

AgZyme[®] Increases Grain Sorghum Yield by 9 bu/acre

Treatment increased yield over MAP maintenance application yield by 14.3 bu/acre.
with Kansas State University in Hays, Kansas

Ag Concepts[®] Corp worked with Kansas State University at the Agricultural Research Center in Hays, Kansas on a study investigating the effects of AgZyme[®] and grain sorghum. Treatments were a control with no application, a maintenance phosphate application of 30 lbs/acre of P₂O₅ as MAP, AgZyme[®] at 20 oz/acre, and AgZyme[®] at 20 oz/acre with 30 lbs/acre P₂O₅ as MAP. As shown in Figure 1, the AgZyme[®] application had the best yield at 90.3 bu/acre. AgZyme[®] with MAP did not outyield control, but did have the greatest tissue phosphorous concentration (Table 1). The MAP treatment yielded 75.8 bu/acre.

Kansas State University recommends a phosphorous management technique of “Build and Maintain” or be willing to fertilize each crop each year. This study was conducted on a field that was in a “maintain” year, so the standard practice was to add 30 pounds of P₂O₅ broadcast as MAP (11-52-0). It should be noted that the site had 25 ppm soil phosphate. 25 ppm is in the maintenance range, but a yield response is not very probable from adding phosphorous. 20 ppm soil phosphorous concentration is at the 95% Relative Yield level and 30 ppm is at 100% Relative Yield.

This test is another encouraging result showing the interaction between Ag Concepts[®] products and soil phosphorous. Without adding extra phosphorous, the AgZyme[®] treatment numerically increased tissue phosphorous concentration, 19.4 lbs/acre vs 19.7 lbs/acre, and increased yield, 81.3 bu/acre vs 90.3 bu/acre, over control.

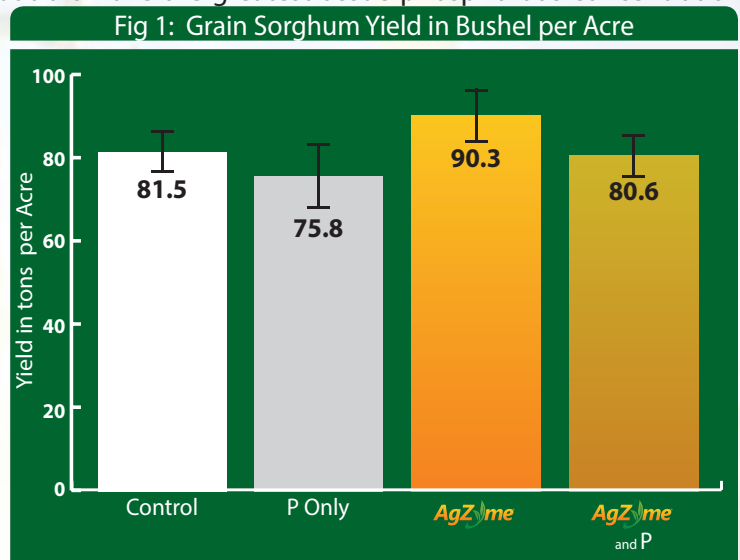


Table 1: Tissue Nutrient Concentration (lbs/acre)

Treatment	N	P	K	S	Mg	Ca
Control	142.0	19.4	140.4	10.6	14.9	19.5
MAP	135.6	18.9	176.3	10.6	16.3	25.4
AgZyme	140.1	19.7	124.2	9.6	14.8	18.0
AgZyme and MAP	153.2	21.4	124.0	10.0	15.9	18.7