

Trial Results

Executive Summary

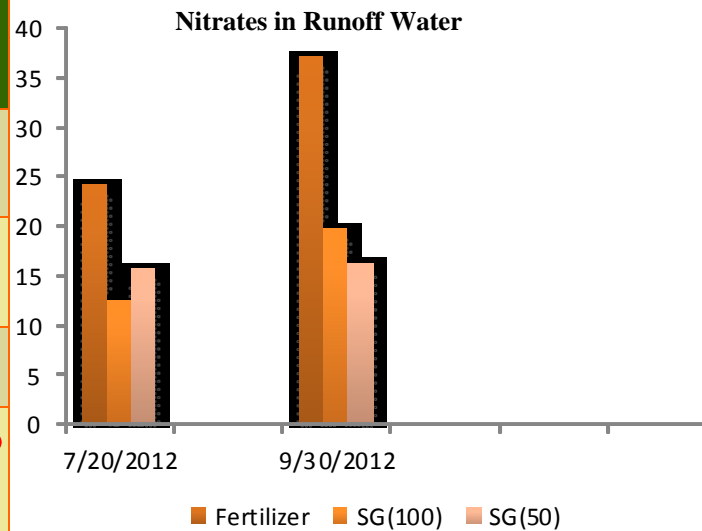


Water/Nitrate Runoff

Arise Research and Discover Facility, Illinois

Research on the effect of products containing SumaGrow on *Water & Nitrate Runoff*

Treatment	Runoff Water (Gallons) on 7/20	Runoff Water (Gallons) on 9/30	Nitrates in Runoff on 7/20	Nitrates in Runoff on 9/30
SumaGrow + 50% Fertilizer	36.5	16.0	15.5	16.0
SumaGrow + 100% Fertilizer	40.0	19.5	12.5	19.5
100% Fertilizer Only	77.0	37.0	24.0	37.0
% Decrease using SumaGrow + 50% fertilizer	52.6%	56.76%	35.42%	56.76%



Trial Summary

The validation testing at the Arise Research and Discover Facility, a specialized testing facility in Eastern Illinois, was performed primarily to determine the effect of a product containing SumaGrow on the amount of tile runoff and the percentage of nitrates contained in the runoff water.

There were five test plot covered by this report; one control plot using the state recommended amount of conventional fertilizer; two plots treated with a product containing SumaGrow and 100% fertilizer; and two plots treated with a product containing SumaGrow and 50% fertilizer.

The findings are significant (see chart above). Both the SumaGrow and 50% fertilizer (SG50) and the SumaGrow and 100% fertilizer (SG100) decreased the amount of runoff water dramatically with SG50 reducing water runoff by an average of 54.68% and SG100 reducing runoff water by an average of 47.68%.

Perhaps more importantly, the nitrates in the runoff water were significantly reduced as well with SG50 reducing nitrates by an average of 46.09% and SG100 reducing nitrates by 47.61% compared to the conventionally fertilized control plot.

Bio Soil Enhancers, Inc.
Evaluation for Sumagrow on Nitrate Leaching in Field Corn.
11-BS0111-11



Treatment 3

Arise Research & Discover, 2014