

SOYBEAN

PRODUCT PORTFOLIO

biottrinsic[™]
by indigo

 **SATISFACTION
GUARANTEE**
100% with replant policy.

INDIGO'S BIOLOGICAL SEED TREATMENT

Plant for Performance and Grow with Confidence

Soybean

biotrinsic™ M34 + N13 + E13

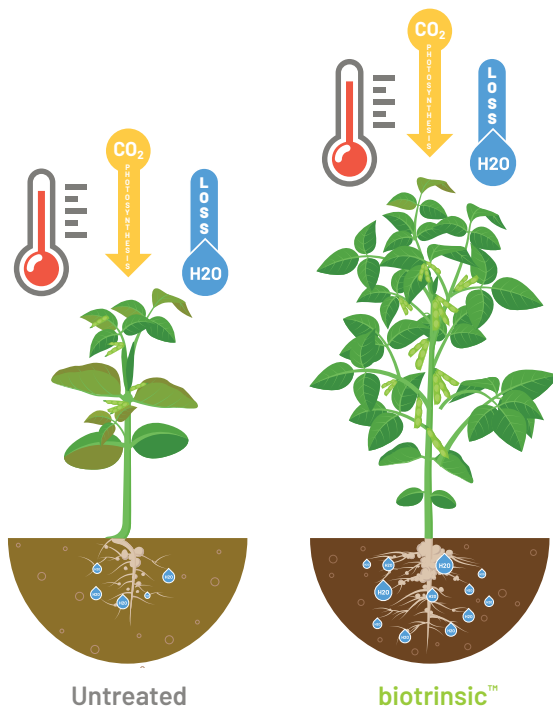
biotrinsic™ M34+N13 is a powerhouse combination of multiple microbes that work together to improve nutrient loading into the plant resulting in greater growth and resilience in the spring which leads to a stronger healthier plant that can better withstand stresses during flowering and pod fill.

2 NEW BREAKTHROUGH TECHNOLOGIES COMBINED TO INCREASE NUTRIENT UPTAKE IN STRESSFUL CONDITIONS

Have you experienced variability, environmental, or nutrient stress that impacts yield in your fields or across your farm?

If so, this can result in shortened soybean plants, low pod number, low seed number, dry or shriveled seeds and pods, wilting plants, and yield loss. What if there was a product that could help your soybean plant withstand the stresses that are negatively impacting yield?

M34 + N13 STARTS WORKING FROM THE MOMENT YOU PLANT THE SEED AND WORKS FROM THE ROOTS TO THE SHOOTS TO IMPROVE ENVIRONMENTAL STRESS TOLERANCE AND NUTRIENT LOADING ALL SEASON LONG TO HELP YOUR CROP BETTER WITHSTAND THE STRESSES NEGATIVELY IMPACTING YIELD



As **SOYBEAN** plants grow and develop their transpiration increases, and soil water depletion happens faster. Soybean vegetative growth only require 0.7 inches of water per week, but flowering (stages R1 and R2) plants need twice that amount (1.4 inches of water per week). Once bean pods are elongating (R3), soybean water use increases to 1.4-1.75 inches of water per week. A soybean crop uses more water and is more likely to have lower yields due to a water deficit during the pod-fill stage than they are earlier in the season.¹

*Product performance information based on third-party field trials. Results will vary across growers and farm operations. A number of variables may affect agronomic outcomes. Indigo does not make any representations, warranties or guarantees as to any specific results or outcomes. Product may not be available in all areas. Limitations, terms, and conditions apply.

¹ <https://coolbean.info/2020/06/16/soybean-irrigation-reproductive-growth/>

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FEATURES AND BENEFITS

- ▶ biotrinsic™ M34+N13 is comprised of multiple live microbes that work together and form a symbiotic relationship with the plant
- ▶ biotrinsic™ M34+N13 work together to improve the availability and uptake of key macro and micronutrients needed for plant growth
- ▶ Improve plant tolerance to environmental stress resulting in improved yield
- ▶ Provide drought protection through flowering and pod fill leading to a greater return on your investment



Improving drought tolerance leads to increased yields

Flowering and pod fill are two critical growth stages where a soybean plant uses approximately 60% of its seasonal water use. A soybean crop is likely to have lower yields due to water deficit during the pod fill stage than they are earlier in the season.

+2
Avg bu/a

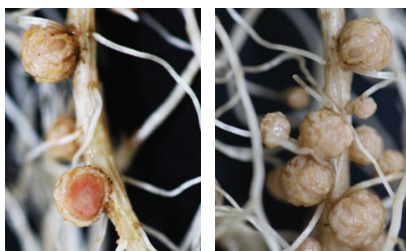
During heat and drought stress

PERFORMANCE OF M34 WAS SHOWN TO HAVE SUPERIOR RESULTS IN SOILS WITH LOWER WATER HOLDING CAPACITY AND IN CLIMATES THAT WERE HOTTER AND DRIER. SPECIFICALLY, IT SHOWED ENHANCED PERFORMANCE DURING LAST SEASON'S GROWING CONDITIONS.

