

# AGRICULTURAL PRODUCTS CATALOG



**TerraMax**<sup>INC.</sup>

Maximizing Earth's Potential

# About TerraMax

## THE BACKBONE OF TERRAMAX PRODUCTS IS MICROBIAL EFFECTIVENESS

For over 20 years TerraMax has been creating defined microbial products to address problems in the agriculture industry. The hallmark of these microbial products has been our proprietary stabilization process to ensure microbes are delivered to the market alive and conditioned to perform the selected function.

From our unique *Azospirillum*-based products to our *rhizobia*-based products, this stabilization process forms the base solution into which our microbes are placed. This industry first formula allows the bacteria to exist and survive in packaging for up to two years prior to use while maintaining effective populations. Effective delivery to the soil, by way of seed treatment, in-furrow application, tank mixing in a pivot, or side dressing, is accomplished by various application methods with specific formulations for each use.

Since our founding in 1998, TerraMax has developed products that offer environmentally sound solutions for plant growers, from row crop agriculture to specialty markets. The main area in which the company has focused its research has been nutritional aids for plants.

Our products are intended to maximize Earth's potential and provide a functional, effective products with a positive ROI for growers.



# Table of Contents

## Soybeans

	Page
Maximize.....	4
New Tech SI.....	6
New Tech SI-IF.....	6
TerraMax Liquid-IF.....	7
TerraMax Dry.....	7

## Corn

MicroAZ-IF Liquid.....	8
MicroAZ-St Dry.....	9

## Wheat

MicroAZ- ST Liquid.....	10
MicroAZ-St Dry.....	11

## Pea, Lentil, Vetch

Optimum PLV.....	12
------------------	----

## Row Crops

PSB-IF.....	13
PSB-ST.....	13
Vertex-IF.....	14

## Other Products

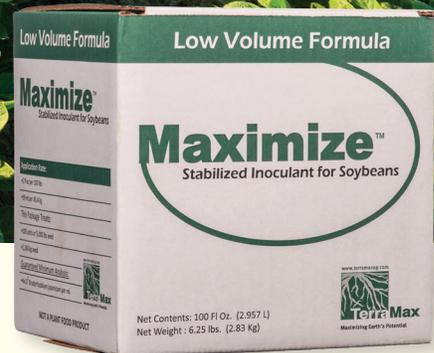
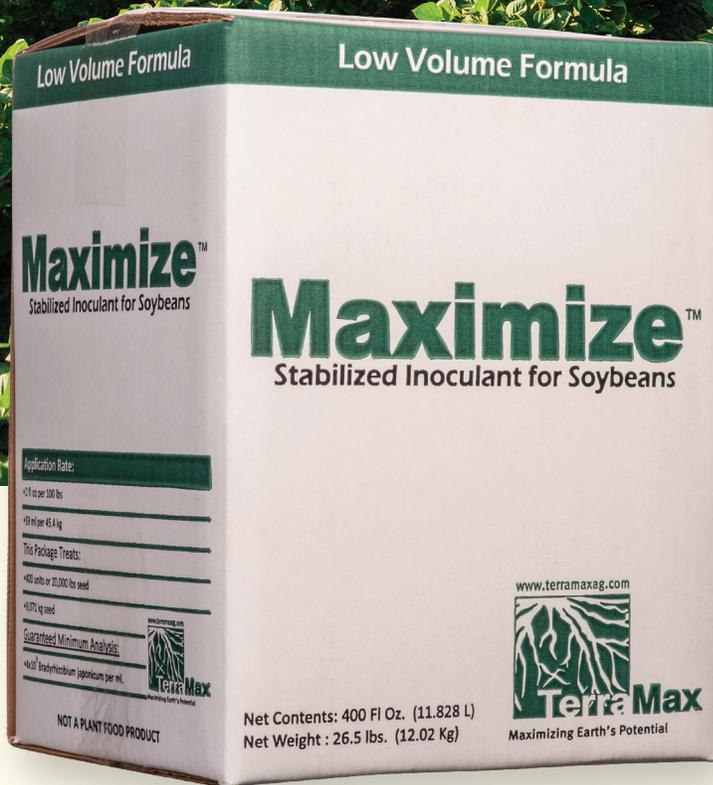
MicroVance.....	15
MicroPT.....	15
AgSoft.....	15
CAPSOYL.....	15



