

# LALFIX<sup>®</sup> PROYIELD

## LIQUID SOYBEAN



SOYBEAN



LIQUID



INOCULANT



## MULTI-ACTION LIQUID INOCULANT FOR SOYBEANS

**LALFIX<sup>®</sup> PROYIELD Liquid Soybean** is a leading liquid inoculant containing *Bradyrhizobium elkanii* and *Delftia acidovorans*. Lallemand Plant Care utilizes two unique strains of *Bradyrhizobium elkanii* to bring soybean growers an innovative inoculant with higher rhizobia survival and competitiveness. In addition, *Delftia acidovorans* increases root growth, nutrient and water uptake – ultimately leading to enhanced nodulation and nitrogen fixation, early vigor and higher soybean yields. In partnerships with university research extensions, *Delftia acidovorans* is known to produce a significant amount of chaperone molecules that help solubilize iron for soybean availability.

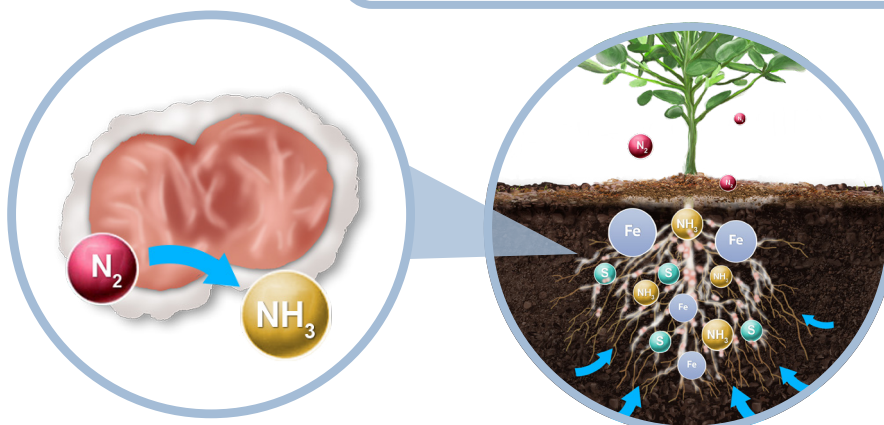
### ADVANTAGES

#### *Bradyrhizobium elkanii*

- More N fixation through utilization of nitrogenase enzyme compared to competitor rhizobia.
- Robust, early nodulation dispersed over the crown and lateral roots compared to competitive inoculants.

#### *Delftia acidovorans*

- Stimulates intricacy of root system allowing for increased nodule formation.
- Aggressively colonizes roots and outcompetes other soil bacteria and fungi.
- Solubilizes iron through siderophore production.
- Makes more sulfur available to the plant.



### CHARACTERISTICS

#### Active Ingredient:

- $1 \times 10^{10}$  *Bradyrhizobium elkanii* per ml
- $2 \times 10^7$  *Delftia acidovorans* per ml

#### Package Size:

- 1 x 400 unit case (45 cases per pallet)
- 4 x 100 unit case (45 cases per pallet)

#### Easy to Use Formulation:

- One package (no mixing required)
- On-seed life of 240 days
- Limited tackiness/bridging

**Always read and follow label instructions.**

### ON-SEED APPLICATION RATE

0.75 fl oz (22.2ml) per 140,000 seeds OR 1.5 fl oz per 100 lbs of seed (44.4 ml per 45.4 kg)

## PLANT BIOMASS RESULTS

### Significant Plant Response to *Delftia acidovorans*

15x replicated trial - 60 days after sowing



*Bradyrhizobium* alone

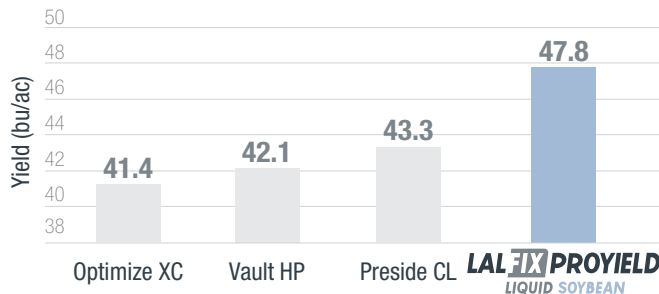
**LAL PROYIELD**  
*Bradyrhizobium* +  
*Delftia acidovorans*

## TRIAL RESULTS

- 4x Replications
- Bushel advantage over untreated control listed above bars

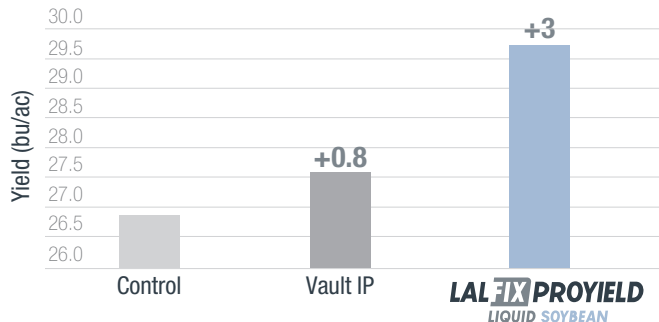
### 2020 UNIVERSITY REPLICATED PLOT TRIALS

FARGO, ND



### 2021 UNIVERSITY REPLICATED PLOT TRIALS

FARGO, ND



## MODES OF ACTION

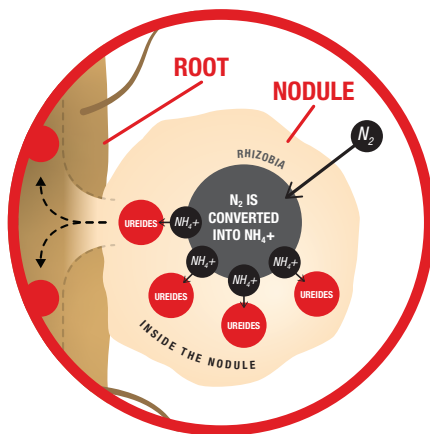
*Bradyrhizobium elkanii*

### INCREASED NITROGEN PRODUCTION

*Bradyrhizobium elkanii* vs  
*Bradyrhizobium japonicum*

### THE UREIDE TEST

Nitrogen Fixation Demonstration  
Developed by Dr. Jay Goos at NDSU



*Bradyrhizobium*  
*japonicum*

**LAL PROYIELD**  
*Bradyrhizobium elkanii*

\*Red color intensity correlates to Ureide concentration.

### About Lallemand Plant Care

Since the beginning of the 20th Century, LALLEMAND has been an expert in yeast and bacteria manufacturing. The family-owned company is now a global leader in the development, production, and marketing of microorganisms for various agri-food industries. Using sound science and know-how, LALLEMAND PLANT CARE (LPC) works closely with clients to deliver the right technology, in the right formulation, for the right application. LPC is committed to solving grower challenges, significantly improving yield and crop vitality.

Microbial by nature

[LALLEMANDPLANTCARE.COM](http://LALLEMANDPLANTCARE.COM)

**LALLEMAND**