ROYAL-GROW.

BUILDING SOIL FOR BETTER CROPS

Boost crop performance and reduce the limiting factors in your fields.

Biologicals Sweeteners Foliar Fertilizers Micronutrients Liquid Starters Seed Treatments

888-292-5760 info@royal-grow.com



ROYAL-GROW Crop Enhancement and Biologicals

Royal-Grow is a yield enhancement company that focuses beyond traditional NPK and lime products. We strive to rebuild the organic matter and microbial life, so your crops and forage can grow in a healthier, more sustainable environment.

HOW CAN YOU BENEFIT FROM USING ROYAL-GROW?



- Build stronger and healthier soil
- SAVE MONEY Reduce input costs and increase net profit
- Receive on-farm visits and recommendations from Royal-Grow representatives.

These products are herbicide compatible and they all contain a low salt content. Contact a Royal-Grow representative for pricing, application rates and results. Results may vary depending on prevailing weather, soil conditions, application rates, plant types and timing. Pricing and per acre cost vary based on fluctuating market price, volume purchased and shipping distance.

QUESTIONS?

Please consult a Royal-Grow representative for product information and application rates.

3656 E Panama Rd Deerfield, MO 64741

1-888-292-5760 info@royal-grow.com www.royal-grow.com



PROVEN RESULTS!

Proven success in different states and with various crops and forage.

Soybeans with one pass of Enzyme Max_® at bloom averages a 3-5 bushel increase. Potential to earn up to \$40.00 more per acre.

Corn with one pass of Enzyme Max_® and Sweetener averages a 5-8 bushel increase. Potential to earn up to \$28.00 more per acre.

Wheat with one pass of Enzyme Max_® and Sweetener averages a 8-10 bushel increase. Potential to earn up to \$43.00 more per acre.

Visit our website to review all data and results.



Crop and Forage En

<section-header></section-header>	Designed to rebuild the organic matter and microbial life, so crops and forage can grow in a more sustainable environment. It is an affordable and powerful biological that contains over 100 billion microbes per gallon, and an advanced composition of minerals, carbohydrates and humic acid. Apply 16 ounces per acre. OMRI APPROVED
<section-header></section-header>	A liquid product with carbohydrates and humic acid that fuel the microbes as well as provide a boost in energy to the plants. It reduces insect pressure by raising the BRIX level in the plant. Apply 16 ounces per acre. OMRI APPROVED
<section-header></section-header>	A dry product that provides a health boosting shot of energy to the plants an soil. The carbohydrates encourage and fuel microbial activity. Has proven to reduce insect pressure by raising the BRIX level. Apply 1-2 pounds per acre. OMRI APPROVED

Liquid products are available in 32 ounce quarts, 2.5 gallon jugs and 250 g All products are FOB: Deerfield, Missouri, Contact us for c

hancement Products

<section-header></section-header>	This OMRI Approved seed treatment is designed to treat all types of seeds to increase quicker germination and improve overall quality, stability, growth and performance of the seeds. It helps raise protein and sugar levels in the plants. Apply 8 ounces or more per 100 pounds of seed. OMRI APPROVED
<section-header></section-header>	Micro Pack combines the benefits of nitrogen and potassium with manganese, zinc and boron. These nutrients are in a readily available form to increase plant health, growth and yields, when nutrients demands are at their highest. Apply 16 ounces per acre.
<section-header></section-header>	Foliar fertilizers formulated using quality raw materials, which provides for an excellent source of nutrients. These low salt products are for foliar, soil and aerial applications. They are herbicide compatible and safe to apply around livestock. <i>All Purpose 10-10-10</i> <i>Supreme Plant Food 30-0-0</i> Apply 32-64 ounces per acre. CDFA APPROVED

gallon totes. Dry Sweetener is available in 20 pound and 40 pound pails. current pricing at 888-292-5760 or info@royal-grow.com.



3-18-18 100% Ortho

7-24-4 80/20 Blend

Clean, affordable supplements designed to build soil quality and improve crop performance.

These starters are recommended for agricultural crops for in furrow, beside the row, or foliar applications. The liquid products allow for more even coverage and even flow. The nutrients are immediately available to the plant during the critical, early growth stages. These liquid starters can be applied with most herbicides, insecticides and fungicides. **Only available in full tank quantities.**

Royal-Grow Liquid Starters are environmentally friendly:

- Salt index less than 35 percent
- · Zero heavy metals
- Non-corrosive
- Non-toxic
- Low pH levels

We now offer financing through John Deere Financial. FINANCING IS ONLY AVAILABLE FOR LIQUID STARTERS.

