OHIO STATE UNIVERSITY EXTENSION

Capturing Program Impacts of Fertilizer Certification Training

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INTRODUCTION

In 2014 Ohio passed legislation requiring all individuals who apply fertilizer or manure to agricultural fields attend a Fertilizer Applicator Certification Training (FACT). Tasked as the sole provider of FACT programs, OSU Extension developed new curriculum to achieve the objectives of the legislation.

Since 2014, OSU Extension educators have delivered the curriculum at over 200 programs throughout the state, reaching an audience of over 12,600 applicators. As these programs will continue to be offered on a widespread basis, it is critical to assess impact of these programs and drive programming in the future.

This poster summarizes program evaluation results collected in 2014-15. These results can enhance understanding of farmer perspectives and practices as a framework to guide delivery of programs to effectively engage farmers with differing perceptions about the interaction between soil health and water quality issues in Ohio.

Increasing water quality concerns have led to increased scrutiny and regulation on farms throughout Ohio.

An equipment demonstration by a local consulting company provided insight to how the local farmer developed his nutrient management plan.

METHODS

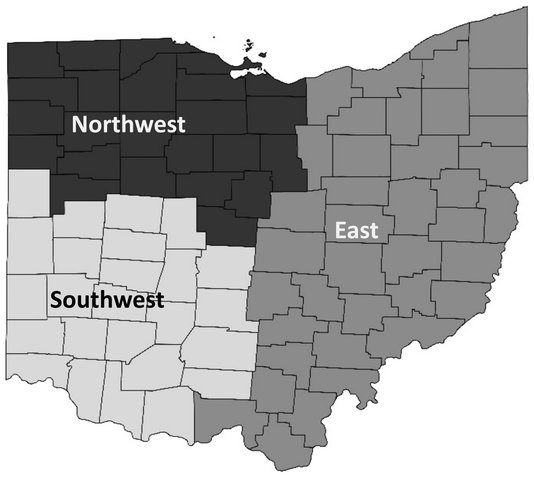
OSUE delivered 48 three-hour FACT trainings in 35 counties throughout the state, reaching an audience of 2,941 attendees in 2014-15.

Program evaluation surveys were distributed at the conclusion of each training. 1,253 surveys were collected (42.6% response rate).

Likert scale ratings for level of agreement with several statements were analyzed with respect to various demographic factors using the Kruskal-Wallace rank sum test (p=0.05) followed by a multiple comparison test (p=0.05). Chi-Square analyses (p=0.05), followed by post-hoc tests, were used to analyze results of multiple-choice questions.

Respondents were grouped based on education level (high school or college), size of farm (less than 1,000 acres or greater than 1,000 acres), and region of residence (northwest, southwest, or east).

Response and Grouping Breakdown		
Education		
High School	566	45%
College	439	35%
Acres Farmed		
0-1000	832	66.40%
1001-2501+	268	21.40%
Region		
Northwest	495	39.50%
Southwest	368	29.40%
East	334	26.70%

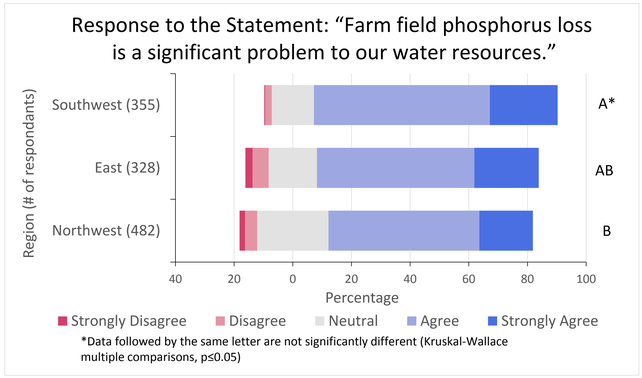


Regional boundaries were based on geography, watersheds, soil types, and cropping practices.

RESULTS AND DISCUSSION

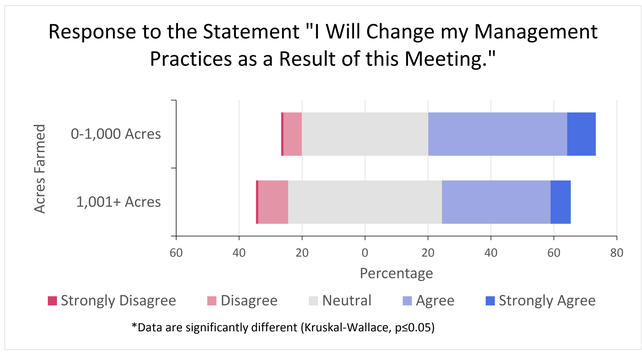
Did perceptions about water quality differ in regions of the state?

Yes. Respondents in northwest Ohio tended to agree less than respondents in southwest Ohio that phosphorus loss from farm fields is a significant problem for water resources.



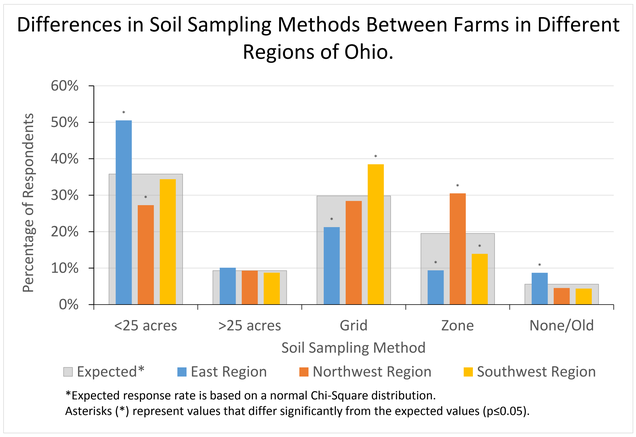
Do farms of different sizes plan to change their nutrient practices as a result of the meeting?

Farms of less than 1,000 acres are more willing to change their nutrient management practices as a result of the Fertilizer Applicator Certification meeting than farms larger than 1,000 acres.



Do soil sampling methods vary among farmers in different regions of the state?

Yes. Farmers in the northwest region were most likely to utilize zone sampling, farmers in the southwest were most likely to utilize grid sampling, and farmers in the east region were most likely to use a "traditional" soil sampling approach, or not sample at all.



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