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Micro 108® Seed Inoculant

Description:

Micro 108® Seed Inoculant is a high concentration of a beneficial microbe that promotes plant health, size, and root growth; increases yield and aids in reducing or eliminating the use of chemical fungicides

Active Ingredient:

* *Streptomyces lydicus* strain WYEC 108
(1x10⁸ CFU/gr.)

Other Ingredients:

* (inert carrier)

Description Of Active Ingredient:

Streptomyces lydicus strain WYEC 108 is a *saprophytic rhizosphere* colonizing *Actinomycete*. It was isolated from the roots of a linseed plant in an area that exhibited a natural suppression of soil pathogens. Under proper conditions (moisture and temperature) the *Streptomyces* spores will germinate and begin forming mycelia that will attach to the root system of the host plant. As the root system grows, the mycelia colonies grow with it, eventually covering the entire *rhizosphere*. When active the *Streptomyces* produce a by-product called *siderophores*.

Siderophores reduce minerals to a form more easily absorbed by plants. The bacteria also produces a small amount of growth hormone, which is, as of yet, unidentifiable.

Temperature Tolerance:

Spores of *Streptomyces lydicus* strain WYEC 108 are regularly frozen for storage at -0° F. Temperatures above 130° F. will sterilize the spores. Germinated spores (which occurs when the *Streptomyces* is added to potting soil, for instance) survive the same temperature range as long as there is a food source such as peat, bark or humates available as well as the proper moisture level.

PH Tolerance:

The *Streptomyces* can survive a PH range 5.0-9.1 but the range of optimal performance is 7.0-8.0.

Longevity:

The shelf life for Micro 108® Seed Inoculant is guaranteed at 12 months. Storing in refrigerated conditions may extend the shelf life. Containers are marked with an expiration date.

Chemical Compatibility:

Micro 108® Seed Inoculant is compatible with all chemical fungicides. Bactericides at levels above 75 ppm should not be used in conjunction with Micro 108® Seed Inoculant or as a drench in soils containing Micro 108® Seed Inoculant

UV Sensitivity:

The bacterium is not UV sensitive.

Rates:

Use 3-32 oz of Micro 108® Seed Inoculant per 100 lbs of seed (about 1-8 grams per pound). Apply one of the following ways:

Dry Coating: Thoroughly mix Micro 108® Seed Inoculant with seeds until all seeds are evenly coated. Use a tumble mixer or have a professional seed coating company perform task.

Soaking: Dissolve Micro 108® Seed Inoculant in appropriate amount of water (enough to barely cover seed) to create solution. Soak seed in solution for 1 hr just prior to planting.

Slurry: Just prior to planting dissolve in appropriate amount of water and apply through slurry.

Rates can vary depending on environmental conditions, seed size and individual practices. Please contact manufacturer if there are any questions regarding rates.

For additional questions or specific technical inquiries please contact Matt Kowalski at 281-580-1643