October 30, 2013

Agricultural News Release

For more information, contact Mark Badertscher
OSU Extension Educator, Agriculture and Natural Resources
419-674-2297 or badertscher.4@osu.edu

Soybean Research Conducted in Hardin County
by Mark Badertscher, OSU Extension Educator

Ohio State University Extension, Hardin County – Five Hardin County soybean fields were part of a statewide OSU Extension Soybean Yield-Limiting Factor Study to determine how to increase production, profits, and quality for local farmers. This research was conducted in 60-70 fields in Ohio, collecting information about soil quality, pests, and management practices. Fields were mapped using Global Positioning System (GPS) points based on two normal production areas and one low production area. Separate soil tests were taken in each area for soil quality and presence of soybean cyst nematode. Field scouting was done to determine the type and amount of insects, weeds, and diseases at two different stages of crop growth, while leaf samples were collected at the flowering growth stage of the soybean plants.

A cultural practices survey was completed identifying crop rotation, tillage methods, seed information, planting information, field drainage, fertilization, and pest management. Harvest date and yield data was collected for each of the three areas in each field. A grain sample was taken from each area for lab analysis of protein and oil content. Data collection was a collaborative effort among faculty, graduate students, and Extension personnel. Soil quality factors, pests, and soybean yield will be correlated to management practices using multivariate analysis conducted by the Ohio State Statistical Consulting Center.
Research results and recommendations will be shared as statewide information to improve soybean production in Ohio. Laura Lindsey, Assistant Professor of Soybean and Small Grain Production, Department of Horticulture and Crop Science at The Ohio State University, was the lead researcher with this study. Cooperating Hardin County farmers participating in this study were Craig Geberin, Ted Griffith, Jan Layman, Paul Ralston, and Mark Watkins. The study was made possible in part by a grant from the Ohio Soybean Council.