

# Ultra<sup>®</sup>

by  AgriGro

HIGHER STANDARDS FOR BIOLOGICALS



ORGANIC SOIL, SEED AND FOLIAR TREATMENT

◆ FOR USE ON ALL CROPS ◆

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# WHO WE ARE



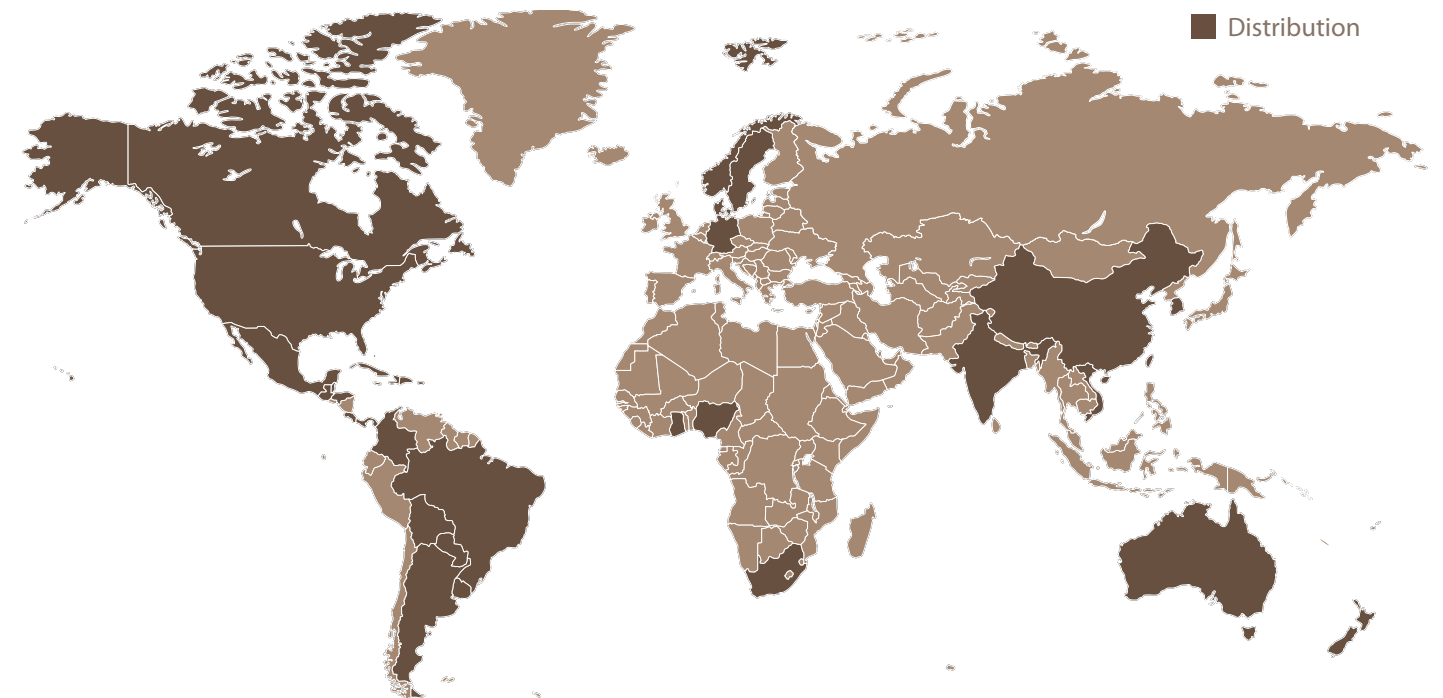
Our mission is to help farmers improve crop and livestock production by maximizing biological performance.

For over 30 years, **AgriGro<sup>®</sup>** has established a tradition of excellence, leading in the field of nutritional supplement technology for agricultural and horticultural use. Producers around the world are growing higher quality, better yielding crops as they use OMRI listed **Ultra<sup>®</sup>** by AgriGro<sup>®</sup> to leverage their current practices with manure, compost and other organic methods of crop production. **Ultra's<sup>®</sup>** ability to leverage traditional organic practices comes by dramatically increasing the populations of existing native species and strains of beneficial micro-organisms within these growing mediums.

**Ultra<sup>®</sup>** is environmentally safe, non-toxic, non-carcinogenic and contains no pathogenic micro-organisms. It is very user friendly and has a long, stable shelf life with excellent storage characteristics.

## GLOBAL REACH

AgriGro, Inc. distributes through hundreds of representatives in numerous countries worldwide.





YOU'RE ALREADY STANDING ON...

# THE KEY TO BIGGER YIELDS AND BETTER PROFITS

**To maximize your yield and profit potential, look beyond the standard options to your soil and your plant's biological system.**

To truly maximize yield and increase profit margin, you must consider the critical role **Ultra**® will play by increasing the population counts of beneficial micro-organisms in your current growing practices. By adding this essential component to your management program, you open the door to maximizing crop quality and yields.

