

THE MERISTEM SOYBEAN ACRE

BRINGING MERISTEM IN EVERY PASS TOGETHER
ON THE SOYBEAN ACRE





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The Meristem soybean acre is all about putting the right product sets together to maximize nutrient use efficiency, building strong healthy plants fast and optimizing genetic potential in-season. Once EXCAVATOR and REVLINE HOPPER THROTTLE and RACEREADY™ COMPLETE is put to work in the planter pass, the focus becomes mitigating yield-robbing stresses and foliar nutrition.

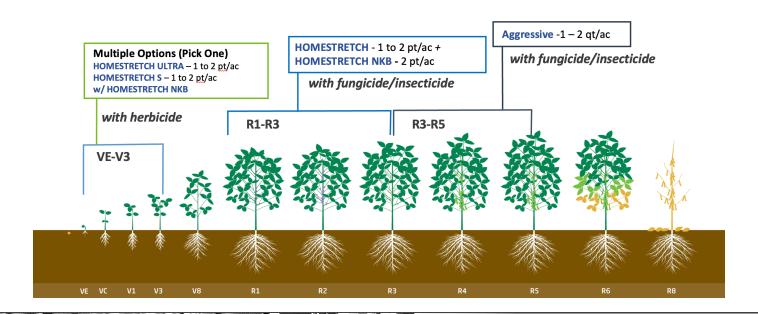
When we help farmers begin to build an in-season crop input plan, the following discussion points are important.

When a soybean plant determines yield

Identifying nutrient deficiencies

Discussing when the best time is to apply nutrients and plant growth regulators/biostimulants for the best results

How post-herbicides and environmental conditions can cause stress





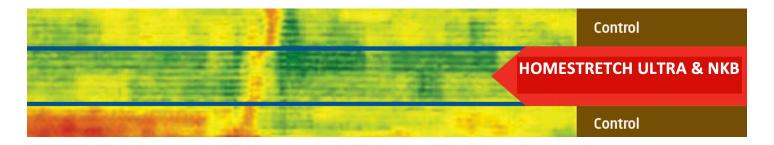


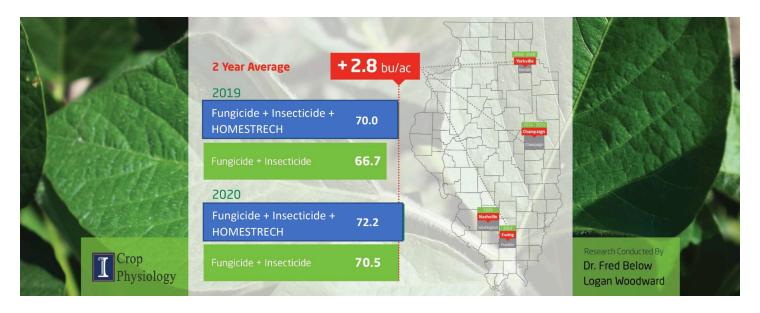
THE MERISTEM SOYBEAN ACRE

SOYBEAN ENTRY PROGRAM

FARMERS GETTING INTRODUCED TO THE CONCEPT OF HIGHER-MANAGEMENT CROPPING SYSTEMS IN SOYBEANS.

Pass/Timing	Product	Rate	SRP/ac*
Post-Herbicide Pass	HOMESTRETCH ULTRA	1qt	\$9.45
Fungicide Pass	HOMESTRETCH NKB	1qt	\$9.15









THE MERISTEM SOYBEAN ACRE

HIGH YIELD SOYBEAN PROGRAM

FARMERS DRIVING FOR HIGH YIELD SOYBEANS

In this scenario, the recommendation now includes a plant growth regulator (PGR), STIMULATE® and a stress-mitigation product, HARVESHIELD™. The PGR helps plants grow through early-season herbicide antagonism and other stressors, additionally this allows for increased lateral branching promoting more flowering sites. The uniqe combination of amino acids and biostimulants in HARVESTSHIELD™, applied late-season, mitigates environmental stressors increasing flower and pod retention.

