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WINNING THE NITROGEN GAME WITH TWO PAIR

In many respects, today's farmers and growers are in a high-stakes poker game; never really knowing how many cards are in the deck, or which cards they may be dealt by the seemingly unpredictable weather. Yet, unlike in a traditional poker game, "two pair" can lead to a winning game.

The "two pair" referred to are the "two pair" that form the '4 Rs' of superior N stewardship; matching the right source with the right N rate, in combination with the right time and place of application. The N source will often dictate the time and the place of application (e.g. beneath the soil surface). The right N rate is often influenced by the anticipated affects of the other three 'rights' on crop N uptake and use efficiency. The time and place of N application depend heavily on knowledge of the soils and cropping system response, and the in-season uptake demands, in the prevailing climate and environmental conditions.

At some retail fertilizer suppliers, the N source choice may be limited for many growers. With such limited choices among N sources, growers are compelled to make even greater efforts to properly place and time their N applications.

Most growers would readily admit that as they approach each new cropping season, they weigh many risks and benefits, while constantly monitoring and anticipating weather outlooks. Some are recognizing that as realistic achievable yields increase, and crop and fertilizer prices fluctuate less predictably, they must hone their N management skills to optimize net returns and the efficient use of all cropping system management inputs and expenses: from planting and tillage systems, to seed purchases and crop protectants, to other fertilizers and any manures used. Good N management can help improve the returns from many other crop inputs.

If you have not seriously evaluated your N management program recently, in view of all available '4R' optionsin consultation with your crop adviser, fertilizer dealer, or extension agentnow would be a great time. Track the crop yield per unit of N applied this year and in previous years, to see if improvements are occurring in your fields. Also determine if there are opportunities to adjust your N management in-season, to respond to high yield environments or to the damages of drought. Ask yourself, does my N source provide flexibility in timing, rate, and place of application? Do I have a precision technology platform that provides broader options in site-specific N management than I am currently taking advantage of?

Hopefully, you have developed a crop N nutrition strategy for a winning game this year ...and every year. A winning strategy starts with an expanded understanding of the fertilizer N sources that may be available at your retailers, and an implemented plan developed in consultation with knowledgeable experts. Explore what leading farmers in your area are doing, weigh your management options, and don't be hesitant to try something new in your fields. Use the technology tools that are available to measure crop nutrition and yield differences in replicated N management comparisons in your individual fields. Maximize the power of the "two pair" that make the '4Rs' of excellent N stewardship and implement changes on your farm; for greater profits and field nutrient retention.

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Abbreviations: N = nitrogen.