

## Monitor Your Crop With Plant Analysis

NORCROSS, Ga. — Have you ever applied fertilizer and not seen the results you expected? Did you ever wonder why? Today, a lot of producers taking a precision approach to farming are confused over why their fertility maps don't match up with their yield maps.

It's important to remember that yield is the end result of a host of interacting factors. End-of-season analyses often come up short when trying to understand why some areas of the field yielded less than others. What's needed is some in-season assessment of how the crop is doing. Plant analysis provides just that.

Plant analysis tells you if your crop is being fed properly. Plant analysis results indicate whether or not a plant has sufficient levels of

essential nutrients. That's important when you're trying to uncover the causes of a problem.

Plant analysis provides great information for diagnosing problems. Suspected nutrient deficiencies can be confirmed. Sometimes, the information can be used to try and rectify a problem in season. Other times, as is frequently the case with phosphate or potash applications, it helps you decide how better to manage the next crop. When used with soil tests, plant analysis becomes even more powerful.

Plants growing in soil depleted in potassium or phosphorus will have lower concentrations of potassium or phosphorus. If soil fertility levels are sufficient but plants are low in phosphorus or potassium, you can conclude that there are some other factors that are limiting the plant's access to these nutrients. For instance, low plant concentrations of phosphorus or potassium can occur on fertile soils where root growth has been severely restricted. Plant analysis can help you understand if factors other than soil fertility are affecting yields.

Consider getting a complete analysis done. Laboratories offer many different analysis options. Often, it is a good idea to have plants tested for as many nutrients as you can. Why? If you're trying to figure out why one part of the field did better than another, you may need to know about nutrients you didn't think to test for. Having a complete analysis done will ensure that your plant data are complete and not limiting your investigations.

Be sure and take good samples so the test results will mean something. What plant parts to sample and when to sample depend on how a lab is set up to interpret test results. Before taking plant samples, consult your analytical lab and ask what plant parts are needed and at what growth stage to take them. You may have to do a little review of plant growth stages to get it right. Most field guides for crops have pictures of plant growth stages in them. Your lab will tell you all the details you need to know, like what to put the samples in, how many plants to sample, and how quickly to mail them in.

Plant samples can be collected more than once in a season. Have you ever suspected that your crop was behaving differently throughout the season? Maybe it was off to a good start, then did poorly later on, as in compacted soils. Sometimes, a deficiency symptom may be seen early in the season and then disappear. Did the crop overcome the problem or is there still a hidden nutrient deficiency? Taking plant samples at different growth stages can help you interpret whether or not your crop is being properly fed all season long. Which growth stages to choose depends on the lab's ability to interpret the results. Choose only the growth stages for which the lab has good information.

Plant analyses are an integral part of good management. They are part of an overall package of best management practices including scouting, soil testing, and good record keeping. Take a few tests this season. You may find some ways to improve your yields and your profits.

For more information, contact Dr. T. Scott Murrell, Northcentral Director, PPI, 3579 Commonwealth Rd., Woodbury, MN 55125, (651) 264-1936, e-mail: smurrell@ppi-far.org.

### ❖ PASTURE Ponderings ❖

(Continued from Page 15)

