



Differences in nitrogen availability were clearly visible in aerial images of manure strip trials on the Mike and Kathy Bravard farm near Jefferson.

in the past. While most of these were done with liquid swine manure, a large number also used poultry manure.

In previous years, On-Farm Network studies have shown yield responses when nitrogen is added after manure has been applied at a rate that might be expected to provide sufficient nitrogen for the crop. This year, though, with a broader scale of manure trials, the initial indication is there was less of a response from added nitrogen than in the past.

“If our assumption that less spring rainfall meant less nitrogen was lost is correct, that explains early observations of a lower response to the added nitrogen,” Blackmer says.

Stalk testing

Just prior to harvest, stalk samples for nitrate analysis were collected from

every county in the state this past fall. These were taken from all of the nitrogen and manure management strips trials, from all the fields being monitored through the On-Farm Network crop scouting network, from every field enrolled in the 100 lb. or less study, and from individual fields where growers are just wondering how they’re doing with nitrogen management.

Totals aren’t available yet, but the number samples analyzed will likely be in excess of 4000. “We’ll learn more about what application rate was optimal in these trials as we put the stalk sample results together with the yield results,” Blackmer continues. “You can have a significant nitrate difference and not have a yield difference.”

Raw results by county are now available at the On-Farm Network website (www.isafarmnet.com). A de-

tailed look at the stalk nitrate tests and what they mean will be presented at the conference.

“With this year’s stalk testing program, we now have data from every county in the state,” Blackmer says. “As we look at the initial results, we see they are as varied within counties as between counties. That underscores the importance of conducting your own tests. And with more nutrient management plans and regulations being discussed and implemented, being involved with collecting this type of information can help you deal government programs.

Right now, growers involved with the Environmental Quality Incentives Program (EQIP) can actually receive money through NRCS to help offset the cost of putting out strip trials and doing soil and stalk nitrate tests. “We’ll be discussing this at the Nitrogen Conference,” Blackmer adds. “It would be beneficial to find out how to do this on your farm, and then to learn how to adapt your management based on the results.”

Ultimate Trials

One last topic that will be addressed at the conference this year is what Blacker calls “ultimate trials.”

“Up to now, we’ve designed trials to compare nitrogen rate differences of 50 lbs.,” he says. “Many of the growers who have been involved in this for the past six years are now at a point when they’ve narrowed the optimum rate to a range of just 50 lbs. Once you get this close to where you need to be, you need to narrow the differences between the rates and strip your fields with rates that vary less. We’ll talk about how to do this at the conference.” ♦