

## Corn

PRODUCT INFORMATION

**biottrinsic**

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



Corn

biotrinsic® M33 + M34

# Indigo's Biological Seed Treatment

Plant for Performance and Grow with Confidence

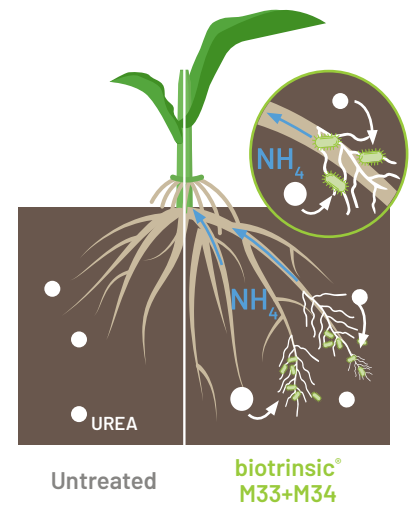
biotrinsic® M33+M34 is a combination of two live microbes that allow the corn plant to better utilize nitrogen while helping to protect it from yield robbing stress. These microbes work directly with the roots providing nitrogen that would otherwise be unused in the soil.

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

What if your corn could spend less energy acquiring and converting nitrogen and use that energy to improve yield?

After all, nitrogen is the most important and expensive nutrient for corn growth and yield.

- biotrinsic® M33+M34 adheres directly to the seed and begins to work the moment you plant it in the soil to start acquiring and converting urea into ammonia the plant can use.
- It provides an average of 17 lbs nitrogen and up to an increase of 42 lbs. A yield increase of 5 bushels has also been observed providing greater return on your nitrogen investment.



## FEATURES AND BENEFITS

- The combination of these two live microbes form a symbiotic relationship with the plant to provide enhanced nitrogen uptake by facilitating the conversion of urea to ammonium for greater plant uptake, growth, and yield.
- Has been shown to improve the root volume and surface area allowing for greater nutrient and water mining.
- Improved drought and heat tolerance that leads to increased yields.
- By applying it directly to the seed the microbes adhere to the roots where they start to work immediately supporting plant health and nutrition. You don't have to worry about weather events stripping away your investment.
- Easy to use flowable formulation which improves seed flowability and can be applied directly in the planter box, pro box, mini bulk, or seed tender.

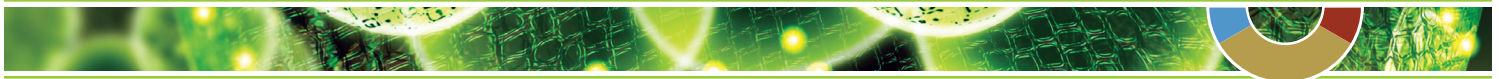
**17 lbs**  
Nitrogen

Average lbs of Nitrogen with a maximum of 42 lbs observed with M34

**+4**  
bu/a

Average Yield Uplift with M34

\*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. [V1.B 12.07.22]



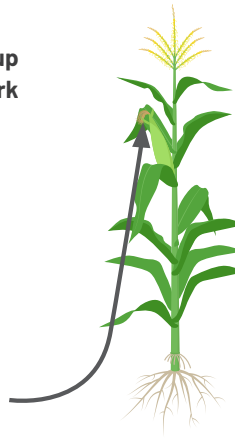
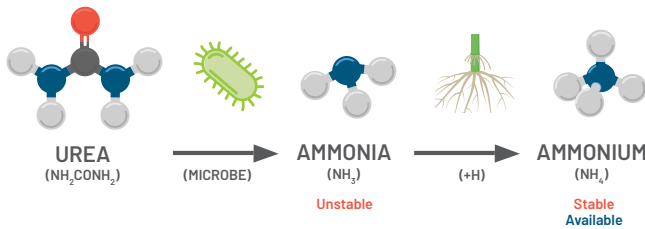
Corn

biottrinsic® M33 + M34

## HOW IT WORKS

biottrinsic® M33 + M34 microbes have been shown to help bridge the gap between soil nitrogen and plant nitrogen. They seek out soil nitrogen and improve the conversion of soil nitrogen into the most stable and desired form the plant can use for greater uptake, growth, and yield.

- By increasing nitrogen conversion, these microbes free up plant energy so that it can be used for other important work like improving yield.



## IMPROVED ROOT MASS AND LENGTH LEADS TO GREATER NITROGEN AND MOISTURE ABSORPTION CAPACITY

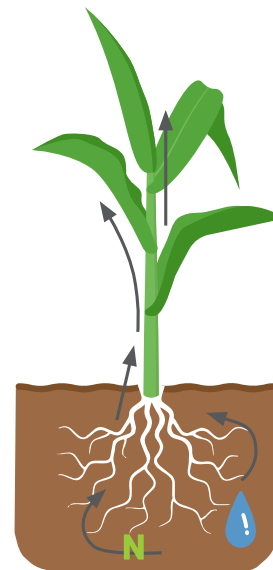
biottrinsic® M33 + M34 microbes have been shown to increase root mass and length. It improves nitrogen and moisture absorption capacity in two ways:

- The roots extend into areas of the soil where they can access more nitrogen and moisture.
- The microbes act as an extension of the roots and help access more nitrogen and soil moisture.



