

The logo for actosol® is displayed in a white, italicized, sans-serif font against a black background. The registered trademark symbol (®) is positioned to the upper right of the word "actosol".

FIELD TRIAL Report #1

**“The potential for actosol® Humic Acid Soil Amendment to Reduce Phosphorous Application Rates and Foliage Burn.”
Paul Bodenstein, Crop Agronomist, October 1998.**

Cereal crops planted in the Mid-Atlantic region are planted in the fall when soil temperatures and soil microbial activity are in decline. These decreases result in less available phosphorous in the soil requiring the addition of phosphorous to ensure availability for adequate plant growth. actosol® humic acid products stimulate soil micro-organisms and enhance P solubility. Adding actosol® to small rates of nitrogen should allow growers to reduce or eliminate P rates in the fall on “high” and “very high” P-testing soils.

In the fall of 1997, Ag. Systems, a Virginia crop consulting firm, applied Professional actosol® with a full rate of fertilizer to barley and at a half-rate to wheat to determine the effect of actosol® in reducing or eliminating excess fertilizer costs. Application rates at the test plots were three gallons per acre.

Two barley test plots received the full fertilizer rate plus Professional actosol® and yield at harvest showed no significant increase. Both plots averaged 102 bushels per acre at harvest in 1998. In a separate trial, Professional actosol® was applied at the rate of one gallon per acre, with the second spring nitrogen application to determine if “foliage burn” would be impacted. Visible results were achieved with “burn” noticeably reduced. Test plots were replicated and yields recorded at harvest. Plots treated with Professional actosol® averaged 101.5 bushels per acre compared to untreated plots which yielded 96.3 bushels per acre. Foliar applications of Professional actosol® increased barley yields by an average of 5.2 bushels per acre.

Two separate wheat plots were also planted and tested. The first test plot was planted at rates of 30 lbs. of nitrogen, 70 lbs. of phosphates, 100 lbs. of potash and three gallons of Professional actosol® per acre. Yield at harvest averaged 67.74 bushels per acre. The second test plot was planted at a rate of 30 lbs. of nitrogen, and a “half-rate” of 35 lbs. of phosphates, and 50 lbs. of potash. The results at harvest indicated an increase in yield over the “full rate” test plot of 2.52 bushels at 70.26 bushels per acre.