

Iowa Soybean Association On-Farm Network®
UAN with Agrotain Plus Replicated Strip Trial Protocol

Objective:

The purpose of this project is to quantify the agronomic and economic impacts of pre-plant UAN with Agrotain Plus (a urease & nitrification inhibitor) on corn fields in Iowa.

Brief summary:

Growers with yield monitors equipped with GPS will treat at least four alternating pairs of strips of pre-plant UAN with and without Agrotain Plus and measure the yield differences at the end of the growing season. An example of an Agrotain Plus replicated strip trial is shown on the right. The width of a strip must be at least as wide as the combine pass and preferably the width of the spray boom. Harvesting must ensure at least one “pure” combine pass (not mixing yields from two strips) within each treated and untreated strip. Mixed passes are acceptable when the application width is wider than individual combine passes, but the grower must be able to harvest at least one pure pass from all treatments in each rep. Loads or regions should be used in the yield monitor to identify the two treatments and any mixed passes.

Rep 1	UAN Only
	UAN with Agrotain Plus
Rep 2	UAN Only
	UAN with Agrotain Plus
Rep 3	UAN Only
	UAN with Agrotain Plus
Rep 4	UAN Only
	UAN with Agrotain Plus

Grower Requirements:

1. Contact Patrick Reeg at 515-669-9184 or Matt Sweeney at 515-669-9157 to confirm intent.
2. Complete and submit a replicated strip trial registration form by June 11, 2009 along with a field boundary in shapefile format (.shp, .dbf, & .shx) or FSA map with the field clearly outlined.
3. Apply alternating strips of pre-plant UAN with Agrotain Plus following the product label with the rows and UAN (check) with a minimum of four replications. The length of the replicated strips should be a minimum of 1,320 feet. Areas containing waterways and or point rows should be avoided. All other factors in the trial area must be managed the same (planting date, variety, etc).
4. Accurately record where Agrotain Plus treatments were applied using GPS equipment or hand drawn maps that include the time of application, application starting point, width of treatments, and number of replications.
5. Complete and submit an application log form and as-applied map within 30 days of application in the following format: raw files from the memory card or exported shapefile (.shp, .dbf, and .shx).
6. Trial must be harvested with a calibrated yield monitor equipped with GPS. If possible, harvest the entire trial area on the same day. Raw GPS yield data from the memory card must be submitted within 30 days of harvest or no later than December 1, 2010.
7. Allow ISA to use submitted and collected data for research, educational, and informational purposes.

ISA Agrees to:

1. Provide Agrotain Plus product for the trial area in some cases.
2. Attempt to collect aerial images from each field and provide them to the grower at no cost.
3. Return a report analyzing the treatment differences.
4. Keep data in a confidential manner that can't be linked back to the individual producer by other parties.

