FALL APPLICATION

BiOWiSH® Fertilizer Enhancement

A BIOLOGICAL FERTILIZER ENHANCEMENT FOR ALL SEASONS

ADVANTAGES

- Arrives on-farm, ready-to-use
- Consistent performance across a broad range of crops, soil types, and management practices
- Proven, reliable approach using root associated pathway
- Superior value at an input cost that makes sense for high production agriculture

A BIOLOGICAL FERTILIZER ENHANCEMENT FOR FALL APPLICATION

While BiOWiSH® Enhanced Efficiency Fertilizers can be applied in season, they can also be applied in the fall for carryover effects into the spring.

Select BiOWiSH® Enhanced Efficiency Fertilizers applied in the fall may qualify you for the 2025 ADM re:generations™ program. Please contact your ADM representative for more information.

Cover Crop Rotations

In the Iowa State University winter rye to corn research study, a carryover effect in a cover crop to a corn practice provided an economic benefit to the grower.

Regenerative agriculture programs emphasize the incorporation of cover crops into crop rotations as a key practice to promote soil health, biodiversity, and overall ecosystem resilience. BiOWiSH® also acts to minimize potential yield losses for this transitional practice.

Double Crop Rotations

In the University of Arkansas winter wheat to soybean research study, a carryover effect in a winter cereal to a spring legume practice provided an economic benefit to the grower.

BiOWiSH® increases nutrient uptake and improves soil conditions for greater root mass and increased plant vigor. It can amplify benefits derived from double crop rotations and improve carbon intensity scores for participation in the ADM re:generations™ program.

Bare Soil*

Independent research at the University of Minnesota demonstrated a carryover effect from applications to bare soil in the fall, which provided an economic benefit to the grower.

Because it contains dormant microbes, BiOWiSH® Enhanced Fertilizers can be applied in the fall to bare soil with drainage. This allows it to complement typical fertilizer applications made on bare soil after harvest.

**Avoid applying BiOWiSH® coated fertilizers to waterlogged soils over winter without roots present (research ongoing).*

FALL APPLICATION

HOW BIOWISH® CAN WORK FOR YOU IN THE FALL

1. BiOWiSH® Enhanced Efficiency Fertilizers give versatility to the grower.
2. Growers can apply BiOWiSH® Enhanced Efficiency Fertilizer at any growth stage as long as there is soil contact — even as part of a fall fertilizer application.
3. The BiOWiSH® Fertilizer Enhancement can be used on most fall fertilizers. Please review our compatibility bulletin for details: https://www.biowishtechnologies.com/resource/crop-liquid-material-compatibility/

FALL APPLICATION TRIALS AND FIELD DATA

BiOWiSH® Enhanced Fertilizers have been trialed across multiple different management practices. The product contains dormant bacteria (endospores), which remain dormant until exposed to sufficient levels of nutrients, soil moisture, and soil temperature required to initiate germination. This enables use of BiOWiSH® coated fertilizers in the fall on cover crops, winter crops, or bare soil.

USA INDEPENDENT THIRD-PARTY RESEARCH SHOWS VALUE FOR FARMERS

Below are the results from our fall applied research efforts, which highlight farmer yield increase over the Control and economics when comparing BiOWiSH® to the grower's standard fertility program in the region:

Trial	Crop	Fertility Treatment	Fertility Rate (lb/acre) [kg/ha]	Application Timing	Yield Change over Control Program (%)	Profit Change ($USD/acre)
Cover Crop/Corn Rotation	Cover Crop (Winter Rye)	BiOWiSH® coated MAP	230 [258]	Fall	9.7**	NA
	Corn	Uncoated Urea	196 [220]	Spring	7.9	96
Iowa State University, Ames, IA						
Winter Wheat/ Soybean Rotation	Winter Wheat	BiOWiSH® coated DAP	152 [170]	Fall	4.6	21
	Soybean	Uncoated Potash	73 [82]	Spring	22.9	104
	Winter Wheat	BiOWiSH® coated DAP (Reduced Rate)	122 [137]	Fall	1.5	19
	Soybean	Uncoated Potash (Reduced Rate)	58 [65]	Spring	14.3	68
University of Arkansas, Colt, AR						
Bare Soil (Drained field)	Corn	BiOWiSH® coated Urea	304 [341]	Fall	4.3	38
University of Minnesota, Wells, MN						

**Profit change is the difference between net income of the respective program and the Control.*
***Biomass Increase*

Scan the code to review the list of BiOWiSH® research and case studies on our website.

NOW AVAILABLE AT SELECT ADM LOCATIONS

ADM®

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