Pass/Timing	Product	Rate	SRP/ac*
Post-Herbicide Pass	HOMESTRETCH ULTRA	1qt	\$9.45
	STIMULATE	2oz	\$3.17
Fungicide Pass	HOMESTRETCH NKB	1qt	\$9.15
	HARVESTSHIELD	1pt	\$9.50

Setting & Retaining Pods

Flower and Pod Abortion (30 to 70%)

- Approximately half of this abortion occurs before the flowers develop into young pods
- The other half is due to pod abortion.

Stress

Abiotic Stress (environment) and Biotic Stress (disease)

Fertility

- General Fertility
- <u>Micronutrients</u> are as critical in development of flower and retention of pods and NPK & S



Figure 1. B-deficient soybean pods, Slaton, U. of Arkansas, 2003





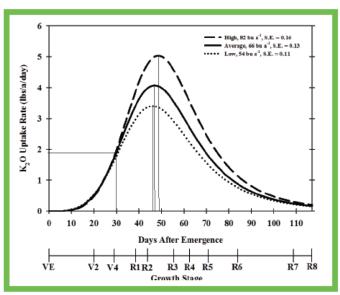


THE MERISTEM SOYBEAN ACRE

HIGH YIELD SOYBEAN PROGRAM

POTASSIUM Uptake in High Yield Beans Soybeans

- After R1 the uptake rates for each yield level separate out and reach peak uptake rates shortly after R2, ranging between 3.5 5.2 lbs. K2O /A./day.
- As much as 90 to and 100 percent of the total K uptake is reached by R5.5 at the high, average and low yield level, respectively.



HOMESTRETCH
Soybeans Trial Locations and Yield Results

Yield Increase
BRANDT HOMESTRES ULTRA
2.3 bu/ac

Yield Increase
HOMESTRETCH ULTRA
+ HOMESTRETCH NKB
3.3 bu/ac

Win Rate
Grower Doubles
Investment
> 70%







Farmers that drive for yield know that season-long plant health is critical to maximizing genetic potential. Foliar feeding is one of the most efficient ways to supply nutrition to crops during critical growth stages. HOMESTRETCH™ULTRA by Meristem™ Crop Performance is a foliar-applied formulation of 5-0-0 with an advanced formulation of micronutrients. It is ideal for in-season nutrient applications on row crops and is an *excellent* tank mix partner.

HOMESTRETCH™ULTRA is approved for use with Engenia®, XtendiMax® with VaporGrip® Technology and FeXapan™ Plus VaporGrip® Technology.

For info, visit:

- EngeniaTankMix.com
- XtendiMaxApplicationRequirements.com

PRODUCT BENEFITS

- Ultimate tank mix formulation compatibility
- Compatible with 2,4D, Dicamba, and Fomesafen-based herbicides
- Excellent compatibility in ultra low spray volumes such as aerial applications
- Drives season-long plant health by providing micronutrients critical for growth and development
- Prepares plants to deal with season-long stressors
- At a value that just makes sense

APPLICATION RECOMMENDATIONS

Apply 1-2 quarts per acre per application throughout the growing season. More frequent applications at 1 pint per acre may be needed to correct deficiencies once they occur.

HOMESTRETCH™ ULTRA ACTIVE INGREDIENTS

Guaranteed Analysis	5-0-0
Total Nitrogen (N)	5.00%
Sulfur (S)	2.00%
Boron (B)	0.50%
Manganese (Mn)	2.00%
Molybdenum (Mo)	0.05%
Zinc (Zn)	2.00%

AGRONOMIC BENEFITS

Sulfur: aids in protein and enzyme synthesis.

Boron: essential to new growth, pollination and reproduction. Stabilizes cell walls, which provides plant structure and integrity. Also aids in nitrogen assimilation and root nodulation formation, which enhances nitrogen uptake and utilization.

Manganese: aids in herbicide metabolism, chlorophyll formation and plant respiration. It is also critical to photosynthesis.

Molybdenum: promotes root nodulation growth and enhances nitrogen utilization.

Zinc: promotes root and shoot growth; helps plants withstand environmental stress.

PRODUCT AVAILABILITY

Products are available in both 2.5 gallon jugs and 250 gallon totes.

Please visit MeristemAg.com for more information.

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STIMULATETM AUXIN/CYTOKININ

OPTIMIZE THE GENETIC POTENTIAL OF EVERY PLANT IN YOUR FIELD

Plant Growth Regulators (PGR) are essential for enhanced germination, uniform emergence, and vigorous growth. Stimulate Auxin/Cytokinin provides two essential, growth-promoting plant hormones for optimal crop development and yield.