Tank load agreements are also available.

Please contact a representative for current, direct pricing. 888-292-5760 | info@royal-grow.com



HERBICIDE BOOSTER

Gain more control of herbicide tolerant weeds!

Nano Enhanced Herbicide Booster

Nano Herbicide Booster provides faster absorption by targeted weeds and 2-3 times deeper plant penetration. This surfactant is designed to improve chemical efficacy ranges from 10%-25%. Apply at a rate of 4 ounces per acre.

Bio Herbicide Booster

Formulated to enhance defoliants and other herbicides. The specialized surfactant spreads the treatment while the enzyme complex helps complete plant chemical intake. It also works as a buffer to lower pH, which enhances the effectiveness of the spray. Apply at a rate of 12-32 ounces per 100 gallons of spray solution.

NIS Herbicide Booster

Herbicide Booster NIS is a general purpose surfactant for ground applied herbicides, fungicides and fertilizers. This surfactant helps the chemical stick to the leaves. Wetting agents penetrate the soil, taking the chemical to the roots.

Apply at a rate of 4-16 ounces per 100 gallons of spray solution.

Contact a Royal-Grow representative for pricing and details. 888-292-5760 | info@royal-grow.com



2019 Corn in Missouri

Results: The treated corn yielded 138.3 bushels per acre. The check was 81.1 bushels per acre. This field was replanted 3 times, and the last planting was late June. It also received a total of 78 inches of rain, mostly during the growing season.

Treatment: During the growing season, it received 3 passes of the following products:

Enzyme Max_® at 16 oz per acre Ultra Sweet at 16 oz per acre Micro Pack at 16 oz per acre It also received 2 gallons of Supreme Plant Food 30-0-0 during the last pass.

2019 High Yielding Corn 278.9 bushels per acre

This corn was originally treated with Luxuriate Seed Treatment. During the growing season, it received 8 passes of the following:

Enzyme Max_® at 8 oz per acre Ultra Sweet at 8 oz per acre Micro Pack at 8 oz per acre Supreme Plant Food 30-0-0 at 1 gallon per acre





Conventional Corn Before and After application of Herbicide Booster



Organic Blue Corn treated with OMRI Listed Enzyme Max®





Picture Taken August 15

SOYBEAN DATA

2019 Conventional Food Grade Soybeans

Results: Treated beans yielded 65.8 bushels/acre. The check was 21 bushels/acre.

Treatment: Two passes of Enzyme Max_{e} , Ultra Sweet and Micro Pack at 32 oz. per acre and 64 oz. per acre of Supreme Plant Food 30-0-0.

These beans were replanted two times, and they were treated with Luxuriate Seed Treatment on the last planting.

2019 Luxuriate Seed Treatment Test

Four test rows were treated with Luxuriate Seed Treatment. All test plots were located in the same field, but they were split by 16 rows of non treated beans.

First plot: 8 bushel bumpThird plot: 4.5 bushel bumpSecond plot: 4 bushel bumpFourth plot: 9.6 bushel bump

2018 Trial: 4.8 Bean

Enzyme Max₀ 16 oz, Micro Pack 16 oz, and Ultra Sweet 16 oz.	53 bu/acre ROI: \$95.53/acre	
Enzyme Max _® 16 oz, Micro Pack 16 oz, and Sweetener 1 lb.	46 bu/acre ROI: \$26.93/acre	
Control	42 bu/acre	

"Any day you can spend \$14.00 to make \$140.00, it is a good day!" -- Corey Scott in Appleton City, Missouri.

Corey Scott applied Enzyme Max_®, Sweetener and Micro Pack to half of an 80-acre soybean field in Missouri.

The treated side produced 14 more bushels to the acre. It multiplied his investment by 9 times, for a net profit of \$140.00.





Raising the BRIX level and reducing insect pressure A field of soybeans was treated with Enzyme Max® and Ultra Sweet at planting. It also received a second application during foliar season. The BRIX levels were tested the day after the second application.

