Current Nutrient Application Practices in Ohio Agriculture

Two surveys conducted in winter 2013 provide the first real quantification of nutrient application practices and attitudes toward phosphorus as a water quality issue. A survey of participants in the March, 2013 Conservation Tillage Conference (CTC), Ada, OH and a mail survey to Ohio Agricultural Retailers. The CTC Survey was answered by 136 farmer and 157 agricultural industry meeting participants. The Ohio Agricultural Retailers survey response was from 54 members representing 4,040,500 acres of nutrient application in both the Lake Erie and Ohio River Watersheds. Both surveys were summarized by Ohio State University Extension.

The CTC participants were given the statement, “Farm Phosphorus loss is a significant problem to Ohio's waters.” using a 5 response likert scale ranging from strongly agree to strongly disagree. Farmer response was seventy one percent agree with the statement with twenty percent neutral and 8 percent in disagreement. Similar responses were related by the ag industry participants.

The Ohio Ag Retailers Survey asked about soil sampling practices on Ohio farms. On 82% of the acres were being sampled by Ohio State University Extension recommended methods. Eleven percent of the acres were sampled but with sample areas of greater than 25 acres. A total of seven percent of the acres were not sampled or sample was older than 5 years. The CTC survey result showed a similar trend.

On the question of application timing in relation to calendar months the surveys revealed the following. For the Ohio Ag Retailers Survey, fall applications defined as September through October accounted for 44%, winter (December –February) were 16%, spring (March-May) are 33% and summer accounted for seven percent of the applications. The CTC survey followed a similar trend with slightly higher fall and spring application timings.

A question was asked about application placement and incorporation. The Ohio Ag Retailer Survey indicated application of broadcast P then tillage after 7 days happened on 15% of applications, broadcast then tillage within 7 days on 18% of the applications, broadcast with no tillage on 31% of the applications, incorporated using strip tillage on 4% of the applications and incorporated with the planter for 33% of the applications.