Corn Hybrid Agronomic and Grain Quality Assessment for Low-Input Farms. (C03-rzewnicki161335-Poster)

Authors:

- P.E.Rzewnicki* - *Ohio State University*
- P.R.Thomison - *Ohio State University*

Abstract:

A statewide on-farm study evaluated the agronomic and grain quality performance of corn hybrids selected by producers and specialty corn types. Varieties were grown on 13 certified organic farms as well as on several university sites with conventional inputs. The trial also assessed the effects of plot width and reduced plant population on grain quality. Six specialty corns were established at three of the participating farms. Seed Consultants 1091, Bird Hybrids B54V, and Frenchs 440 were not significantly different from each other as the highest yielding group. Nitrogen was the single most significant soil nutrient associated with yield. Nearly all variation in yield averages across participating farms could be attributed to variation in nitrogen levels. Positive correlation for harvest moisture and test weight between on-farm results and university test sites was significant. However, there was not a strong correlation of yields for 2001 as was found a year earlier. Plots wider than 12.2 m per variety were found to be necessary to evaluate grain quality characteristics, especially protein, starch and lysine. Enhanced protein and lysine were found with reduced plant population.

Corresponding Author Information:

Phil Rzewnicki
Ohio State University
2021 Coffey Rd
Columbus, OH 43210

phone: (614) 292-0117
fax: (614) 292-7162
e-mail: rzewnicki.1@osu.edu

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