Relative Amount of Active Ingredient Needed Per Acre

Optinyte® Technology (Nitrapyrin) vs. DCD (Dicyandiamide)

N-Serve® and Instinct NXTGEN® **Nitrogen Stabilizers**

Nitrapyrin is quite effective even at relatively low rates.

Nitrapyrin is quite effective even at relatively low rates. Rates as low as 0.1 ppm have been shown to effectively inhibit certain strains of Nitrosmonas, but rates of 10 ppm has been shown to be effective against most strains (Belser and Schmidt, 1981).

Source: Robert Mullen | Nitrogen additives: What is what, and do they work?

up to

DCD

Dicyandiamide is required at a significantly larger concentration to be effective.

Dicyandiamide is required at a significantly larger concentration to be effective. Zacherl and Amberger (1990) found that DCD had to be applied at concentrations of 300 ppm to inhibit the activity of Nitrosomonas.

Source: Robert Mullen | Nitrogen additives: What is what, and do they work?

"DCD is effective only at certain rates; however, the rates used typically are not high enough to be effective.

Source: North Dakota State University I Dave Franzen

Mullen, Robert W. 2010. Nitrogen additives: What is what, and do they work?" Proceedings of the Integrated Crop Management Conference. 23. https://lib.dr.iastate.edu/icm/2010/proceedings/23 Franzen, D. 2017. Chemistry to Enhance Nitrogen and Phosphorous Efficiency. Indiana CCA Conference, 12 December, 2017, North Dakota State University

