

Sound science and better farm profits

That's the answer I give whenever anyone asks me why the Iowa Soybean Association is helping farmers conduct crop nutrient management studies on their farms.

When the Iowa Soybean Association Board began looking ahead at impacts environmental regulations might have on farmers, it quickly became obvious that there was no sound science on what the right rate of nitrogen should be to balance environmental concerns, productivity, and profit.

Farmers needed to know what they should do. So the growers on the promotion board decided that using checkoff money to develop the missing scientific data was a good start.

Our goals have been the same since we started these programs, but the size and scope of the project has greatly expanded as people outside of ISA learned of the value of the program. Soybean checkoff dollars have been matched with state and federal funds, allowing more producers to participate each year.

This year, growers from every county in the state have been involved in one way or another. Some are just starting out on their search for the right rates for nitrogen. Others are fine-tuning their program. Many are looking at possible environmental impacts of both their own farm and the watershed in which it lies, in hopes of determining whether their management should be modified.

I've been involved with this work as a director since 1990, but even longer on my own farm. What I've learned – what we've all learned – is there is no one-size-fits-all answer for how much nitrogen is needed for corn production. The correct rate depends on a host of factors, including the form of nitrogen used, the timing and type of the application, the soil, the season, and farm management.

What's more, the right rate frequently means a lower rate. Many farmers who have looked at nitrogen rates in replicated strip trials on their farms have found they can cut 50 lbs. or more per acre without significantly reducing yield. With nitrogen at 30-cents a pound, cutting rates by 50 lbs. leaves them with an extra \$15 an acre in their pockets.

Sometimes, though, the right rate is a higher rate. Use of end-of-season stalk nitrate testing can give growers an accurate picture of whether or not they hit the right rate. With stalk sampling in all Iowa counties this year, Iowa Soybean Association researchers can tell us more about where growers got the right rate and where they missed the target.

You'll find information on these and other nitrogen management subjects in the pages of this issue of *Field, Farm & Watershed*. But if you'd like to learn more about it, I'd encourage you to attend the Iowa Soybean Association annual Nitrogen Conference. There, you'll hear from some of the growers who participate in nitrogen studies. Iowa State University researchers and soybean association staff will present results from the 2005 studies, as well as summaries of results to date. You'll be able to ask questions and learn how to do this yourself, either on your own or through the Iowa Soybean Association On-Farm Network™. And you'll be able to meet dozens – maybe hundreds – of other Iowa farmers who share your concerns about farm profitability and environmental responsibility. I look forward to seeing you there. ♦



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Association