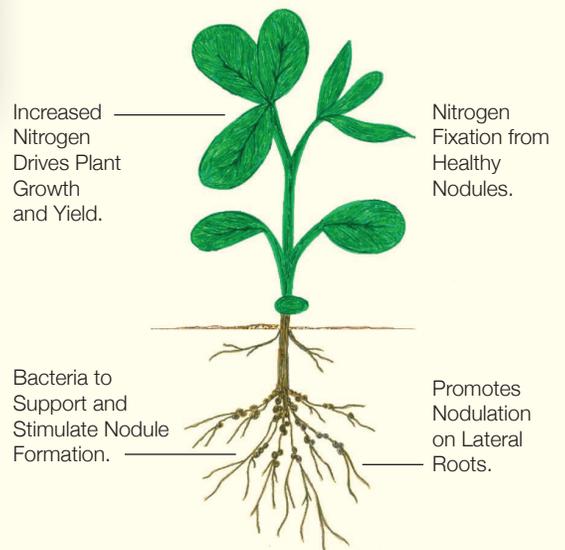
Maximizing Earth's Potential



# Maximize™



Guaranteed Minimum Analysis:  
4 x 10<sup>9</sup> *Bradyrhizobium* per ml  
Application Rate:  
2 fluid ounces per 100 pounds  
59 ml per 45.4 kg  
Available in 400 fluid ounces and 100 fluid ounces



# SOYBEAN INOCULANT

Maximize™ is a stabilized, low volume liquid Soybean Inoculant, designed to be used in conjunction with other seed treatments where a reduced volume of liquid would be beneficial. Maximize soybean Inoculant encourages increased nodulation along root systems while requiring less moisture when initially treating the seed. Field studies in Nebraska showed yields per acre increasing by as high as 10 bushels with the use of Maximize.

Maximize contains a high count *bradyrhizobium japonicum* inoculant in TerraMax's enhanced stabilization formula for maximum growth potential in a lower volume application.

## **BENEFITS**

**Stabilized formulation for extended survival**

**Two strains of *Bradyrhizobium japonicum***

**120 day on seed survivability**

**Improves nodulation**

**Nutritional advantage for germinating seed**

**No extenders needed**

**Superior adherence**

**Ease of use**



# New Tech SI & New Tech SI-IF



## NEW TECH SOYBEAN INOCULANT FOR SEED TREATMENT AND IN-FURROW

A combination of TerraMax's Maximize and our *Azospirillum* formulation, this inoculant brings the increased root mass characteristics of *Azospirillum* and the nodule development power of our Maximize *rhizobium* inoculant. Available in liquid seed treatment and in-furrow.

**New Tech SI** Packaged in 400 unit bag in a box  
 Guaranteed Minimum Analysis:  
 4 x 10<sup>9</sup> *Bradyrhizobium* per ml  
 2 x 10<sup>5</sup> *Azospirillum* per ml  
 No sticker or extender required  
 Early tests reported increased nodulation mass in grams and slight yield improvement.  
 \* Results available

**New Tech SI-IF** Packaged in 2.5 gallon jugs  
 Guaranteed Minimum Analysis:  
 1 x 10<sup>9</sup> *Bradyrhizobium* per ml  
 2 x 10<sup>4</sup> *Azospirillum* per ml  
 12.8 ounces per acre  
 2.5 gallons treats 25 acres  
 Early tests reported increased nodulation mass in grams and yield improvement.  
 \* Results available

# TerraMax Liquid-IF™ & Dry

## TERRAMAX LIQUID-IF



TerraMax Liquid-IF is a stabilized in-furrow soybean inoculant containing *Bradyrhizobium japonicum*. This stabilized in-furrow applications allow it to be tank mixed with most starters, making TerraMax Liquid-IF one of the easiest ways to inoculate your soybeans or to double inoculate. In cases where soybeans haven't been planted in 3-4 years or virgin soils this is an easy way to provide a second application of inoculant. \*TerraMax recommends double inoculating this situation.



**Guaranteed Minimum Analysis:**  
**TerraMax Liquid-IF**  
 2 x 10<sup>9</sup> *Bradyrhizobium japonicum* per ml  
 Application Rate:  
 12.8 ounces per acre  
 2.5 gallons treats 25 acres

## TERRAMAX DRY

Our “Dry Powder” formulation, using the same stabilization technology, to support bacteria survivability. It has a “built in” extender. A non-peat based carrier with great sticking ability for effective seed coverage. TerraMax Dry is an easy to use Planter box application.

