

# DuPont Pioneer Experts Provide Fall Management Tips

## Fall soil sampling, fertility management and weed control improve spring productivity

**DES MOINES, Iowa**, Oct. 28, 2013 - Strong genetic potential and proven crop management practices are vital to making the most out of every acre. According to DuPont Pioneer agronomy experts, focusing on management practices this fall will help maximize potential in your fields next season.

"Advances in management help maximize the gains in productivity that improved genetics make possible," says Brent Wilson, DuPont Pioneer technical services manager in Iowa. "As growers plan for the next season, it's a good time to evaluate key management decisions - such as fertility programs - that help set the stage for success in 2014."

### Soil sampling

Fertilizers are significant variable costs in production and it pays to assess crop nutrients in fields. Soil testing is a relatively inexpensive but powerful management tool that determines nutrient levels in fields. With knowledge gained from soil tests, you can make more informed crop input decisions to minimize risk and maximize profitability.

DuPont Pioneer agronomists recommend sampling soils at the same time every year on a two- to four-year rotation for a given field. Sampling three to six months prior to the next crop allows enough time for any pH or nutrient adjustments. For many crops, the optimum time to take a soil sample is in late fall during post-harvest. For assistance with proper soil sampling and selection of a soil-testing laboratory, contact your local DuPont Pioneer agronomist or extension office.

### Fall nitrogen application

Nitrogen (N) is typically the most yield-limiting nutrient, and it's one of the largest input costs for corn production. Fall-applied N is at highest risk for loss through leaching or denitrification.

"This fall, consider the benefit of improved utilization efficiency gained by applying N closer to the time the crop uses it," Wilson suggests. "Take the time to rethink the number of acres covered and your N application rate."

For example, this past spring several fields with fall-applied N had leaching problems following excess spring moisture. Growers may not have lost as much of their investment if they had waited until spring to apply.

"Fall applications are largely driven by logistics and an effort to spread out the workload. If you have the equipment and manpower, it's better to wait to apply nitrogen in the spring," says Neal Hoss, DuPont Pioneer technical services manager in Illinois and Indiana. "If you don't have the capacity for spring applications, target fields with the least amount of risk and use nitrogen inhibitors to minimize the potential loss of your nitrogen investment."

### Timing phosphorus and potassium fertility

To improve phosphorus (P) and potassium (K) management and maximize the return on your investment, consider precision soil sampling, such as management zone and grid sampling, in conjunction with variable rate technology. The return on fertilizer investment is greatest for low-testing soils. With variable input prices, avoiding unnecessary fertilization of high-testing soils increases profitability.

P and K fertilizers applied in the fall are more stable, offering less risk than fall-applied N. If you're trying to reduce your spring workload, P and K fertilizer applications can easily be done in the fall, when weather and soil conditions are generally not as wet, which diminishes concerns about compaction.

If weather or a late harvest delays application, avoid applying P and K on frozen or snow-covered fields due to a high risk of loss with surface runoff. In such cases, application prior to planting in the spring is just as effective, as long as soil test levels are above the very low range.

### **Fall weed control**

Heavy weed cover in the spring causes the soil to remain cool longer, delaying tillage and planting. The winter annuals may also provide a nest for insects that attack emerging crops. In addition, if spring brings cold, wet conditions again next year, you will have a limited window for field preparation before planting.

"In the fall, you should assess your weed control program and determine which fields are going to need more attention than others," recommends Hoss. "In areas such as Illinois and Indiana, a fall herbicide application may be beneficial because it provides a different mode of action for weed control."

Fall herbicide applications provide greater spring flexibility and improved weed control of winter annuals. Burndown and residual applications in the fall help prevent weeds from producing seeds in the spring, giving you a head start on weed control.

Remember that a number of factors influence spring weed growth, and fall applications may not always eliminate the need for a spring burndown treatment. Be sure to factor in weed populations and planting schedules when developing an effective control program.

### **Additional management considerations**

Depending on harvest timing, additional fall management practices can be beneficial as you set the stage for 2014. These may include crop rotation, cover crops and fall tillage, which generally tend to be a multiyear decision based on personal preferences and specific to your farm. If you're looking for additional insight, consider working with your DuPont Pioneer agronomist to evaluate your current practices and determine the best options for your farm.

Post-harvest is also a good time to evaluate your management practices alongside yield data using Pioneer<sup>®</sup> Field360<sup>™</sup> Select software. Interactive field maps provide field-by-field visuals to help you evaluate your management decisions, including fertilizer applications and seeding rates, alongside historical performance data.

By working with your Pioneer sales professional, you can use what you learned this year to develop management zones and adjust your cropping plan for next year. For additional information on how you can maximize your crop management practices, contact your local Pioneer sales professional or visit [pioneer.com](http://pioneer.com).