Untreated

biottrinsic® M33+M34



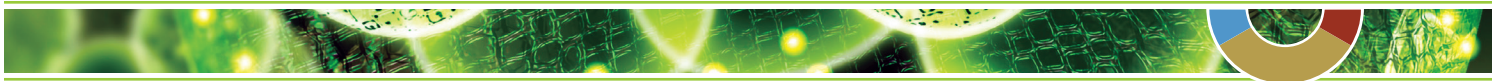
**N**

**NITROGEN**



**MOISTURE**

\*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. [V1.B 12.07.22]

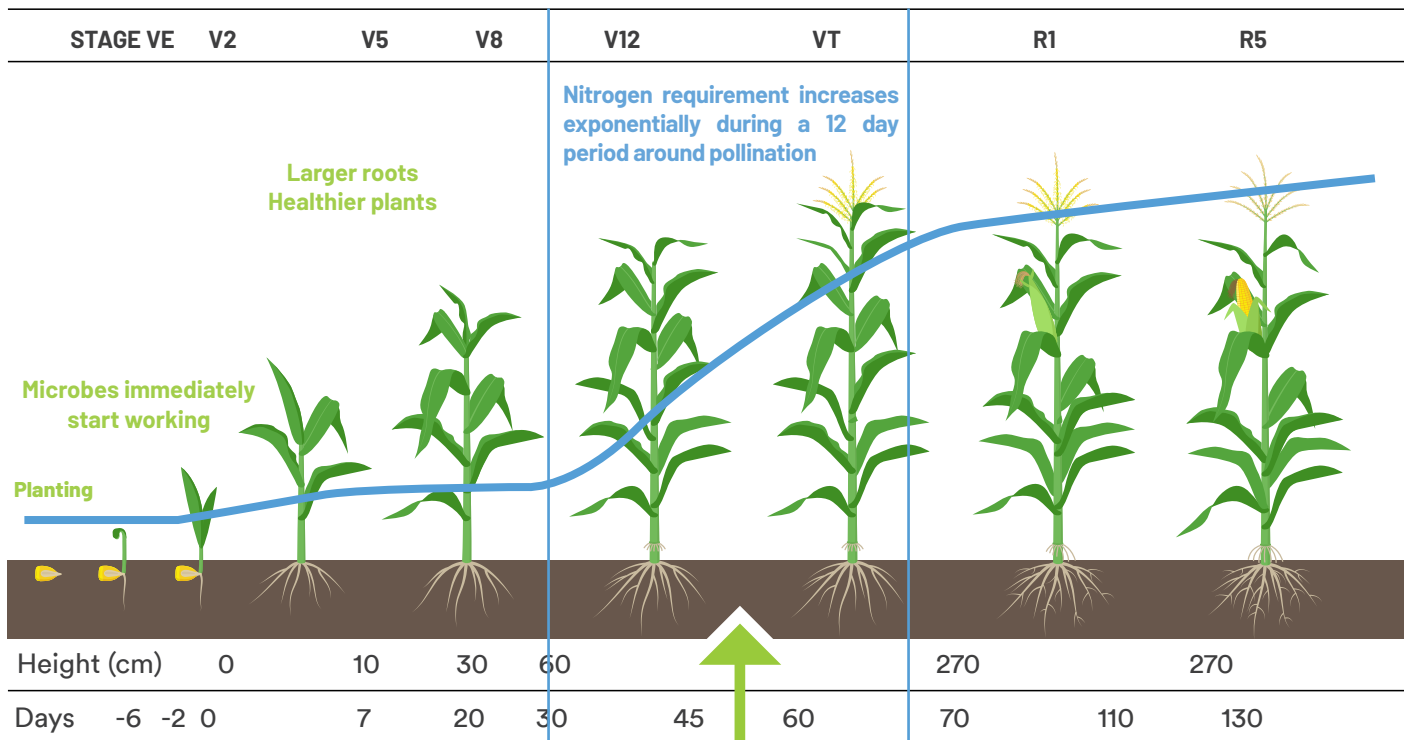


## Corn

biottrinsic® M33 + M34

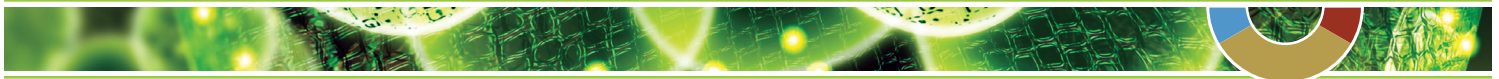
### DROUGHT AND NITROGEN UPTAKE

Drought can decrease a plant's nitrogen uptake from the soil and reduce the concentration of nitrogen in plant tissue. Nitrogen uptake in dry soil is reduced primarily by the inhibition of root growth along with a decrease in nitrogen transport in the soil to the root surfaces.