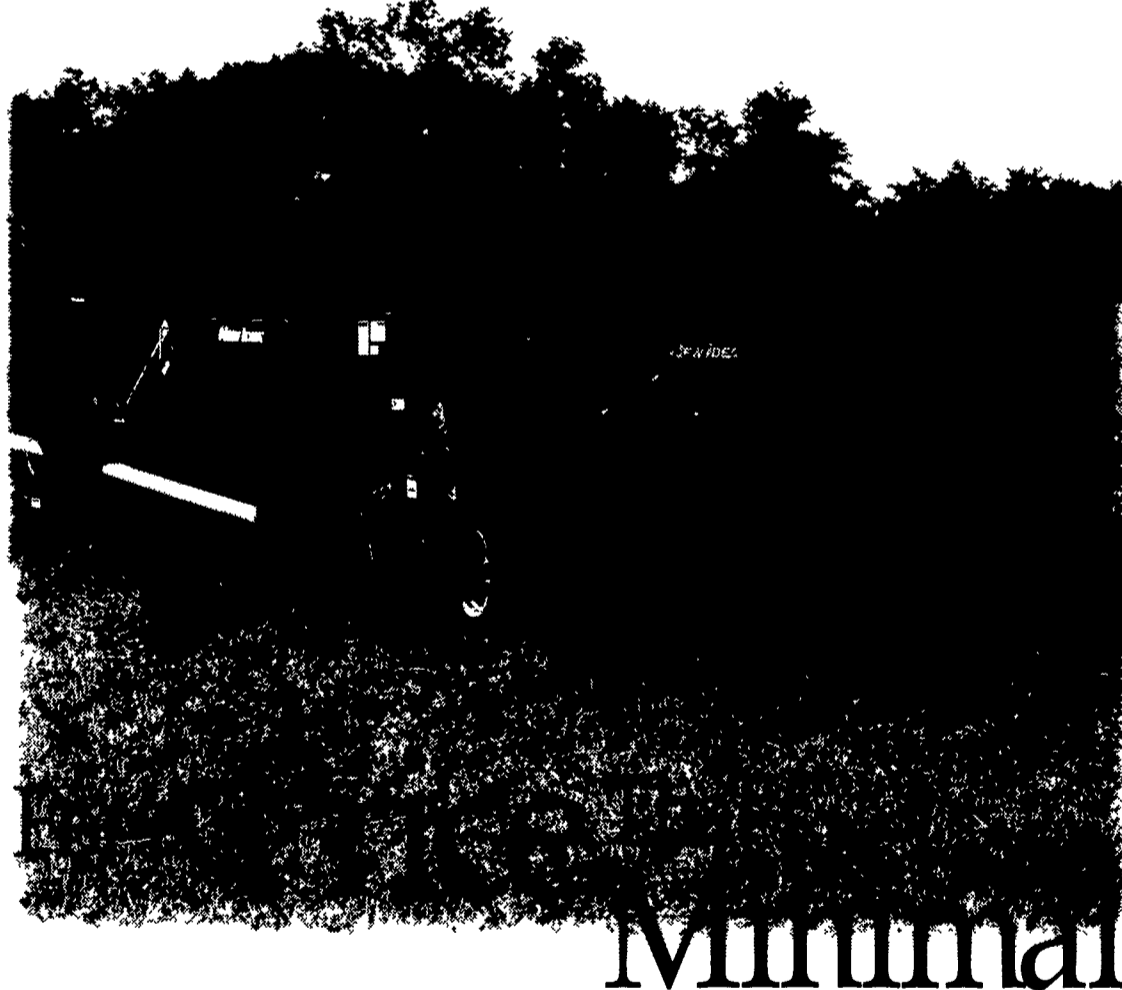
you have a different type of livestock that you have nothing to learn from their system.

If you would like additional information on grazing, you can stop by any of our local county NRCS offices and discuss your needs with them. You can also give me a call at 717-237-2221 or write to me at NRCS, One Credit Union Place, Suite 340, Harrisburg, PA 17110-2993. I will also be at many of the listed pasture walks and grazing field days over the grazing season.

Until next time, happy grazing!



# Maximize Your Yield Potential



When it comes to improving Relative Feed Value and maximizing the Crude Protein in hay, nothing outperforms the New Idea® 5209 Disc Mower Conditioner. Its high-speed disc cutterbar glides through fields with ease, even in extreme conditions. And the unique Ti-Cor® Conditioning Rolls gently condition the stems, speeding drydown.

The 5209's reliable design keeps you mowing and conditioning year after year. With the segmented cutterbar driveshaft, a New Idea innovation, the cutterbar is truly modular, which makes for easy maintenance.

To see the disc mower conditioner that'll exceed your expectations — not your budget, visit your AGCO® New Idea dealer today.



**NEW IDEA®**

BUILT FOR THE BOTTOM LINE

## See Your AGCO - New Idea Dealer Listed Below.

**Delaware**  
Georgetown  
Baxter Farms

**Maryland**  
Dayton  
J.D. Mullinix

**Pennsylvania**  
**Bechtelsville**  
Miller Equipment  
**Bethel**  
Zimmerman's Farm Service  
**Carlisle**  
Carlisle Farm Service  
**Chambersburg**  
Chambersburg Farm Service

**Glen Rock**  
Wertz Farm & Power Equip.

**Greencastle**  
Meyers Implements

**Honesdale**  
Marshall Machinery, Inc.

**Klingerstown**  
Stanley's Farm Service

**Lebanon**  
Umbergers of Fontana

**Mercer**  
Ralph W. Kyle

**Mifflinburg**  
B, S & B Repair

**Oakland Mills**  
Peoples Sales & Service

**Quakertown**  
C. J. Wonsidler

**Quarryville**  
A. L. Herr