Better Crops/Vol. 91 (2007, No. 1) **7** 

grows best when soil pH is between 6.0 and 7.0, while fine fescues grow best in the more acidic range of 5.5 to

Putting the three attributes together—P, K, and pH—two-thirds of the soils tested showed a possible limitation arising from one or more of the three. Soil testing would benefit the performance of the majority of lawns. It also identifies lawns where further P inputs are not required, helping to protect the environment.

Since P and K are nutrients that accumulate in the soil, fertilizing usually builds up the soil test level, as long as the amount applied exceeds removal. If all clippings are removed from a vigorous lawn, the annual nutrient removal amounts to about 0.5 to 2 lb of P2O5 and 1 to 5 lb of K<sub>2</sub>O per thousand square feet. If the clippings are left on the sod, most of the P and K is recycled. Where soil tests are low, continued fertilization will eventually increase them. It is unnecessary to continue building up soil test P once it is in the high range.

Does a buildup of P in a turf soil increase the risk of runoff polluting water? This question was investigated in research at Cornell University. In the fall of 2003, 68 plots were monitored for runoff water. Half of the plots were bare soil, and the other half had turf. The Morgan soil test P levels in these plots ranged from 4 to 20 ppm in the top 6 in., and from 8 to 40 ppm in the

top inch.

The presence of turfgrass reduced the P load in runoff from these plots by 36%. For bare soils, the P load in runoff increased six-fold with increasing soil test. Where the soils were protected by turf, there was no significant increase in runoff P load as soil tests increased.

These data suggest that buildup to a soil test P level sufficient for turfgrass nutrition would not constitute a risk to water quality in terms of runoff P load. Of course, it would be important to ensure that P fertilizer is applied using best management practices:

- At recommended rates
- Avoiding spillage onto paved surfaces
- Keeping away from water flow paths
- In balance with other nutrients
- With appropriate timing BC

## IPNI/FAR Project NY-07F

Dr. Soldat is Assistant Professor, Dept. of Soil Science, University of Wisconsin, Madison. Dr. Petrovic is Professor, Dept. of Horticulture, and Dr. Rao is Senior Extension Associate Director, Cornell Nutrient Analysis Laboratory, Dept. of Crop and Soil Sciences, Cornell University, Ithaca, NY 14850. Dr. Bruulsema is Director, IPNI Northeast Region, North America Program, located at Guelph, Ontario.

## 2007 InfoAg Conference Schedule



ates for two regional Information Agriculture Conferences and the biennial international InfoAg Conference were announced earlier by Foundation for Agronomic Research (FAR) President Dr. Harold F. Reetz and IPNI President Dr. Terry L. Roberts.

InfoAg Mid-South is set for February 7-8 at the Bost Extension Center, Mississippi State University, Starkville. This regional event will focus on the application of precision technology and information management for cotton, rice, soybeans, and other crops of interest in the Mid-South.

InfoAg Northwest is scheduled for February 20-21, at the Three Rivers Convention Center in Kennewick, Washington. This is a first-time conference in the Northwest agricultural region. InfoAg Northwest will highlight precision equipment, practices, and the

people who have successfully incorporated them into their grain crop, fruit, vegetable, and potato production systems.

InfoAg 2007, the popular national/international edition of the Information Agriculture Conference, is set for July 10-12. The location is the Crowne Plaza in Springfield, Illinois, the same as for InfoAg 2005. Since the first conference in 1995, InfoAg has been a leading event in precision agriculture. InfoAg 2007 will present a wide range of educational and networking opportunities for manufacturers, practitioners, producers, and anyone interested in site-specific techniques and information management.

For more information about the 2007 InfoAg Conferences, please visit the website: >www.infoag.org<. Or call: 217-762-8655. BC