

WHAT IS SUMAGROW®?

IT'S ABOUT RAISING YOUR BOTTOM LINE

Products containing SumaGrow® grow higher yielding plants and grasses while reducing fertilizer and irrigation costs. We offer competitive, stable pricing and allow our customers to

reduce production costs up to 50 percent on average while increasing production volume up to 20 percent, depending on soil and climate conditions.



SumaGrow® products have demonstrated the ability to achieve optimal crop performance on a broad spectrum of cropping systems in diverse climates and soil conditions. They are utilized by small land holders as well as integrated into the management regimes of larger production farms. In addition, we offer products in OMRI listed formulations for the organic grower.

Blended in liquid humates for easy application, our products require no special equipment or refrigeration, and can be applied year-round.

THE BENEFITS OF SUMAGROW®

As science continues to reveal how a healthy community of microorganisms directly impacts crop performance, the use of microbial technology to improve agricultural production is rapidly becoming standard best practices.

SumaGrow® biologicals are a combination of multi-functional and symbiotic microorganisms selected for their abilities to maximize crop yields, reduce the damaging effects of persistent fertilizer application, and increase the nutrient and water holding capacity of the soil. SumaGrow® improves soil fertility by maintaining the vibrant, diverse community of microorganisms required to supply nutrients to the plant, break down organic matter, unlock bound nutrients, and solubilize needed phosphates.

ADVANTAGES AND BENEFITS INCLUDE

- 1 Improved land water infiltration and holding capacity leading to reduced irrigation needs
- 2 Improved fertilizer efficiency leading to reduced fertilizer usage, nutrient waste, and contamination
- 3 Increased plant health for optimal crop performance and greater resistance to environmental stresses including extreme temperatures and drought
- 4 Increased Brix or higher nutrition in plants, grasses, and foods
- 5 Organic (OMRI listed products available)



FIELD TRIALS

ORGANIC CORN IN MARSHALL, WISCONSIN

In the results below, it should be noted that even when the fertilizer was not reduced, the group with the addition of a product containing SumaGrow® still out-performed the grower standard only group and increased profits despite additional

input costs. The maximum yield increase and profit benefit were seen by the group that reduced fertilizer inputs by half when applying a product containing SumaGrow®.

SUMAGROW®
+ 50% GROWER STANDARD

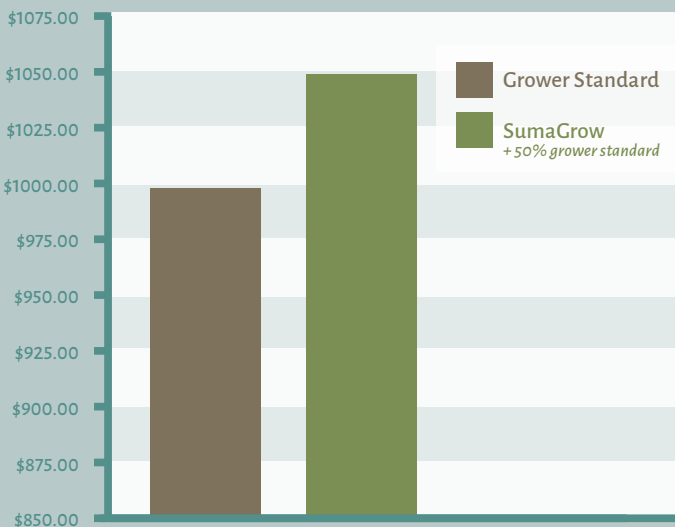
SUMAGROW®
+ GROWER STANDARD

GROWER STANDARD

	YIELD (BU/ACRE)	INCREASE OVER GROWER STANDARD	TOTAL TREATMENT COST/ACRE	VALUE/ACRE AT \$15.90 PER BUSHEL	REVENUE PER ACRE	INCREASE PROFIT PER ACRE
SUMAGROW® + 50% GROWER STANDARD	115.00	+ 21%	\$91.87	\$1,828.50	\$1,736.63	+ \$329.88
SUMAGROW® + GROWER STANDARD	106.00	+ 11.6%	\$143.75	\$1,685.40	\$1,541.65	+ \$134.90
GROWER STANDARD	95.00	---	\$103.75	\$1,510.50	\$1,406.75	---

grower standard: full recommended fertilizer application

AVERAGE PROFIT PER ACRE



WHEAT IN ZAMBIA

Wheat is grown on more land area than any other commercial crop and in 2016 was the second most produced cereal grain with corn as the first and rice as the third most produced.

A cost analysis was conducted in a trial on wheat to determine the financial benefits when using our products. Both the preplant and top dress fertilizer were reduced by 50 percent in the group treated with a product containing SumaGrow® via pivot irrigation, which maintained a yield comparable to the full fertilizer group.

