





## IMPROVE NUTRIENT UPTAKE, ROOT DEVELOPMENT AND YIELD

Terrasym<sup>™</sup> 401 is a NewLeaf Symbiotics proprietary strain of PPFM technology (pink pigmented facultative methylotroph) for use in soybeans that provides additional nutrition to plants during critical stages of development. When applied at the planting, Terrasym<sup>™</sup> 401 promotes plant and root nutrition uptake.

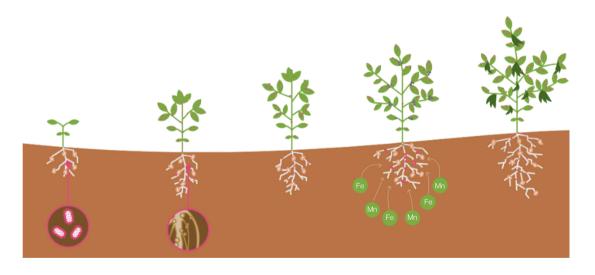
The mutually beneficial relationship between PPFMs and plants has co-evolved over time. Of the countless types of microbes that exist on plants, PPFMs are one of the few that have a truly positive symbiotic relationship with soybeans all season long. Terrasym<sup>™</sup> 401 takes no energy from the soybean plant but instead feeds on a waste product from the plant (methanol).

70 % WIN RATE

+3.7 BU/A WIN ADVANTAGE

83 DATA POINTS

2 + YEARS OF TRIALS



- As broad plant colonizers, PPFMs spread from the seed surface across a plant's roots and leaves.
- PPFMs secrete beneficial molecules into the root zone that can bind and transport yieldenabling micronutrients.
- PPFMs improve nutrient uptake by populating plant roots which promotes higher numbers of root tips and overall root mass.
- Prolonged PPFM colonization and increased nutrient uptake result in increased chlorophyll content and enhanced photosynthetic efficiency, both of which translate to increases in yield.

## **UNIQUE SEASON-LONG PERFORMANCE**

Terrasym<sup>™</sup> 401 works all season long, providing added protection and contributing to plant performance. With many benefits, PPFMs are one of the few known microbes to have no known strains that impact plants negatively.



**UNTREATED** 

**TREATED** 

## IMPROVE NUTRIENT UPTAKE AND STRENGTHEN THE PLANT

Terrasym<sup>™</sup> 401 is a biological technology that colonizes plants with microbes that improve nutrient uptake, making your soybeans crop stronger, more stable and more tolerant of stress up until the day it's harvested. The microbes in Terrasym<sup>™</sup> 401 produce siderophores, which increase plant uptake of iron, manganese and other important nutrients.

## TAILORED SPECIFICALLY FOR SOYBEANS

NewLeaf technologies are powered by a bio-informatics platform - Prescriptive Biologics Knowledgebase (PBK) - which provides the ability to uniquely select and align technology selection to a particular crop. Terrasym<sup>™</sup> 401 for soybeans includes a uniquely selected PPFM developed to fit soybeans production and helps deliver the best yield at harvest.



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**TREATED**