

2010-11 PFT Success Report

Title: Managing Soil Nutrients and Fertility

PFT: Crop Production

The Situation

Crops with high yield potential, currently grown in Kansas, cannot reach optimum yields without ensuring an adequate and balanced supply of nutrients. Conversely, excessive levels of soil nutrients often generate excessive nutrients over time, increasing the risk of ground and surface water contamination. The diversity of soils and environmental conditions in Kansas presents challenges for optimum soil nutrient management. Extension programs and applied research on soil fertility and nutrient management will be increasingly important to achieve optimum crop production while minimizing the potential environmental impacts.

What We Did

Information on soil fertility and nutrient management was presented in diverse formats including electronic newsletters, press releases, and county/district based meetings. One emphasis for 2010-11 was the "Soil Fertility Schools", and a total of 21 counties completed this training program. Furthermore, demonstration plots provided comparisons of traditional farmer's practice versus the use of sensors and slow release Nitrogen (N) sources for improved N use efficiency. Regional educational efforts focused on specific issues like schools and field days on liming and issues with low pH soils and potassium management.

Outcomes

Improved nutrient use efficiency by increase in yields while minimizing environmental impact. Increased number of producers implementing nutrient management plans. Increase in the number of producers and acres involved in soil testing programs.

Success Story

<from an email received from one producer in Lebo, KS>

"... the fertility workshops held in Emporia by K-State Research and Extension... it was a very informative meeting on how to manage fertilizer costs for our area. Our fertilizer inputs are among the highest bills we have each year, so we try to be as efficient as possible without sacrificing grain yields.

... In my farm operation for the 2012 season, I will save \$6,000 over 500 acres of corn and sorghum in fertilizer costs due to K-State's Extension program. Thanks for your support of Kansas Agriculture!"

Contact

Name: Dorivar Ruiz Diaz and Doug Shoup

Title: Assistant Professor

Address: 2711 Throckmorton

Phone: 785-532-6183

E-mail: ruizdiaz@ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Gary M. Pierzynski, Interim Director.