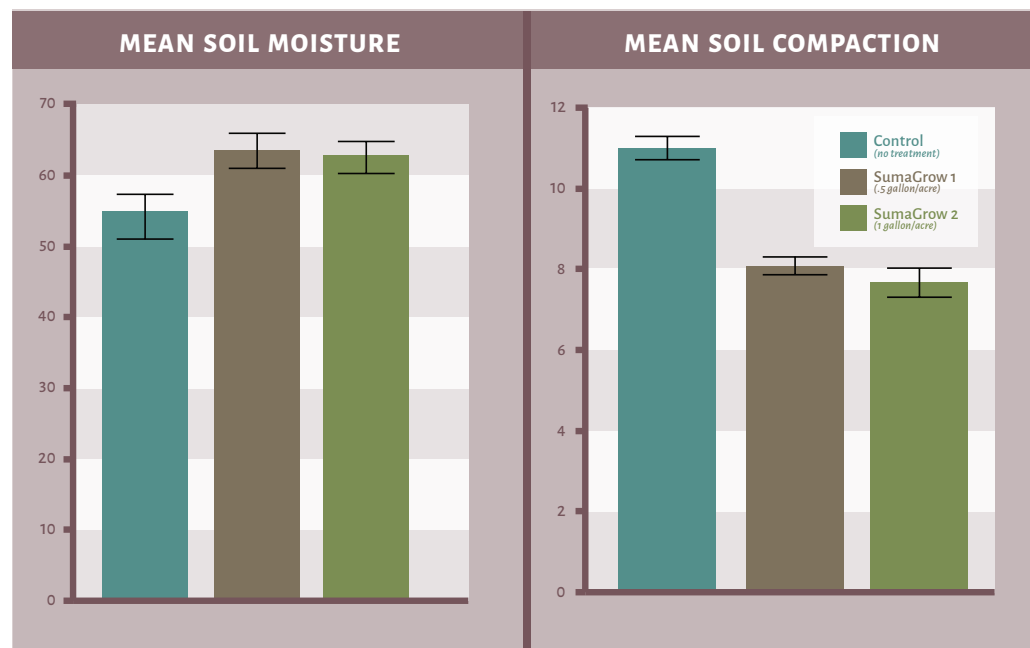
The SumaGrow® treated groups attained a financial gain of 4.8 percent for the farmer.

MISSOURI DEPARTMENT OF CONSERVATION

A study managed by the Missouri Department of Conservation (MDC) was conducted with SumaGrow® on the Ionia Ridge Conservation Area. The study focused on the potential for soil microbial products to improve success of native tallgrass seedling establishment and also to evaluate the effect on stand persistence. This area was an active row crop and cattle grazing farm prior to the acquisition by the MDC in 2008.

This study focused on the differences in the physical and biological properties of the soil between control and SumaGrow® treatment groups within the conservation area. When comparing soil treated with a product containing SumaGrow® with untreated plots, the treated soil experienced a 15+ percent increase in soil moisture potential, or the soil's ability to hold water.

Additionally, the study found a 26 percent reduction in soil compaction in the SumaGrow® treated soil which equates to softer, more aerated soil. This allows plant roots to grow more easily and reach deeper to tap the water and nutrients held within the subsoil.



FAQS

ARE YOU ADVOCATING ELIMINATING CHEMICAL FERTILIZERS?

No. It's not a question of either/or but a balance of both inputs working simultaneously to grow higher quality, higher yielding crops and grasses. As our products improve fertilizer efficiency, we recommend reducing fertilizer inputs by 50 percent when using products containing SumaGrow®.

HOW DOES THE COST COMPARE WITH CHEMICAL FERTILIZERS?

In most cases less than the chemical fertilizers.

HOW IS (NAME BRAND PRODUCT) APPLIED?

SumaGrow® is a liquid and can be applied using irrigation systems, spray tanks, and spray bottles.

DO (BRANDED PRODUCTS) NEED TO BE APPLIED EVERY YEAR WHEN APPLYING ON THE SAME CROPS?

Yes. Salts from persistent fertilization, depletion of nutrients through soil erosion, removal of organic matter with crop harvest, and low or high pH values affect the value of soil.

📷 COMPARISON PHOTOS



30 acres of tobacco in North Carolina were treated with SumaGrow®. The remaining acres were treated only with conventional fertilizer. The SumaGrow® treated fields had golden leaves all the way to the top and were perfect for harvesting. The untreated fields were destroyed by frost and were not harvestable.



untreated vs treated potatoes in Montana



untreated vs treated snapdragons in the Dominican Republic



This image shows the rooting differences between SumaGrow treated and untreated turf on a sports field at a school in Australia.



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