**Ultra**® has a targeted effect on the soil and plant's biological system and is designed to be tank mixed with your normal spray program. **Ultra**® improves soil structure, promotes healthy soil for better growing conditions, and supports vibrant and robust plant growth.



# WHY IS SOIL BIOLOGY SO IMPORTANT?



With permission from **The Soil and Water Conservation Society** (SWCS), the following information are excerpts from the *Soil Biology Primer* and are provided for educational purposes, describing the interaction and importance of a healthy biological soil for different purposes including crop production. The SWCS does not endorse AgriGro®.

For more information, visit the NRCS soil biology site: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/biology/>

## How the Food Web Serves the Land Manager

- More water soaks into soil and can be used by crops as biological activity enhances soil structure.
- Less topsoil is lost to water and wind erosion where soil organisms have stabilized the soil structure.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Fungi Enhance Soil Quality

- Decompose complex carbon compounds.
- Improve accumulation of organic matter.
- Retain nutrients in fungal biomass, reducing leaching of nutrients out of the root zone.
- Physically bind soil particles into aggregates.
- Are an important food source for other organisms in the food web.
- Improve plant growth when mycorrhizal fungi become associated with the roots of some plants.
- Compete with plant pathogens.
- Decompose certain types of pollutants.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Bacteria Enhance Soil Quality

- Feed other members of the food web.
- Decompose organic matter.
- Help keep nutrients in the rooting zone.
- Enhance soil structure, improving the flow of water and reducing erosion.
- Compete with disease-causing organisms.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Protozoa Enhance Soil Quality

- Release nutrients stored in microbial biomass for plant use.
- Increase decomposition rates and soil aggregation by stimulating bacterial activity.
- Prevent some pathogens from establishing on plants.
- Provide prey for larger soil organisms, such as nematodes.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Nematodes Enhance Soil Quality

- Regulate the populations of other soil organisms.
- Mineralize nutrients into plant available forms.
- Provide a food source for other soil organisms.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Arthropods Enhance Soil Quality

- Improve soil structure through burrowing and the creation of fecal pellets.
- Control disease-causing organisms.
- Stimulate microbial activity.
- Enhance decomposition through shredding of large plant litter and mixing of soil.
- Regulate healthy soil food web populations.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*

## How Earthworms Enhance Soil Quality

- Shred and increase the surface area of organic matter, thus stimulating microbial decomposition and nutrient release.
- Improve soil stability, porosity, and moisture-holding capacity by burrowing and aggregating soil.
- Turn soil over, prevent disease, and enhance decomposition by bringing deeper soil to the surface and burying organic matter.
- Improve water infiltration by forming deep channels and improving soil aggregation.
- Improve root growth by creating channels lined with nutrients.

*Soil and Water Conservation Society (SWCS). 2000. Soil Biology Primer. Rev. ed. Ankeny, IA: Soil and Water Conservation Society.*



**HOW DOES ULTRA® HELP IMPROVE YOUR SOIL BIOLOGY?**  
FIND OUT NEXT...

# THE BIOLOGICAL EDGE

As previously illustrated by the USDA, there are numerous benefits that can be leveraged by having a healthy, biologically active soil.

Ultra's® ability to leverage your growing medium has been proven in multiple studies, where the active ingredients in Ultra® increased existing micro-organism (CFU) populations between 2000% and 5,000% within 24 hours over the non-treated soil.



