

Huma[®] OM Liquid HA 16 With Micro Carbon Technology[®] Improves Spring Wheat Yield With 60% Increased ROI

Research Report

Research by: Jared Spackman, PhD, College of Agriculture and Life Sciences, University of Idaho **Huma® Product:** OM Liquid HA 16

Background

Humic substances have been shown to improve crop yield. Solid and liquid forms of humic substances with high levels of organic acids can be produced by incorporating Micro Carbon Technology®. Some are suitable for conventional and others for organic farming. Huma® *OM Liquid HA 16*, OMRI-Listed for organic farming, is a liquid form of humate that can be used for both organic and conventional farming systems.

Objective

The aim of this study was to assess the effect of *OM Liquid HA 16* on spring wheat yield under a field condition in which Urea N is decreased by 20%.

Materials & Methods

Soft white spring wheat (cultivar: "UI Cookie") was grown at the agricultural research facility of the University of Idaho in Aberdeen, Idaho. The trial was conducted as a randomized complete block with four replications. The nitrogen sources were Urea (46-0-0) and Mono Ammonium Phosphate (MAP), while the phosphorus and sulfur came from MAP (11-52-0 -1.2S). The fertilizer was applied at planting with the planter. Solid-set sprinkler irrigation system supplied water for the crop. The spring wheat was planted on April 30 and harvested on August 19.

Table 1. Treatment details for the wheat study.

Treatment	Amount per A	Application Method	Timing
	N = 130 lb		
Check	P = 11 lb	With Planter	At planting
	S = 0.58 lb		
Check + Huma® OM Liquid HA 16	HA = 4 gal	Soil Surface Sprayer	Right Before Planting

Results

Organic *OM Liquid HA 16* at 4 gal/acre improved the yield of spring wheat by over 10 bu/acre when compared with the Check treatment. Although the yield difference between the Check and *OM Liquid HA 16* was not statistically significant (Figure 1), the yield improvement translated into \$19 per acre net gain advantage and a return on investment (ROI) of 60%.

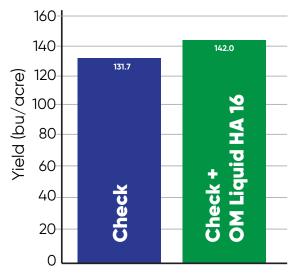


Figure 1. Spring Wheat Yield Affected by Huma® OM Liquid HA 16

Conclusion

The recommended level of Urea-N was 165 lb N/acre. This study reports the effects of \it{OM} Liquid \it{HA} 16 on wheat yield when the Urea-N was decreased by 20%.

This field study illustrated that incorporating an organic liquid form of humic acid enhanced by Micro Carbon Technology® can improve the crop yield and give a farmer an economic advantage (ROI = 60%) even when Urea N is decreased by 20%.

Product Summary

Huma® *OM Liquid HÁ* 16 is OMRI-Listed for organic farming and carbon complexed with Micro Carbon Technology®. It is an activated liquid humic acid source derived from a highly oxidized, naturally occurring carbon and mineral deposit. *OM Liquid HA* 16 treats unbalanced soil conditions caused by a lack of organic matter,

promoting a stronger, healthier soil for sustainable plant growth.