# How to Implement Microbial Health Program

Growing a productive crop is a 365 day process of healthy soil and plants. Our sciencebacked, farmer-proven microbial team technology is equipped to maximize the resources that lead to the greatest plant potential.

### PHASE I: Residue Management

Fall: Meltdown 1 qt/a, Environoc 501 1 pt /a

Spring: Meltdown 1 qt/a, Environoc 501 1 pt /a

# **PHASE II: Planting**

Environoc Seed Treatment
Environoc 401 In-Furrow 1 pt/a
BW - Balance 1 pt/a
BD - Sweet 1 pt/a
BD - Biocast Broadcast
pre/post planting 1 qt/a

#### **PHASE III: Foliar**

BW - Balance 1 qt/a SG Advance 2 qt/a BD - Ntrust 48-64 oz/a Respite Rx 4 oz/a BD - Sweet 1 pt/a

# Value to the Crop

- · Improves biological diversity and overall soil health
- Better germination emergence: uniform fuel processing by minimizing plant to plant competition for sunlight
- Increased rate of cell division, plant growth and vigor
- · More efficient utilization of invested fertility dollars
- Provides a "slow release" fertilizer effect via efficient cycling of crop residue
- Reduces carbon tie up of soil nitrogen and micronutrients
- Enhances overall plant health by decreasing rates of stalk rot
- Creates platform for greater kernel size, weight and nutrient density at harvest
- Sets the stage to analyze, test, and determine limiting factors in maximizing crop yield

# What is the impact of uneven emergence?

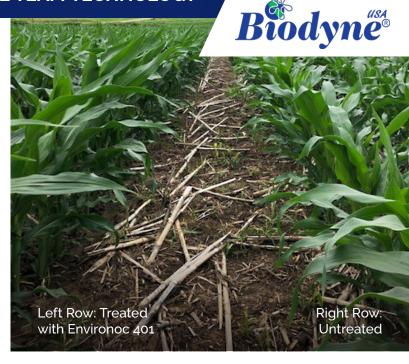
<b>卡夫夫夫夫夫夫夫夫夫夫夫</b>	100%	
***	95%	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	88%	
本本村本本村本本村	94%	Early: 85% Medium: 15%
ARRABA	91%	Early: 61% Medium: 39%
李表表、李表表、李表表、	90%	Early: 96% Late: 4%
本体本体本本	79%	Early: 82% Late: 18%

Data from Carter, P.R., E.D. Nafziger, and J.G. Lauer, Uneven emergence in corn (IL and WI), North Central Regional Extension Publication No. 344

# **Stand Optimization**

**BIODYNE'S MICROBIAL TEAM TECHNOLOGY** 









# Biodyne's Microbial Team Technology Capability

Over 200 Proprietary Non-Pathogenic, Non-GMO, and Naturally Ocurring

#### Diazotrophic Microbes

Nitrogen Fixation from Free N in Air

#### **Ammonifying Microbes**

Convert Organic N to Ammonia Form

#### **Phosphate Solubilizing Microbes**

Makes Unavailable P Available

#### **Many Degradation Abilities**

Cellulose, Lignin, Chitin, Starch, Waxes, Oils

#### **Microbial Surfactant Production**

Free up More Nutrients in Soil/Rhizosphere

#### Vitamin/Hormone

Vitamin Production and Facilitate Hormone Release

#### **Siderophore Production**

"Iron Magnets"; More Iron Availability in the Soil

#### **Petroleum Hydrocarbon Bioremediation**

Oil. Diesel. Gas. Soil and Groundwater

#### **Pesticide and Herbicide Bioremediation**

Specialized Remediation Capabilities

#### Fats, Oils, Grease, Common Organics Degradation

Wastewater, Pond Treatment

#### **Sulfur Oxidizing Capabilities**

Enhance Sulfur Oxidation in the Soil and Increase Available Sulfate

#### **Nodulating**

Nitrogen Fixing Symbiotic Relationship Nodules on Soybeans