Boost Your Crops with Helena Powered by BiOWiSH®

Working together, Helena Agri-Enterprises, LLC and BiOWiSH Technologies strive to support growers and improve their profitability. Now, growers across the US can get the standard Helena fertilizers they are familiar with boosted by BiOWiSH Technologies' powerful microbial additives. The added biology works within the soil, shifting the soil ecology to favor microorganisms that benefit the crops and the growers.

How can you get more out of your fertility program?



BiOWiSH® Crop Liquid is approved for use in organic food production and OMRI listed.

BiOWiSH® Crop Liquid

BiOWiSH® Crop Liquid is coated onto solid fertilizers and fertilizer fillers or mixed with liquid fertilizers to create an enhanced efficiency fertilizer.

This powerful formula works on granular fertilizers and all liquid fertilizers. It helps you get an increased yield and higher return on investment.

Natural and non-GMO, BiOWiSH® helps you get more out of your fertility program. A unique feature of BiOWiSH® is its ability to provide consistent performance across a wide range of operating conditions and management practices:

- pH levels between 3.5 and 9.5
- Salinity up to 35,000 ppm (35 ppt) which is seawater level
- Low oxygen content (0.5 ppm), active in water-logged conditions
- Across a range of temperatures. Optimal performance is reached as temperatures increase, with high performance starting at 50°F.
 The microorganisms enter dormancy as temperatures fall below the threshold and re-activate as temperatures rise
- Below wilting point
- In oligotrophic (very low nutrient level) conditions
- Across a broad range of organic materials

BiOWiSH® Crop Liquid can be supplied with "Green Choice" for urea and ammonium sulfate or colorless for NPK fertilizers and other fertilizer components. This gives an added benefit of visual confirmation that your fertilizer is now Powered by BiOWiSH®.



Boost Your Crops with Helena Powered by BiOWiSH®

What benefits can BiOWiSH® offer?

- Improves crop yields
- Increases nutrient availability
- Enhances root development
- Improves plant vigor
- Stimulates native microbial activity in the soil
- Improves soil productivity

How does BiOWiSH® work?

Increases plant nutrients in the soil

- Converts ammonia into less volatile nitrogen species
- Converts bound phosphorous to available phosphorous
- Produces a number of enzymes that break down complex organic molecules in soil

Adds beneficial microbes & stimulates native microbial activity

• Promotes growth of beneficial soil microbes

Promotes root development

- Hyphal networks
- Root growth

Improves plant vigor

- Demonstrated endophytic activity
- Improves drought tolerance

Featured research studies

All research studies are available at biowishtech.com/resources



Rice - Helena Agri-Enterprises, LLC

The Helena Powered by BiOWiSH® treated plot increased yield per acre by 36%, increased profitability by \$742 per acre, and maintained key nutrient levels in the rice.



Tomatoes - Helena Agri-Enterprises, LLC

Tomatoes treated with BiOWiSH® achieved increased Brix levels, improved levels of nitrogen, and increased yield as high as 15% for some treatments.



Wheat - Helena Agri-Enterprises, LLC

Plots treated with BiOWiSH® coated urea achieved as much as 7% higher yield. Additionally, the BiOWiSH® maintained the soil NPK content and grain protein percent, which measured at 10% for all treatments.



Corn Silage - Helena Agri-Enterprises, LLC

The plots treated with Helena Powered by BiOWiSH® outperformed competitive fertilizers and the base fertilizer. Results included a 27% increase in biomass, \$470 increase in profit per acre, and maintained soil fertility for future crop rotations.

