Agronomy Profile



Applying nitrogen with irrigation water

Overview

Applying a portion of your crop's nitrogen (N) requirement with irrigation water, known as chemigating, is a best management practice to reduce nitrate leaching in coarse soils. New irrigation technology systems have made the process of chemigating easier.

What you should know

- Applying fertilizer through your irrigation system (chemigating) can ensure uniform application and reduce soil compaction.
- Chemigating also helps you control application timing, provides flexibility with changing weather conditions and allows for additional N when the crop is growing rapidly.
- · Do not chemigate more than one-third of your N requirements.

Action steps

- 1. Decide if chemigating N is right for you: Chemigating is managementintensive and involves additional equipment and liquid N expense, and a chemigation use permit.
- 2. Ensure proper timing: Timing your N application is critical to give corn necessary N before the pre-tassel stage. Plan your nutrient program ahead for pre-planting broadcast, planting fertilizers and pre-tassel applications. Finish with the final N requirements prior to the 16-leaf stage. Stick with your program to ensure the crop receives all necessary nutrients. When a plan is in place, make sure to properly calibrate your chemigation injection system.
- 3. Manage properly: Manage your irrigation system to prevent runoff. Inspect all components-check valves, hoses, fittings, suction line, etc. Manage travel time and amount of water applied, and then recalculate the injection system for proper application. Monitor the injection rate during the chemigation process and adjust as necessary. When finished with each N application, run clean water through the injection meter.



Applying fertilizer through your irrigation system can ensure uniform application and reduce soil compaction.



- Chemigating N can be beneficial to supplement pre-planting fertilizer application.
- · Chemigation does require extra steps, additional expense and careful management.
- Weigh the advantages and disadvantages before deciding if it will work on your farm.

NOTES:

For more information, contact:



www.nutechseed.com 1-888-647-3478