



## Enhanced Efficiency Fertilizer

### What is Grip-N?

Grip-N is UREA or UAN nitrogen that has been treated by Hi-Line Coop with DCD, a nitrification inhibitor.

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### How does it work?

DCD significantly reduces the risk of loss to denitrification and leaching for subsurface applied nitrogen. It keeps nitrogen in the plant available, stable ammonium form longer. As a result, there is more nitrogen available in the root zone so crops can access it throughout the growing season.

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### Features & Benefits:

- » Use when nitrogen is incorporated into the soil
- » DCD is not a labeled pesticide, nor kills beneficial bacteria in the soil
- » Grip-N is center pivot and irrigation compatible
- » Active ingredient DCD (dicyandiamide), is an AAPFCO defined nitrification inhibitor
- » Ask your NRCS rep about conservation practice 590, the use of an Enhanced Efficiency Fertilizer could qualify you for cost share payments

**Hi-Line Cooperative, Inc.**

203 S Perkins Ave / Elsie, NE 69134 / (308) 352-2800





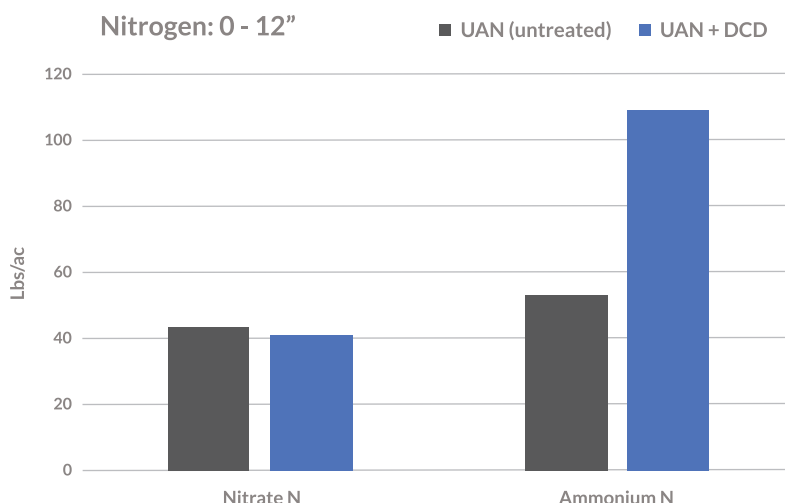
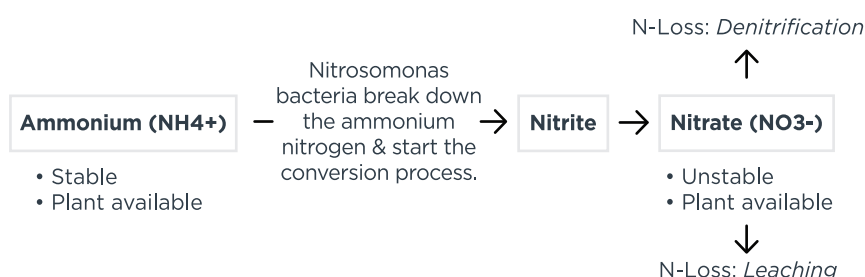
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### Below Ground Protection DCD – NITRIFICATION INHIBITOR

Nitrogen is still susceptible to loss after its below ground. Nitrosomonas bacteria convert the stable ammonium nitrogen into nitrite which then converts to nitrate. Once in the unstable nitrate form, nitrogen becomes mobile and can escape through denitrification or leaching.

DCD blocks the nitrosomonas bacteria to keep the nitrogen in the stable ammonium form longer. As a result, there is more nitrogen available in the root zone so crops can access it throughout the growing season.

### LEACHING AND DENITRIFICATION Conversion of nitrogen below ground



This UAN leaching study conducted by the University of Florida demonstrates the effectiveness of DCD to keep nitrogen in the stable ammonium form. A 0 – 12” soil sample was taken after a 0.5” water event. The graph shows significantly more nitrogen available when treated with DCD.

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