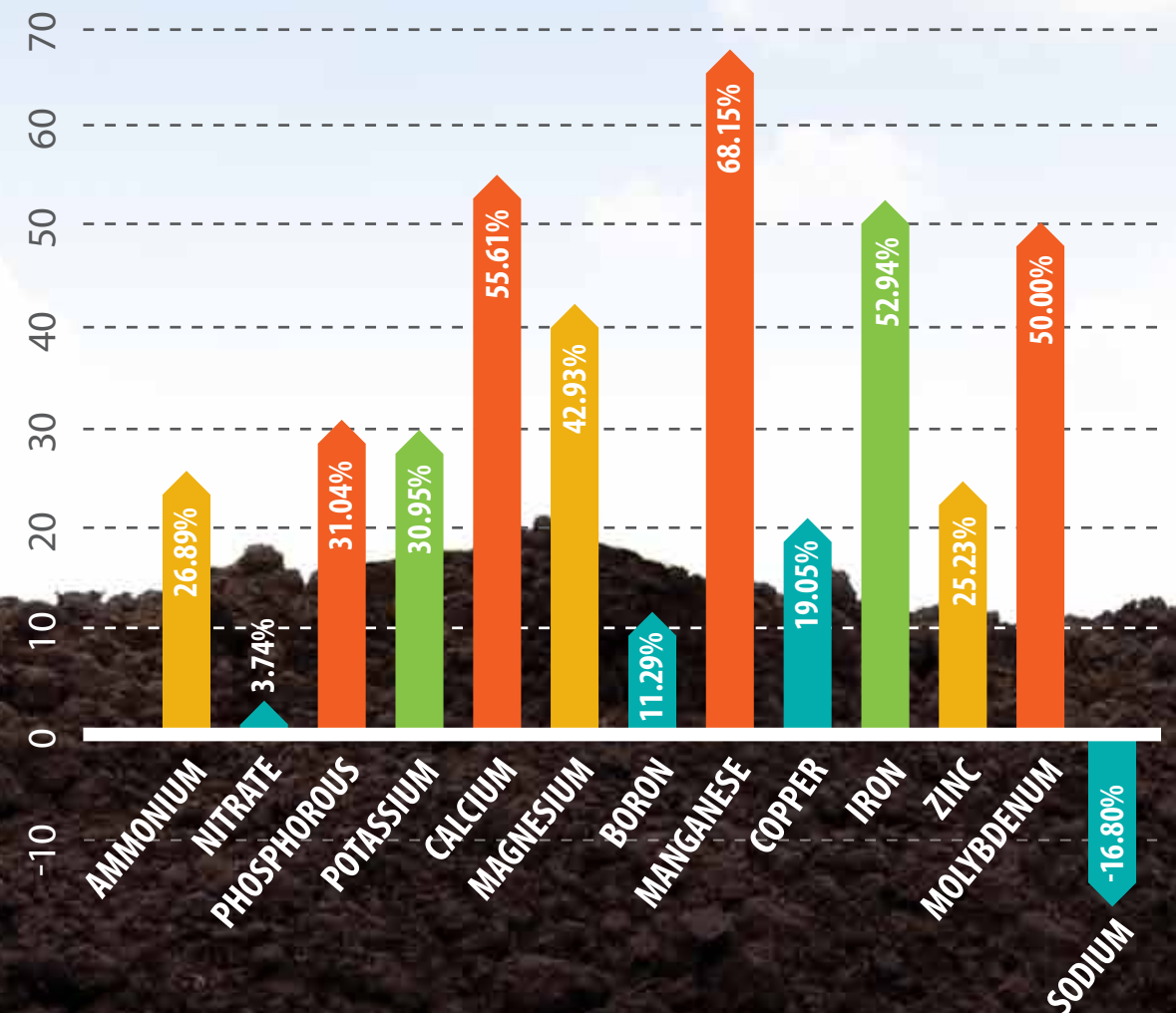
In order for growers to maximize their yield and profit potential, they must look beyond the standard options to their soil and plant's biological systems. Due to Ultra's® ability to increase native species and strains of beneficial microorganisms, Ultra® will even enhance microbial activity in manure and compost.

# ENHANCED SOIL BIOLOGY INCREASES NUTRIENT AVAILABILITY

In a detailed University study, the active ingredients in Ultra® significantly increased the uptake and availability of 12 macro and micro-nutrients while lowering the levels of sodium in the soil and plant tissue.

## PERCENT OF INCREASE IN NUTRIENT AVAILABILITY

Research conducted by Lincoln University, Jefferson City, MO.





## IMPACT ON SOIL BIOLOGY

Ultra's® technology is derived from seaweed extract and contains complex carbohydrates, essential plant micro-nutrients, beneficial enzymes, amino acids and a host of nutritional supplements not found in standard fertilizers.

