

Testing, Testing...

Curt Sindergard, President, Iowa Soybean Association



- ◆ A farmer on the program at the Co-op agronomy meeting says he's getting better soybean yields with foliar fertilizer. You like the looks of his numbers, but how do you know if you can duplicate this on your farm?
- ◆ An article in a farm magazine tells about a corn grower in another state who rips corn ground to about 15 inches deep. The fellow claims it improves his corn yields. Sounds good, but can you make deep tillage work on your farm?
- ◆ You've heard fertilizer is being used to excess, causing surface water problems and maybe fouling the Gulf of Mexico to the point that fisheries and shrimp harvest are being impaired. You certainly don't want to be blamed for this, but how do you know you're not part of the problem?

For four years now, the Iowa Soybean Association, through the Iowa Soybean Association On-Farm Network™, has been helping growers find answers to these and other crop production questions. While some of the issues being studied have far-reaching consequences (nitrogen and phosphorus use, for example), the research is conducted simply, one farm at a time.

All farmers need to do is follow a basic protocol developed by On-Farm Network™ research director Tracy Blackmer, which turns fields into research using replicated strips marked by GPS. Combined with a combine-yield monitor, these strips turn out valid comparisons between a standard or usual practice on the farm and a variable (the idea or practice being considered).

On-Farm Network studies this past year have provided valuable information on varied subjects. These include: the routine use of a fungicide in soybean production, the value of liming (especially on calcareous soils), the use of a rye cover crop between corn and bean crops, availability of nitrogen the first year after manure is applied, and much more. Some of the studies are conducted within watersheds, where ISA watershed programming allows monitoring of stream water for nitrate content. Farm by farm, we're learning that often, even the "best management practices" with respect to nitrogen use can be affected by a number of factors. Some variables that affect the studies are heavy rainfall at the wrong time and the role carbon plays in the availability of nitrogen from organic matter. Another significant variable is that in a corn-bean rotation some growers, who sidedress nitrogen before corn is more than 6 inches tall, can produce 200 bushel corn with less than 100 pounds of applied nitrogen.

This program didn't happen overnight! Its roots lie in a previous group of ISA directors who were looking ahead and

realized that government regulation of crop and livestock production was converging on them. Their response, rather than to ignore this impending fate, was to take a proactive approach, conducting studies on farms to determine truths about nitrogen use, soil pH, phosphorus indexing, the value of manure as a fertilizer, and more.

The ISA On-Farm Network has provided overall study findings to participating growers, legislators, and others without details that could be used to trace them back to any individual farmer. Each year, the number of participants has increased, particularly in nitrogen studies, where doing the right thing economically also has the potential to have a positive influence environmentally.

Grower experiences and management decisions based on study findings are presented within these pages. The intent of this publication is to share more of the information now available; and at the same time, challenge other Iowa crop producers to join the approximate 300 farmers already involved in on-farm studies.

We'd welcome your questions, comments, and suggestions for other topics of study. To learn more about the ISA On-Farm Network, its programs, or to sign up to participate, contact Christine Borton at 800-383-1423. You can also find more on the group's website at www.isafarmnet.com or through the Iowa Soybean Association's main website at www.iasoybeans.com. ■