2023 Michigan Wheat Field Day Soil Fertility & Nutrient Management Research Kurt Steinke, Soil Fertility <u>soil.msu.edu</u> Lane Suplito, Graduate Student

Soil Fertility: More Inputs or the "Right" Inputs

When is the right time to start thinking about managing winter wheat? Examine the following pre-plant soil test report and consider what needs to be addressed: 55 ppm (BrayP1), 68 ppm K, 245ppm Mg, 1200 ppm Ca, 12 ppm S, 8.2 CEC, 7.2 soil pH. What should be applied and when? Does planting date matter?

WHY? Take a look at the Feekes 7 wheat photos below involving various autumn nutrient management practices. Observe any differences?









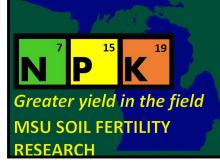


Integrating Fertilizer and Fungicide Strategies

Does autumn nutrient management influence fungicide application timing and strategies? Trials continuing evaluating 2 rates of autumn starter, 5 fungicide application combinations, and late-season applied N (F7) on yield, straw, and grain quality.

2022 field trials showed the following:

- Autumn starter improved grain and straw yield, tiller counts, head counts, canopy coverage, and greenness
- Little disease pressure thus few fungicide strategy impacts
- Cool, wet spring 2022 conditions resulted in late-season N improving grain protein content
- Take a pre-plant soil sample!



Additional research results and observations always available at <u>soil.msu.edu</u>