- Royal-Grow treated area had a BRIX level of 25
- Check had a BRIX level of 15
- A neighboring field had a BRIX level of 5

The Royal-Grow treated fields did not have insect pressure throughout the entire season. During the BRIX test, the untreated field had visible pressure from insects.

Reducing Insect Pressure with OMRI Listed Sweetener

Customers also use Sweetener to raise the BRIX level and successfully reduce insect pressure.



Luxuriate SEED TREATMENT



OMRI Approved Luxuriate Seed Treatment increases quicker germination on all seed types. Luxuriate improves the plants overall quality, stability, growth

and performance.

Hemp Seed Results

2019 trial with two year old hemp seed Luxuriate treated seeds: 96% germination rate Untreated seed: 58% germination rate

Wheat Seed Results

The wheat seeds on the left were treated with Luxuriate and spouted within 12 hours.

Corn Seed Results

Top Pictures:

Left plants treated with Luxuriate at planting.

Right plants were not treated.

Bottom Pictures:

Left plant: Treated with Luxuriate and in the ground 6 days.

Right plant: Not treated and in the ground 16 days.





Cover Crop Treated with Luxuriate

Treated with Luxuriate

Not Treated



LARGE SCALE PRODUCE DATA

Enzyme Max_®, Sweetener and Luxuriate produced great results for Darnell Farms in Mississippi. Darnell said the Luxuriate Seed Treatment really helped get the plants out of the ground.

- · All treated seeds sprouted within 5 days
- Treated plants were ready to harvest at least a week in advance when compared to the control
- · Produce was also darker green and larger

Their clients were very pleased with the final product. Darnell Farms distributes produce to grocery stores and farmer markets within a 100 mile radius from their farm.





COTTON DATA

LOCATION: Texhoma, Oklahoma Foliar Application: Sweetener at 1 pound per acre Enzyme Max₀ at 16 ounces per acre Average plant height: 24 - 26 inches (Check: 18 inches)

Average bolls per plant: 16 - 18 (Check: 8-10)

LOCATION: McAllen, Texas

Foliar Application:

Enzyme Max_{\odot} at 16 ounces per acre Observation: In a first square trial with Enzyme Max_{\odot}, the producer reported that the treated cotton, produced 20% more 5-lock bolls than 4-lock bolls, when compared to a competing product.

HAY MEADOW DATA

The treated side produced 2.4 more 5x6 bales per acre.

This side of the field was treated with the following: Supreme 30-0-0 (1 gallon/ acre) Micro Pack (16 ounces/acre) Enzyme Max_® (16 ounces/acre) Ultra Sweet (16 ounces/acre)

This side of the field was not treated.



LOCATION: Kremlin, Oklahoma **Application at flag leaf and with a fungicide:**

Enzyme Max_® at 12.8 ounces per acre Sweetener at 1 pound per acre 28-0-0 at 1 gallon per acre

Results:

Protein: 12.5 to 13.5 percent Test Weight: 60-63 pounds per bushel Bushels: 59 bushels per acre

<u>ROYAL-GROW OUTPERFORMS TRADITIONAL</u> <u>PRODUCTS IN REPLICATED WHEAT TRIAL!</u>

LOCATION: Missouri	Combination Trials	Trial Yield	Check Yield	Approx. cost
Overview:SEach plot wasStreated with aUdifferentTcombinationUof products.SThe averageEyield for allTplots was 68.42S(9.17 moreSbushels thanS	Sweetener (1 lb.) Supreme 30-0-0 (1 gal.)	87.83	65.21	\$12.07
	Supreme 30-0-0 (1 gal.) Ultra Sweet (16 oz.)	65.01	56.35	\$12.17
	Traditional 28-0-0-3 (10 gal.) Ultra Sweet (16 oz.)	63.56	61.27	\$13.80
	Supreme 30-0-0 (1 gal.) Enzyme Max₀ (16 oz.)	67.96	62.12	\$11.72
	Traditional 28-0-0-3 (10 gal.) Enzyme Max₀ (16 oz.)	67.92	55.33	\$13.35
	Supreme 30-0-0 (1 gal.)	66.87	64.62	\$9.17
	Traditional 28-0-0-3 (10 gal.)	59.8	55.26	\$10.80

Maximize Soil Health with OMRI Listed Products



Enzyme Max[®] | Ultra Sweet | Sweetener | Luxuriate Contact us at 888-292-5760 or info@royal-grow.com

Notes: