in a minimum of 50 gallons of water per 5 acres. Reapply as frequently as every 4 to 6 weeks during active growing season.

Nature's Source Plant Probiotic alone, and in conjunction with Nature's Source Plant Food, can be applied through your specific applicator, whether it is a low-pressure watering nozzle, overhead boom sprayers and sprinklers, injectors, propagation mist nozzles, hydroponic systems, flood floors and benches, spray tanks or fertigation systems.

Phone: 888 839-8722

Website: www.NS-PF.com

Email: info@NS-PF.com Visit NS-PF.com for current Terms & Conditions of Sale.

For a complete company directory, visit http://NS-PF.com/ContactUs/



Guaranteed by: Nature's Source 307 E. Mulberry Street, Sherman, TX 75090 USA

Not available in all U.S States and not available in Canada. Visit www.NS-PF.com for details.