**A 200 BUSHEL CROP NEEDS ABOUT 94 LBS OF NITROGEN DURING THIS CRITICAL YIELD DETERMINING PHASE**

\*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. [V1.B 12.07.22]



## Corn

### biottrinsic® M33 + M34

## PRODUCT DETAILS

### CAN BE USED ON

- Fields where nitrogen deficiencies have limited yields in the past.
- Fields where nitrogen may be adjusted to save costs.
- Fields where nitrogen loss is a concern or issue.
- Dryland fields where rain fed crops are limited by moisture.
- Crops that are planted in an ideal or late planting window.
- Irrigated fields where irrigation is limited in the amount of water that can be applied or efficiency of applied water.
- Fields where elevation changes make water infiltration into the soil profile difficult.
- Fields where soil texture limits water holding capacity.
- All corn hybrids and traits.



### HOW TO USE IT

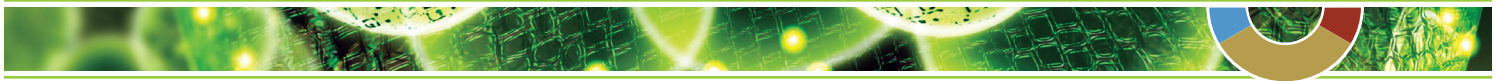
- Can be applied to corn seed at any time in the pro box, mini bulk bag, seed tender, or planter hopper (always follow recommended on seed stability guidelines).
- The low use rate allows additional room on the seed so it can be applied with other products like talc and graphite due to its low use rate.
- The low dust formulation allows it to be used with equipment and operators where dust off is a problem.
- No expensive additional equipment is needed to apply and it can be used with any planter.
- By applying it directly to the seed, the microbes are adhered to the roots where it starts to work immediately supporting plant health and nutrition. You don't have to worry about weather events stripping away your investment.
- Application on the seed 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 corn seed. With other in-furrow treatments on the market, the roots must grow to the treatment which could take many days.
- 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 the Indigo Ag compatibility guide.

Pkg Treats	Pkgs/ Case	Case	Case Treats	Unit Measures
20 units	5	5x1x20	100 units	50 lbs
50 units	5	5x1x50	250 units	50 lbs

Application Rate: 1.0 vol oz / CWT



\*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. [V1.B 12.07.22]



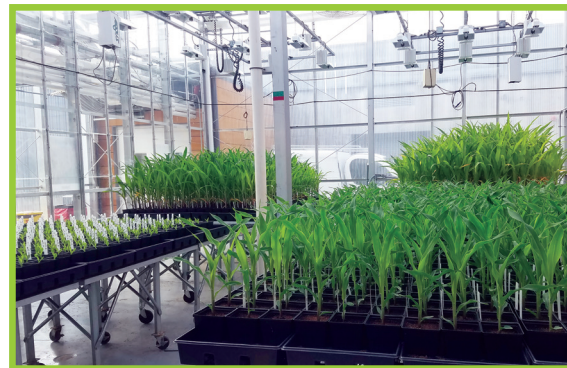
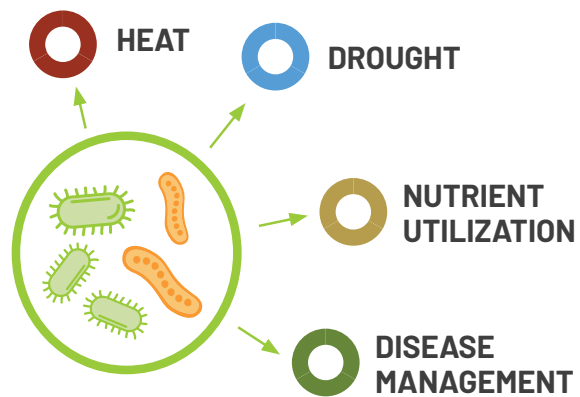
Corn

biottrinsic® M33 + M34

## 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 **biottrinsic**® 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 naturally occurring microbial strains 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 produce products to a specific crop and set of stresses.

\*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. [V1.B 12.07.22]



50 South B.B. King Blvd | Memphis, TN 38103 | (901)250-5737 | [biotrinsic@Indigoag.com](mailto:biotrinsic@Indigoag.com) | [growbiotrinsic.com](http://growbiotrinsic.com)