

AgZyme® and AgConcepts® SuperHume®

Increases Lettuce Yield by 0.9 bu/acre

AgZyme and Ag Concepts Super Hume with 75% GSP yielded statistically the same as 100% GSP with the University of Arizona in Yuma, Arizona

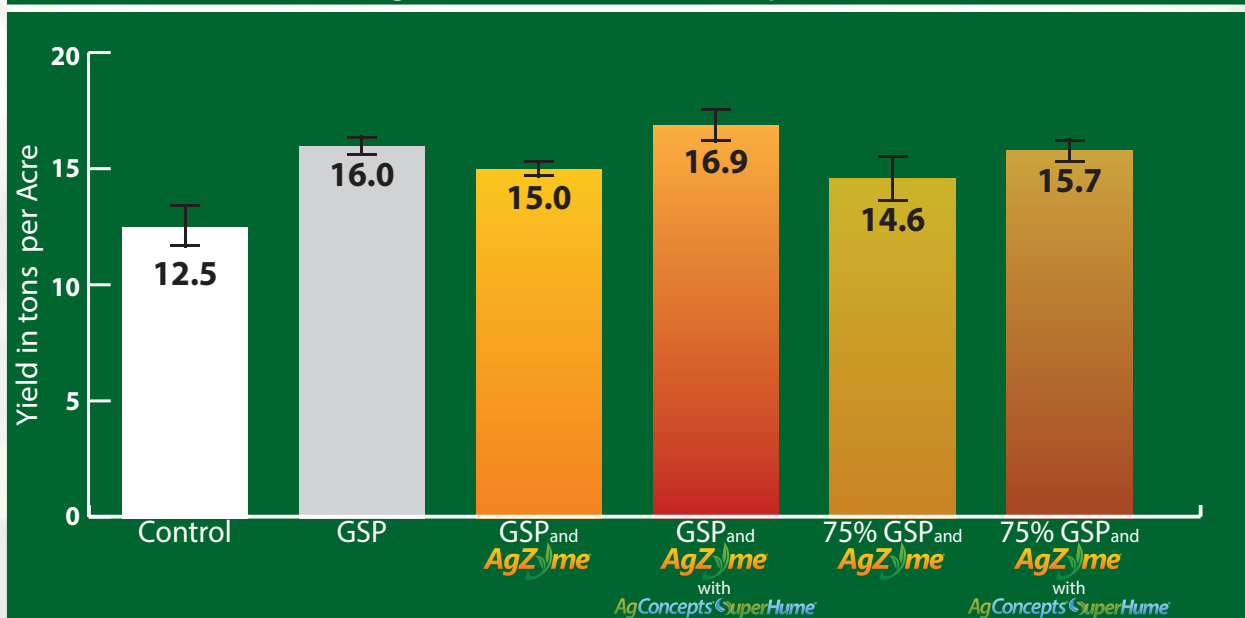
Ag Concepts® Corp worked with the University of Arizona in Yuma, Arizona on a study investigating the effects of AgZyme® and Ag Concepts® Super Hume® on lettuce. The test was the first part of a trial examining a cold weather crop, lettuce, followed by a warm weather crop, watermelon. (The results of the watermelon trial are reported elsewhere.) Six treatments were included in this test. A control with no fertilizer added, Grower Standard Practice (GSP) with 89 lb/a P as MAP, GSP with AgZyme at 12.8 oz per acre, GSP with AgZyme (12.8 oz per acre) and Ag Concepts Super Hume (1 gal per acre), 75% GSP with AgZyme and 75% GSP with AgZyme and Super Hume. Yield results can be seen in Figure 1. GSP combined with AgZyme and Ag Concepts Super Hume had the highest yield numerically but differences between all GSP treatments were not statistically significant.

The treatment with 75% GSP with AgZyme and Ag Concepts Super Hume yielded numerically slightly less, but statistically the same, as 100% GSP with AgZyme and Ag Concepts Super Hume (15.7 tons/a vs 16.9 tons/a). The reduction in P between 100% GSP and 75% GSP is a savings of about \$25-\$30 per acre depending on the source. Net ROI may have been increased with the reduction in P applied.

AgZyme and Ag Concepts Super Hume with 75% and 100% GSP resulted in the same increase for tissue P, 0.27% Midrib P, over the GSP of 0.22% Midrib P. Although there was not a correlation with yield, this is evidence of the interaction between Ag Concepts Super Hume and P.

The treatments that included Ag Concepts Super Hume showed significant P fertilizer use efficiency. This is shown by the direct correlation between Soil Test P levels and Tissue Test P levels on the Ag Concepts Super Hume treatments. No such correlation exists for the non-Super Hume treatments. (See Figure 4 and 5 here). This result is very encouraging but it should be noted that this site has non-optimal pH for phosphate availability and relatively low phosphate soil levels.

Fig 1: Lettuce Yield in Tons per Acre



2016 at Yuma, Arizona by University of Arizona, n=4