

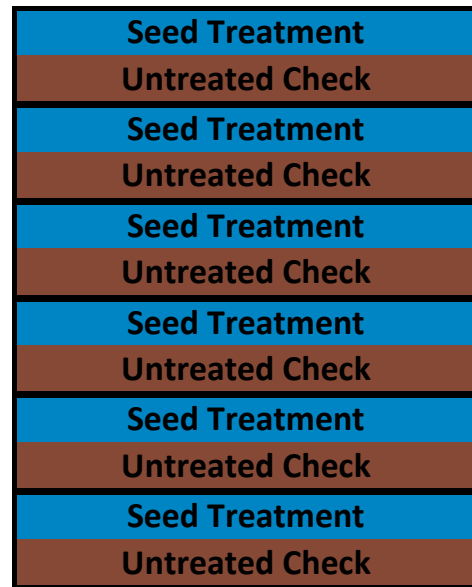
Iowa Soybean Association On-Farm Network®
Seed Treatment Replicated Strip Trial Protocol

Objective:

The purpose of this project is to quantify the agronomic and economic impacts of seed treatments such as inoculants, fungicides, insecticides, or combination products to untreated checks on corn and soybean fields in Iowa.

Brief summary:

Growers with yield monitors equipped with GPS will plant at least six alternating pairs of strips with and without a seed treatment. The treatments can be set up using a split planter configuration in which half of the row units on one side of the planter are filled with seed that is treated and the other half of the row units on the opposite side of the planter contain the same seed lot untreated. Another option would be to fill the entire planter with seed that is treated and plant every other pass using a high accuracy GPS guidance system. After the planting the treated seed the planter can be filled with the same seed containing no seed treatment and fill in the passes not yet planted. The planting operation must be recorded with GPS mapping system. This as-applied data will be overlaid with combine yield data to measure the yield differences at the end of the growing season. A planter that is twice the width of the combine header (such as a 12 row planter and 6 row combine header) would be the ideal configuration of equipment for this replicated strip trial in corn. In soybeans it may be necessary to harvest partial swaths to achieve the same objective. An example of the plan is shown on the right.



Grower Requirements:

1. Plant alternating strips of treated seed following the product label and the same seed untreated (check) with a minimum of six 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).
2. Accurately record where seed treatments were applied using GPS equipment that includes the application starting point, width of treatments, and number of replications.
3. Complete and submit a replicated strip trial registration form, GPS as-applied map, and field boundary by June 11, 2008. The field boundary should be in shapefile format (.shp, .dbf. & .shx) or an FSA map with the field clearly outlined. The GPS as-applied map can be in a raw format from the memory card or exported shapefile (.shp, .dbf. & .shx).
4. Trial must be harvested with a calibrated yield monitor equipped with GPS. If possible harvest the entire trial area on the same day. GPS yield data must be submitted within 30 days of harvest or no later than December 1, 2008 in the following format: raw yield from the memory card or exported shapefile (.shp, .dbf. & .shx).
5. Allow ISA to use submitted and collected data for research, educational, and informational purposes.

ISA Agrees to:

1. Provide seed treatment 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.