N13 is our exclusive proprietary blend of 3 Bradyrhizobium strains, 1 is patented. This combination is 30-100% more efficient than older genetics

- ▶ Nodules are fewer, but larger, and create a larger reservoir of nitrogen that the plant can pull from
- ▶ N13 nodules have a wrinkled appearance that provides a greater surface area for nitrogen conversion
- ▶ Tolerant to glyphosate optimizing nitrogen fixation
- ▶ Works better than traditional Bradyrhizobium in hot dry soils or cool wet soils

Strong leghemoglobin response in nodules; actively fixing nitrogen



biotrinsic™

Significant increase of nodulation on the tap root



Untreated

biotrinsic™

Treated plants show less symptoms of nitrogen deficiency



Untreated

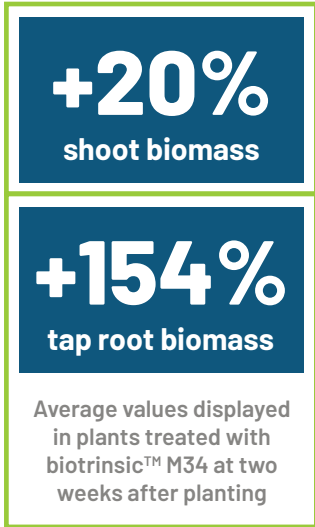
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M34 SHOWS MORE SHOOT AND ROOT BIOMASS

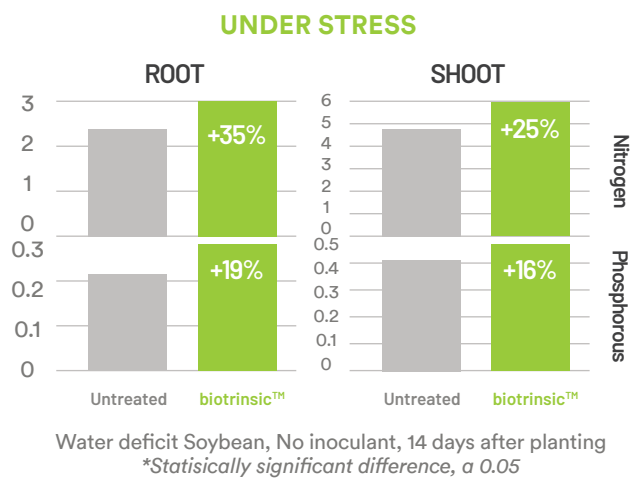
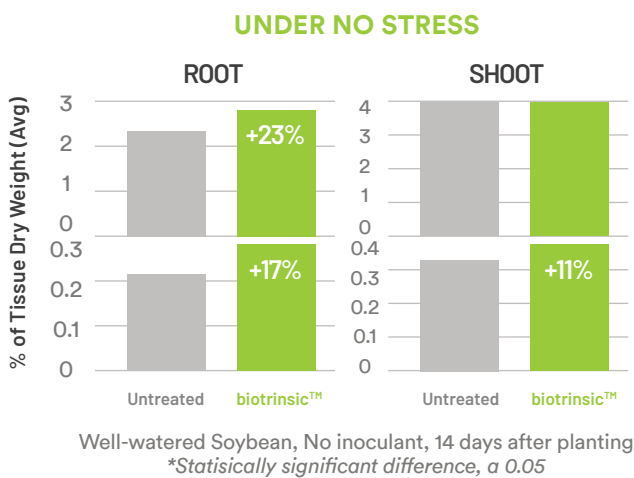


M34 consistently shows an increase in the lab and field



Copper | Iron | Magnesium | Manganese | Zinc

M34 SHOWS MORE NITROGEN AND PHOSPHOROUS IN THE WHOLE PLANT



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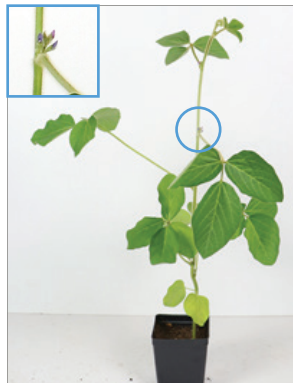
HOW IT WORKS

biotrinsic™ M34+N13 is a combination of multiple microbes that work together to first mine nutrients from the soil and then load them into the plant. This leads to greater growth and resilience to stress throughout the season.

- **M34 WORKS BY REDUCING THE SOIL PH AROUND THE ROOTS TO INCREASE THE AVAILABILITY AND MOBILITY OF NUTRIENTS. MANY OF THE NUTRIENTS THAT ARE OFTEN LACKING ARE MORE AVAILABLE AT A LOW SOIL PH.**
- **ADDITION OF BIOTRINSIC M34 TO SOIL SIGNIFICANTLY IMPROVES WATER-SOLUBILITY OF KEY MICRONUTRIENTS REQUIRED FOR PLANT GROWTH.**

Bradyrhizobium

N13 is our exclusive proprietary blend of 3 Bradyrhizobium strains, 1 is patented. This combination is 30-100% more efficient than older genetics.