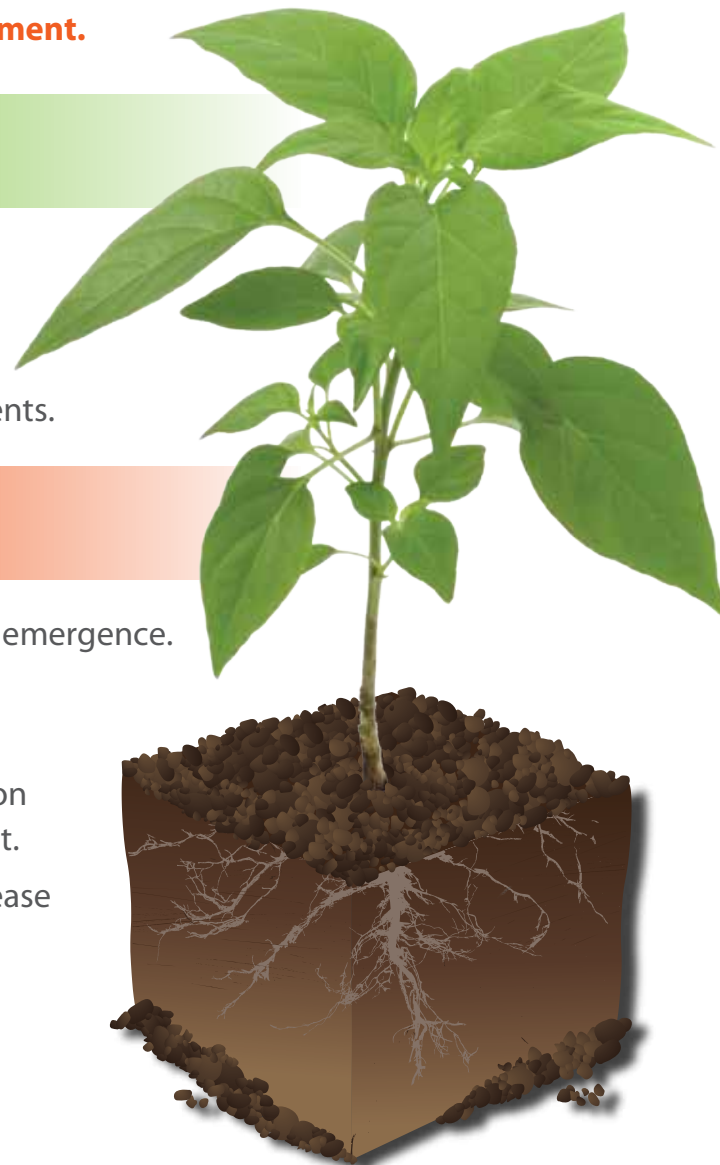
Ultra® technology has a profound effect on both the plant and its growing environment.

### A HEALTHY BIOLOGICAL SOIL INCLUDES:

- Balanced population of beneficial fungi, bacteria, protozoa, nematodes, arthropods and earthworms.
- Balance of soil macro and micro-nutrients.

### BENEFITS OF A HEALTHY BIOLOGICAL SOIL:

- Increased seed germination and plant emergence.
- A surge in early and sustained root development.
- Optimized efficiency in water regulation and utilization within the soil and plant.
- Enhanced nutrient mineralization (release of soluble nutrients) for plant uptake.
- Reduced soil pathogens.
- Speeds up the breakdown of manures and compost.



## A NATURAL SOLUTION

Ultra® by AgriGro® is a nutritional plant supplement that can be used as a soil application, seed treatment, root dip, or foliar feed. These various types of application are user friendly and enable the soil and the plant to receive direct benefits from Ultra®.



### ULTRA® IS RECOMMENDED FOR USE ON ALL FIELD, FRUIT AND VEGETABLE CROPS.

The active ingredients in Ultra® by AgriGro® are very similar to those found in FoliarBlend® by AgriGro®. Unlike FoliarBlend®, Ultra® has been formulated to meet OMRI requirements for use in organic production. Despite the differences, a USDA-ARS soil microbiologist from the University of Missouri, who has tested FoliarBlend® in a multi-year study, suggests the use of Ultra® will produce growth and yield results comparable to FoliarBlend® due to the nutrient similarities in both products.

▶ **VIEW AGRIGRO® RESEARCH: [WWW.RESEARCH.AGRIGRO.COM](http://WWW.RESEARCH.AGRIGRO.COM)**



**ULTRA® HAS BEEN REVIEWED AND LISTED BY OMRI (THE ORGANIC MATERIALS REVIEW INSTITUTE) FOR USE IN ORGANIC PRODUCTION.**

FOR MORE INFORMATION ON OMRI, VISIT [WWW.OMRI.ORG](http://WWW.OMRI.ORG).

# Just Add Life™

The following application rates are for general practices. Please consult your AgriGro® representative for a customized crop application.

**Broadcast or Band Soil Application:** Apply 16-32oz. of **Ultra®** per acre prior to planting or plant emergence.

**Seed Treatment Application:** Apply 6-8oz. of **Ultra®** per 50lbs. of seed.

**Row or Transplant Application:** Apply 16-32oz. of **Ultra®** per acre at planting.

**Foliar Application:** Regular applications of **Ultra®** should be applied throughout the vegetative stage of growth. Please consult with you AgriGro® representative for specific foliar applications and rates. For best results spray when the crop is in an active growing state after irrigation or natural rainfall. Spray early in the morning or late in the afternoon for best leaf absorption. (Foliar fertilization is intended as a supplement to a regular fertilization program and will not, by itself, provide all the nutrients normally required by agricultural crops.)

**Ultra® by AgriGro® can be applied through standard ground or aerial application equipment, and through standard irrigation or fertigation systems.**



**Ultra®**  
by AgriGro

**Availability:**

- 5 gallon boxes
- 55 gallon drums
- 275 gallon totes

Authorized AgriGro® Dealer



For more information visit [www.ultra.agrigro.com](http://www.ultra.agrigro.com)