Stimulate Auxin/Cytokinin contains indole-butyric acid for fast, vigorous root growth and cytokinin for optimal growth of vegetative and reproductive parts of the crop.

ACTIVE INGREDIENTS:

Cytokinin (as kinetin) 0.15%

Indole-3-butyric acid 0.85%

GUARANTEED ANALYSIS

Designed to help plants function more efficiently. Not replacement for sound agronomy and fertility programs. This product works in concert with good farming practices to help the plant realize its true yield potential.

PRODUCT FEATURES

BOOSTS ROOT GROWTH + PLANT VIGOR

Stimulate Auxin/Cytokinin has key ingredients to optimize season-long plant development, leading to higher yield.

IMPROVES PLANT HEALTH + PHYSIOLOGY

Stimulate Auxin/Cytokinin enhances cell division and nutrient uptake, setting the stage for maximum yield.

INCREASE YIELD POTENTIAL + GRAIN OUALITY

An EPA-registered product, Stimulate Auxin/ Cytokinin enhances naturally occurring hormones within the plant to optimize genetic expression.

RECOMMENDED FIELD APPLICATIONS

Stimulate Auxin/Cytokinin is formulated for foliar application at a recommended rate of 2.0 oz/ac.



Mixes well with most crop protectants.

Please visit MeristemAg.com for more information.

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Farmers that drive for yield know that season-long plant health is critical to maximizing genetic potential. Foliar feeding is one of the most efficient ways to supply nutrition to crops during critical growth stages. HOMESTRETCH™KB by Meristem Crop Performance™ is a 2-0-16 formulation with a boost of boron. It is ideal for in-season nutrient applications on row crops and is an excellent tank mix partner.

HOMESTRETCH™ KB is approved for use with XtendiMax[®], Engenia[®], FeXapan[™], Enlist Duo[®] and Enlist One®.

For info, visit:

- XtendiMaxApplicationRequirements.com
- EngeniaTankMix.com
- FeXapanApplicationRequirements.dupont.com
- Enlist.com/en/herbicides/approved-tank-mix.html

PRODUCT BENEFITS

- Ultimate tank mix formulation compatibility
- Maximum nutrient mobility and efficiency, allowing for a lower application rate per acre
- Low salt index and low impurities
- Contains a proprietary, high efficiency form of boron
- Healthier plants, stress mitigation, enhanced quality and yield
- At a value that just makes sense

HOMESTRETCH™ KB **ACTIVE INGREDIENTS**

Guaranteed Analysis	2-0-16
Nitrogen(N)	2.00%
2.0% Urea Nitrogen	
Soluble Potash (K ₂ O)	16.00%
Boron (B)	2.50%
Molybdenum (Mo)	0.20%

AGRONOMIC BENEFITS

Boron: essential to new growth, pollination and reproduction. Stabilizes cell walls, which provides plant structure and integrity. Also aids in nitrogen assimilation and root nodulation formation, which enhances nitrogen uptake and utilization.

Potassium: assists with drought tolerance, nodulation, lodging resistance and defense against insects and diseases. Critical to high vields.

APPLICATION RECOMMENDATIONS

Apply 1-2 quarts per acre per application throughout the growing season. More frequent applications at 1 pint per acre may be needed to correct deficiencies once they occur.

PRODUCT AVAILABILITY

Products are available in both 2.5 gallon jugs and 250 gallon totes.

Please visit MeristemAg.com for more information.

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CROP PERFORMANCE

1-833-637-4783 (MERISTEM)



HOMESTRETCH™ HARVESTSHIELD by Meristem Crop Performance™ is a stress-mitigating biostimulant and nutritional designed to reduce plant stress and improve yield in tough conditions.

Stay protected in times of stress due to extreme temperature, drought or water stress with HARVESTSHIELD's special formuation of botanical extracts rich in natural auxins, vegetal amino acids, tryptophan, arginine and high performance surfactants all brought together to improve performance during difficult growing conditions.

PLANT EXTRACTS

Each plant extract contained in HARVESTSHIELD™ has components vital to stress mitigation or cell division. Polyphenols protect the plant from oxidation caused by environmental stresses or stresses on the plant during rapid growth stages. Auxins are known to stimulate cell division. Additionally, betaines keep water content stable in plant cells.