Untreated

biotrinsic™

30-100%

MORE EFFICIENT RHIZOBIUM

- › Nodules are fewer, but larger, and create a larger reservoir of nitrogen that the plant can pull from
- › N13 nodules have a wrinkled appearance that provides a greater surface area for nitrogen conversion
- › Tolerant to glyphosate optimizing nitrogen fixation
- › Works better than traditional Bradyrhizobium in hot dry soils or cool wet soils

Our proprietary 3 strain Bradyrhizobium maximizes nitrogen availability and uptake. Together these provide superior nutrition to the plant.

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PRODUCT DETAILS

CAN BE USED ON

- › Fields where nutrient deficiencies have limited yields in the past
- › Fields where temperature exceeds 94°F during the growing season
- › Dryland fields where rain fed crops are limited by moisture
- › Crops that are planted in an ideal or late planting window
- › All soybean varieties and traits



HOW TO USE IT

- › Seed treater friendly
- › By applying it directly to the seed the microbes are adhered to the roots where it starts working immediately supporting plant health and nutrition. You don't have to worry about weather events stripping away your investment.
- › The low use rate allows additional room on the seed so it can be applied with other products.
- › Applications on the seed is the catalyst that creates an immediate team between microbes and plants positively improving plant and root growth with no wasted time. Our seed treatment starts working the moment you plant because it's on the seed.
- › 60 days on-seed stability provides the flexibility you need during the planting season.
- › Broad chemical compatibility so it can be used with your existing treatments. Always reference Indigo's compatibility guide.

Pkg Treats	Pkgs/ Case	Case	Case Treats	Unit Measures
40 units	10	5x2x40	400 units	50 lbs
400 units	1	1x400	400 units	50 lbs



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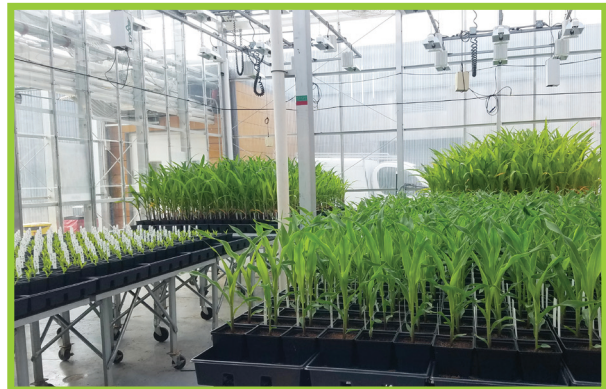
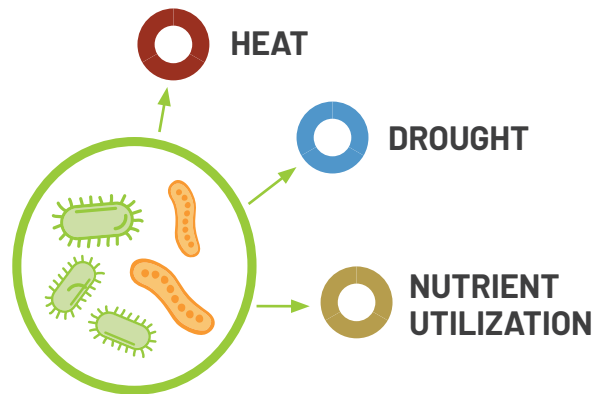
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THE SCIENCE BEHIND THE DIFFERENCE

Microbiomes, or communities of microbes, help maintain internal processes for all living things – Indigo focuses on identifying microbes that have evolved in conjunction with plants over time to optimize their health and maximize their productivity.

At Indigo, we identify which of these microbes are most beneficial to a plant's health through the application of algorithms and machine learning. We further prove their performance at our research laboratories and greenhouses in Boston, Massachusetts and Research Triangle Park, North Carolina along with extensive field trials throughout the United States. Our resulting seed treatment products complement a plant's natural process to improve health and development across each phase of life, while boosting crop yields.



WHAT MAKES BIOTRINISIC™ DIFFERENT

More Beneficial for Your Crop

Microbes are selected to address the key stresses that limit crop yield potential. This allows you to select the right biottrinsic™ products based on the stresses that have the greatest impact on your farm.

From Plants for Plants

biottrinsic™ is a collection of over 30,000 all naturally occurring microbes that have been extracted from plants thriving in stressful conditions. We isolate microbes that are abundant in plants that are thriving under stress while other plants around them are not. This allows us to tailor our products to a specific crop and set of stresses.

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50 South B.B. King Blvd | Memphis, TN 38103 | (901)250-5737 | biotrinsicupport@indigoag.com | growbiotrinsic.com