**BENEFITS FROM TERRAMAX**  
**Encourages the Establishment of Nodules**  
**Superior Adherence to Seed Without Additives**  
**Nutritional Advantage for Germinating the Seed**  
**Stabilized for Survival**

**TerraMax Dry**  
 1x10<sup>8</sup> *Bradyrhizobium*  
 2 oz per unit of seed  
 Available in 10 unit and 40 unit jars.



Available in Organic:  
 TerraMax Green Liquid IF In-Furrow Soybean Inoculant  
 TerraMax Green Liquid Seed Treatment for Soybeans  
 TerraMax Green Dry Seed Treatment For Soybeans

# MicroAZ-IF Liquid™

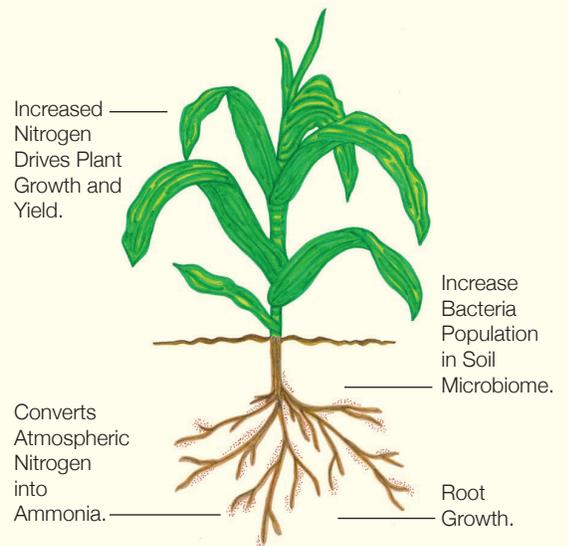
## IN-FURROW TREATMENT FOR CORN

MicroAZ-IF is an in-furrow inoculant for corn that contains the stabilized bacteria *Azospirillum*. It's easy to use and can be tank mixed with starter fertilizers.

The *Azospirillum* in MicroAZ-IF harvests and fixes atmospheric nitrogen so that it can be used by the plant; it also exudes plant-like compounds that stimulate root development for improved nutrient uptake and increased yields. Once the planted seed germinates and the roots start to develop, the bacteria attach to the roots and begin to work.

The root stimulation effects by *Azospirillum* create even more attachment sites and an environment that allows the bacteria to thrive. The nitrogen fixing capability of the bacteria allow the plant to use nitrogen from sources other than the applied nitrogen. These functions allow the plant to better utilize the available soil nutrients.

**Fixes Atmospheric Nitrogen**  
**Stimulates Root Growth**  
**Accelerates Germination**  
**Promotes Better Stand**  
**Increases Drought Tolerance**



Guaranteed Minimum Analysis:  
2 x 10<sup>4</sup> *Azospirillum* per ml  
Application Rate:  
12.8 ounces per acre  
2.5 gallons treats 25 acres



# MicroAZ-ST Dry



## DRY SEED TREATMENT FOR CORN

TerraMax's MicroAZ-ST Dry contains two species of beneficial bacteria, *Azospirillum brasilense* and *Azospirillum lipoferum*.

MicroAZ-ST Dry is a special nutrient blend that provides superior stability ensuring the bacteria's survival and allowing it to get the job done. This product is used to stimulate germination and rooting in grasses which can lead to increased plant stand, root mass, and root yield.

**THE MICRO AZ-ST DRY ADVANTAGE**  
**Two Strains of *Azospirillum***  
**Improves Plant Growth**  
**Fixes Nitrogen**  
**Stimulates Rooting**  
**Increases Yields**



Guaranteed Minimum Analysis:  
5 x 10<sup>5</sup> *Azospirillum* per gram  
Application Rate:  
2 ounces per 80,000 kernels  
Available in 2 ounces or 5 lbs jars

Available in Organic:  
Az Green-IF Liquid In-Furrow  
Corn Inoculant  
TerraMax AZ Green ST Dry  
Seed Treatment for Corn

# MicroAZ-ST Liquid™



## WHEAT AND SMALL GRAINS INOCULANT

The same technology we harnessed for corn is now available for small grains. TerraMax now makes our base *Azospirillum* product available for wheat, oats, and barley. Early data shows an increase in wheat yield and protein enhancement/improvement of grain quality.

MicroAZ is a microbiological root stimulant developed to increase root mass and improve stand development.

TerraMax's unique and effective stabilization media solves a long-standing problem with previous *Azospirillum* products, in that we have demonstrated shelf life of two years. This means our bacteria will be viable and active when necessary.

