

OHIO STATE UNIVERSITY EXTENSION KNOWS

COMPARING CORN YIELD RESPONSE TO NITROGEN RATES IN MINERAL AND MUCK SOILS



SO YOU WANT TO KNOW HOW CORN RESPONDS TO NITROGEN IN MINERAL COMPARED TO MUCK SOILS?

Learn results from three years of nitrogen rate trials in mineral soils vs. three years of nitrogen rate trials in muck soils with high organic matter content. Find out how Ohio corn producers are moving toward using the best economic rate as an answer to tighter budgets and environmental concerns.

WHAT YOU'LL NEED TO KNOW:

- Nitrogen rates applied to corn have changed over the years to produce a bushel of corn depending on soil types, mineralization, organic matter, and other factors.
- Corn hybrids today have more starch and less protein compared to hybrids grown 20 years ago.
- Five different sidedress rates will be compared with three replications in each trial.
- Although additional nitrogen can increase corn yields, Ohio corn producers are moving toward using the best economic rate as an answer to tighter budgets and environmental concerns.
- The Maximum Return to Nitrogen method is being recommended in the state with the new update of the Tri-State Fertilizer Recommendations in 2019.
- On-farm research such as these trials provide evidence of the results of this method for farmers to consider when managing their nitrogen dollars.

NEEDED TO BE SUCCESSFUL:

- Review on-farm research studies in nitrogen rate
- Plug in your own data into the Corn Nitrogen Rate Calculator
- Set up replicated trials in your own field with OSU Plots App
- Work with your county OSU Extension educator to analyze results
- Make changes in your operation based on what you learn

CONTACT INFORMATION

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