

Iowa Soybean Association On-Farm Network®
Manure with Nutrisphere-N Replicated Strip Trial Protocol

Objective:

The purpose of this project is to quantify the agronomic and economic impacts of adding Nutrisphere-N to manure applied at the recommended N level to corn.

Brief summary:

Growers with combines equipped with yield monitors and GPS will compare manure applied at a rate that meets the recommended N level, to manure with Nutrisphere-N. Manure must be applied uniformly. Preferred fields for these trials would have straight rows and some variability of soil type, topography, etc. An example of manure plus Nutrisphere-N replicated strip trial is shown on the right. Strips must be at least as wide as one combine pass and preferably wider. 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 both 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	Manure Only
	Manure with Nutrisphere-N
Rep 2	Manure Only
	Manure with Nutrisphere-N
Rep 3	Manure Only
	Manure with Nutrisphere-N
Rep 4	Manure Only
	Manure with Nutrisphere-N

Grower Requirements:

1. Contact Matt Sweeney at ISA (515-669-9157) to confirm intent to conduct a manure replicated strip trial.
2. Complete and submit a replicated strip trial registration form by June 11, 2010 along with a field boundary in shapefile format (.shp, .dbf, & .shx) or FSA map with the field clearly outlined.
3. Apply the treatments replicated four times as shown in the above treatment layout. 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, hybrid, etc).
4. Accurately record where each of the different 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 files within 30 days of application in the following format: raw files from the memory card or exported shapefile (.shp, .dbf, & .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 product to grower in some cases.
2. Attempt to collect aerial images and stalk nitrate samples 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.