ARGININE

Arginine is an amino acid building block for polyamines. Polyamine production increases during times of environmental stress including drought, heat and high salinity levels in soil.

TRYPTOPHAN

The amino acid building block for Indole-3-acetic acid (IAA). Tryptophan assists plants in cell expansion and cell division.

5-8-4 GUARANTEED ANALYSIS

Total nitrogen (N)	5.00%
Available phosphate (P205)	.8.50%
Soluble Potash (K20)	4.00%
Organic Carbon* (C)*of biological origin	3.00%

RECOMMENDED USE RATE

Apply 1 pint per acre with a minimum 10 gallons of water.

PRODUCT AVAILABILITY

- 2.64 gallon containers
- 250 gallon totes

Please visit MeristemAg.com for more information.

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PGR Biostimulant-Liquid

- · Kinetin (.12%)
- · GABA (.98%)
- · Choline Chloride (1.95%)



Timing: Early reproductive · Rate: 12.8 oz/acre

Inertia is a fortified cytokinin designed to increase pollination and support photosynthesis during fruit or grain fill. The unique combination produces more flowering/fruiting sites, and more importantly increases the plant's net capture of solar energy to help drive sugar production.

Influence Reproductive Stage

Early reproductive application increases branching, flowering, and fruiting sites

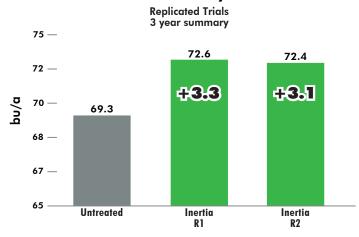
Optimize Plant Metabolism

Strengthens plant cell structures and maintains photosynthesis, even in stress conditions

Produce Larger Yields

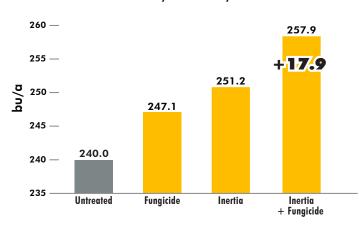
Boost yield potential by increasing pod/grain size and reducing abortion incidence

Inertia on Soybean

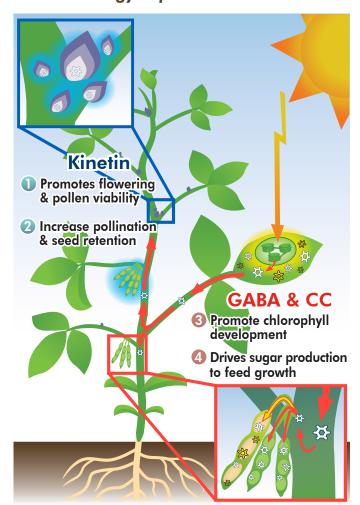


Inertia on Corn @VT

Replicated Trials
2 year summary



Greater pollination + more energy capture = More Yield!



Please visit MeristemAg.com for more information.

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8-0-0-17S

HOMESTRETCH SULFUR 17 is specifically formulated for foliar delivery of sulfur. Sulfur is important for chlorophyl formation, nodulation, enzyme activation, and S-containing amino acids.

PRODUCT BENEFITS

- Ultimate tank mix formulation compatibility
- Maximum nutrient mobility and efficiency, allowing for a lower application rate per acre
- Low salt index and low impurities

HOMESTRETCH™ SULFUR 17 ACTIVE INGREDIENTS

Derived from urea and ammonium thiosulfate.

AGRONOMIC BENEFITS

- Essential for chlorophyl production
- Aids in protein and enzyme synthesis
- Enhances nitrogen use efficiency

APPLICATION RECOMMENDATIONS

Foliar:

Apply 1/2-4 quarts per acre per application throughout the growing season. More frequent applications at 1-2 pints per acre may be needed to correct deficiencies once they occur.

Soil Applications:

Field and Row Crops: 2-4 quarts per acre banded either as a stand alone or in combination with liquid NPK starter fertilizers at planting or as a side-dress during the season.

PRODUCT AVAILABILITY

Products are available in both 2.5 gallon jugs and 250 gallon totes.

Please visit MeristemAg.com for more information.

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CROP PERFORMANCE

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