Yield Goals: Their Economic Reality in Site-Specific and Conventional Farming. (A08-bullock131130-Oral)

Authors:

• D.S.Bullock* - Univ of Ill Dept Agr and Cons Economics

Abstract:

Formulas based on yield goals have been used often in the past to recommend to farmers rates of fertilizer application. To a degree, these formulas were developed based on experiments and experience. But they were always simply rules of thumb, meant to serve whole states or regions, and meant to guide farmers on average. But the whole point of precision agriculture is to not do things on average. This presentation discusses the possible economic flaws of traditional yield-goal based fertilizer application rate formulas, and suggests two directions for future research to develop methods of making site-specific recommendations. First, more information about the function relating yields to fertilizer application rates needs to be gathered. This can be done through more long-term region-wide agronomic experimentation. The costs of such experimentation will be drastically decreased by precision technology. Second, research is needed that will enable farmers to measure the site-specific characteristics of their fields cheaply and accurately.

Corresponding Author Information:

David Bullock phone: 217 333-5510 University of Illinois fax: 217 333-5538

1301 W. Gregory Dr. e-mail: dsbulloc@uiuc.edu

Urbana, IL 61801

Presentation Information:

Presentation Date: Monday, November 11, 2002

Presentation Time: 9:30 am

Keywords:

site-specific, yield goals, economic optimality