Guaranteed Minimum Analysis:  
2 x 10<sup>6</sup> *Azospirillum* per ml  
Application Rate:  
4 fluid ounces per 100 pounds  
118 ml per 45.4 kg  
2.5 gallons treats 25 acres

# MicroAZ-ST Dry

## WHEAT AND SMALL GRAINS INOCULANT

The same technology we harnessed for corn is now available for small grains. TerraMax now makes our base *Azospirillum* product available for wheat, oats, and barley. Early data shows an increase in wheat yield and protein enhancement/improvement of grain quality.

MicroAZ is a microbiological root stimulant developed to increase root mass and improve stand development.

MicroAZ is a proprietary formulation of the bacteria *Azospirillum*. This bacteria has been studied since the early 1970's and is known to attach itself to plant root hairs and fix nitrogen from the atmosphere.

TerraMax's unique and effective stabilization media solves a long-standing problem with previous *Azospirillum* products, in that we have demonstrated shelf life of two years. This means our bacteria will be viable and active when necessary.



Guaranteed Minimum Analysis:  
2 x 10<sup>5</sup> *Azospirillum* per ml  
Application Rate:  
4 ounces per 100 pounds  
118 ml per 45.4 kg

Available in Organic:  
**TerraMax AZ Green ST is a Seed  
Treatment for Wheat in both  
Liquid and Dry**



# Optimum PLV Liquid



## PEA, LENTIL, VETCH INOCULANT

Optimum PLV – Pea, lentil, vetch inoculant allows growers to have an easy to use dry or liquid seed treatment. Optimum PLV will encourage nodulation for fixing nitrogen and root growth for increased nutrient uptake.

**Two Species of *Rhizobium* Specifically for these Crops as well as *Azospirillum Brasilense* for Root Growth and Nitrogen Fixation  
2 Year Shelf Life  
30 Day on Seed Survivability**



**Optimum Liquid** 2.5 gallon jugs.  
Use Rate: 4 oz. per acre container  
Application Treats 8,000 lbs.  
No extenders or stickers needed

**Optimum Dry** 20 oz. and 5 lb. jar.  
Rate: 3.5 oz. per cwt  
Treats 570 lbs.  
Treats 2,285 lbs.  
Non-peat based

Available in Organic:  
Optimum Green PLV

# PSB-IF™ and PSB-ST™

## PSB-IF FOR IN FURROW TREATMENT PSB-ST FOR SEED TREATMENT

TerraMax PSB (Phosphorous Solubilizing Bacteria) is designed to provide a new form of biological kick start to improve the availability and efficiency of phosphorus in soil. Particularly where the soils are “phosphorous responsive”, soils where phosphorous is present but unavailable. PSB’s unique soil acidifying activity will support the release of phosphorous from soil particles and enable improved accessibility of the phosphorous to the plants.

**Improves Phosphorous Availability**  
**Not Crop Specific**  
**Promotes Better Stand**  
**2 Year Shelf Life**

Available in Organic:  
PSB Green



Guaranteed Minimum Analysis:

**PSB-IF** (In Furrow Treatment)

Application Rate: 16 ounces per acre  
Available in 2.5 gallon jugs.

**PSB-ST** (Seed Treatment)

Application Rate: 2 ounces per unit (50lbs)  
Available in 2.5 gallon jugs.



## ROW CROP INOCULANT

Vertex-IF is an in-furrow row crop inoculant that combines two great TerraMax Products: MicroAZ-IF and Micro PSB-IF in to one amazing product for ease of use and greater yield potential.

The proven performance of MicroAZ-IF and Micro PSB-IF in Vertex-IF gives the plant the benefits of fixing atmospheric nitrogen and increasing root growth through the stabilized bacteria *Azospirillum* and it also has the benefit of improving the availability and efficiency of phosphorus in the soil using phosphorous solubilizing bacteria called *Pseudomonas*.

**Fixes Atmospheric Nitrogen (NFB)**  
**Stimulates Root Growth**  
**Releases Phosphorous from Soil Particles**  
**Compatible with Most Starter Fertilizers**

Guaranteed Minimum Analysis:

2 x 10<sup>5</sup> *Azospirillum*

2 x 10<sup>6</sup> *Pseudomonas*

2 x 10<sup>6</sup> *Pantoea*

Use Rate: 16 oz. per acre in-furrow application Available in 2.5 gallon jugs.  
Treats 20 acres







TerraMax, Inc.  
815 W. 106th Street  
Bloomington, MN 55420  
952.657.5592 | [www.terramaxag.com](http://www.terramaxag.com)

November 2018