

2016 Michigan Wheat Field Day Soil Fertility & Nutrient Management Research

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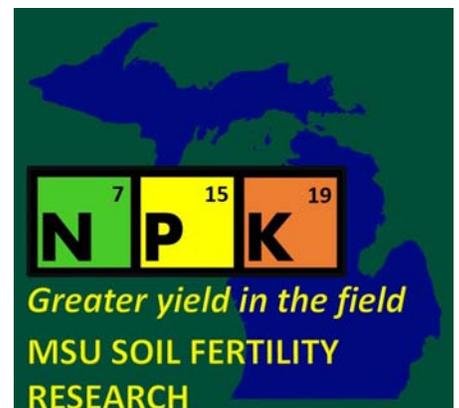
Where to Invest Your Wheat Dollars?

- **WHAT?** Agricultural inputs must be able to withstand market price fluctuations to pay for yield increases
- **WHY?** Wheat may be perceived as requiring greater input and management costs compared to other row crops which may negate price incentives
- Duplicate trials underway evaluating both soft red and soft white wheat response to individual and combination treatments
- N-only, high-N, urease inhibitor, nitrification inhibitor, plant growth regulator, fungicide, and micronutrients



Other Points to Ponder:

- Intensive management and high N are *NOT* similar terms. Wheat can be intensively managed with lower rates of N, and higher rates of N application may not always result in intensive management.
- Planting date can be a critical factor when discussing intensively managed wheat production.
- Autumn tiller production has continued to provide the most consistent positive correlation to grain yield.
- Research results and observations always available at soil.msu.edu



Plant Growth Regulators (PGR)

- **WHAT?** The use of plant growth regulators in wheat production
- **WHY?** Palisade ® EC† is a plant growth regulator labeled for wheat.
- **2012-2015 Results:**
 - 5% yield increase across 4 site years
 - Decreased height 2.8 inches and reduced plant lodging by 67-83% in years when lodging occurred
 - 12 oz./A of Palisade ® EC at Feekes 5/6 was most optimal rate and timing

Severity of plant lodging from June 22, 2015 severe thunderstorm. Wheat not receiving a PGR application resulted in severe plant lodging (pictured top right) while wheat receiving a PGR application had minimal plant lodging (pictured bottom right). Wheat cultivar pictured is “Red Dragon” which has an average plant height of 37 inches.



† Mention of a trademark, proprietary product, or vendor does not constitute an endorsement compared to similar products or suppliers.