

QUANTUM-1®

Beneficial Soil and Plant Microbial Inoculant



DESCRIPTION

Quantum-1 is a plant and soil inoculant that restores and enhances the foundational levels of soil biology (also known as the soil food web). This product incorporates highly specialized heterotrophic bacteria into a diverse microbial formulation that provides unprecedented plant enhancement at the root and rhizosphere. The addition of humic material (sourced from peat) to the formulation, provides a readily usable carbon source.

PERFORMANCE CHARACTERISTICS

When used as a foliar or soil application, Quantum-1 directly impacts plant vigor and performance by:

- ✓ **Improving nutrient uptake**
- ✓ **Improving plant photosynthesis**
- ✓ **Improving root and shoot growth**
- ✓ **Fortifying plant natural defense systems**
- ✓ **Promoting water production and retention**

PRODUCT CHARACTERISTICS

Highly concentrated – Provides one million colony forming units per milliliter. Safe and easy to use - It may be applied as a foliar or root drench and is compatible with most types of irrigation systems to include: speed sprayer, boom sprayer, pivot irrigation, aerial spray, micro-jet, etc.

No re-entry restrictions. Easy storage – Does not require refrigeration.

Long life – Shelf stable for 3 years (unopened) and 1 year (opened).

PROPERTIES

Guaranteed Bacterial Analysis:	Bacillus amyloliquefaciens 33,000,000 cfu/mL Bacillus licheniformis 1,300,000 cfu/mL
Fertilizer Analysis:	4% Humic Acid; No NPK; fertilizer analysis of 0-0-0
pH:	6.9-7.5
Specific Gravity:	01.04 approximately
Appearance:	Brown/Black liquid
Particle Size:	100% through 100 micron/140 mesh
Odor:	Pungent and distinctive earthy odor
Packaging	Plastic 1 gallon bottles, 5 gallon totes, 30 gallon & 55 gallon drums and 275 : gallon totes (mini-bulks)
Storage/handling:	Shake/agitate before use. Re-cap as soon as possible. Store between 32°F/0°C and 110°F/43°C.

DIRECTIONS FOR USE

Row Crops – 64 oz per acre at planting; 64 oz per acre at 14 to 21 days post planting; 64 oz per acre prior to full canopy.

Grains (Irrigated) – 64 oz per acre at planting; 64 oz per acre at seed head development. Grains (Non-irrigated) – 1 gallon per acre at planting.

Turf (Golf) – Initial application of 8 oz per 1,000 ft² on tees and greens; 4 oz per 1,000 ft² every 14 days.

Turf (Sod & Sport) – Initial application (including at planting) 1 gallon per acre; 64 oz every 30 to 45 days.

Vegetables (Greenhouse) – Water in seeds with 4 oz per gallon.

Vegetables (Outplanting) – Root dip or drench with 4 oz per gallon; 64 oz per acre every 14 to 21 days.

DO NOT MIX WITH FUNGICIDES OR PESTICIDES.

When tank mixing, add the Quantum-1 last and apply within 0 to 12 hours. For crop specific application rates and timing, visit <http://www.GrowQuantum.com/product-application-rates.aspx>.