



# Manage™

## Microbial Inoculant

Pathway®  
BioLogic

PATHWAY BIOLOGIC, LLC - MICROBIAL TECHNOLOGY

VEGETABLES

FRUITS

ORNAMENTALS

ROW CROPS

**Manage™** is a consortium of polymicrobial strain PGPRs (Plant Growth Promoting Rhizobacteria) that can be mixed with a wide range of fertility and crop protection products. These tank mixes can be sprayed in furrow, foliar, or deployed through various forms of irrigation. The polymicrobial strains have been selected for their ability to build strong relationships with crop plants, providing a healthier environment more conducive for plant growth. Plant growth is enhanced due to the more active nature of the soil microbiome. The plant microbe relationships also provide greater opportunity for growth and increased yield.

#### PATHWAY TECHNOLOGY – “It’s about species selection and formulation”

Pathway products are unique in the agriculture industry because of our formulation technology and ability to deliver a truly effective rate of bacterial spores through a wide range of common agricultural practices. The consortium of selected bacterial spores are derived from proprietary strains of bacteria and formulated to allow for ease of application/use. This provides the grower with consistent product performance when applied at the recommended rates.

**Manage™ is tank-mix compatible with most fertilizer and pesticide solutions but a bench test is recommended.**

*Available in 10 pound bag, 40 pound case.*

## PATHWAY BIOLOGIC, LLC - MICROBIAL TECHNOLOGY

Pathway utilizes the latest advancements in microbial technology to formulate multiple microbial groups into one product. **Manage<sup>™</sup>** is composed of multiple strains and species of Bacillus (*B. subtilis*, *B. methylotrophicus*, *B. amyloliquefasciens*, *B. licheniformis*). The consortium consist of particular species and strains of bacteria that form colonies in a complex sugar and protein matrix along the root surface, building a coating referred to as a biofilm. The selected bacteria live both within the root and the biofilm "coating".

Pathway has selected the bacteria in Manage<sup>™</sup> for their ability to:

- **Root growth** is increased by bacterial production of metabolites - increases the capture of Nitrogen and water (more efficient use of fertilizer and irrigation)
- **Phosphorus uptake** is enhanced by the greater root volume and the production of Phosphorous solubilizing enzymes
- **Iron uptake** is improved by the production of natural chelating agents (siderophores)
- **Photosynthesis** is enhanced by greater leaf area, canopy development, and increased chlorophyll content; a result of bacterial hormone production. This result is measured in increased production of starches, sugars and bio solids. Each of which contribute to harvested quality and yield.
- **The inherent characteristics** of the crop ecosystem is improved.

### APPLICATION RATES:

**Pre-plant** – 10 to 20 oz per acre using 35 to 50 gal water

**In-Furrow or Banded** – 4 to 8 oz per acre monthly

**Chemigation** – 4 to 8 oz per acre monthly

**Cuttings & Bare Root** – 10 to 20 oz in 50 gallons water for dipping

**Transplants** – 10 to 20 oz in 50 gallons water, apply as a drench

For further specifications, refer to Rates & Frequency table on product label or contact your Product Representative.