



INDIANA CCA POST-CONVENTION SELF-STUDY CEU QUIZ

Value of More Uniform N Application Across the Toolbar

Bruce Erickson, Jess Lowenberg-DeBoer, Fulgence Mishili

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- Benefits of more uniform ammonia application may include all of the following EXCEPT:**
 - a. Increased crop yields.
 - b. Decreased nitrogen expenses.
 - c. Better crop utilization of nutrients applied.
 - d. Reduced chance of nitrogen leaching.
- A way that corn growers can reduce the relative unevenness of ammonia application among rows is to:**
 - a. Ensure hoses are the same length.
 - b. Loop hoses so liquid ammonia pools in low spots.
 - c. Use aqua ammonia as an additive.
 - d. Inject ammonia less deeply in the soil.
- Near the economic optimum rate of nitrogen in corn following soybeans, a 10 lb. decrease in the rate of nitrogen applied will most likely result in the following yield response:**
 - a. 1-2 bu/A.
 - b. 5-8 bu/A.
 - c. 10-15 bu/A.
 - d. 20-30 bu/A.
- Ammonia is stored before application in tanks in the form of a:**
 - a. Liquid suspension.
 - b. Pressurized gas.
 - c. Liquid.
 - d. Vapor.
- As compared to corn following soybeans, the recommended rate of nitrogen for corn following corn is usually:**
 - a. 25% less.
 - b. 10% less.
 - c. The same.
 - d. More.
- The return to a grower with 500 corn acres of investing in improved N equipment as compared to a grower with 1000 acres is:**
 - a. Less.
 - b. The same.
 - c. More.
 - d. Doubled.
- The economically optimum rate of nitrogen applied is that rate where:**
 - a. The last pound of N is just paid for by the yield increase from that N.
 - b. The last pound of N provides a 2:1 ratio of cost vs. return.
 - c. Corn plants do not show deficiency symptoms.
 - d. The cost curve intersects the y axis.
- According to the analysis in this module, if a grower applying 140 lb/A N for corn following soybeans using a conventional manifold in 30" spacing switched to a system of uniform application, they could increase yields by:**
 - a. Less than 1 bu/A.
 - b. 1-2 bu/A.
 - c. 3-5 bu/A.
 - d. 5-8 bu/A.
- The manifold type showing the greatest amount of row to row variation is the:**
 - a. Vertical dam.
 - b. Rotaflow.
 - c. Conventional.
 - d. Ammoniator.
- Reasons a producer may want to apply anhydrous ammonia in 60-inch spacings vs. 30-inch spacings include all of the following EXCEPT:**
 - a. Decreased soil disturbance.
 - b. Reduced horsepower requirements.
 - c. More uniformity of fertilizer application across the field.
 - d. Ability to cover more acres in a day.

Fax the completed exam to Dr. Jim Vorst (765) 496-2926 (fax), (765) 494-6374 (phone), or mail to Dr. Jim Vorst, Agronomy Department, 915 West State Street, Purdue University, West Lafayette, IN 47907-2054. Please allow 30 days for processing. An exam score of 70% or higher will earn CEU credit.