

**Project Title:**

Effects of Seed Treatment on Germination and Growth Performance of Spring Wheat

**Objective:**

To test the various growth hormone seed treatments on spring wheat's early vigor, growth, yield, and quality.

**Personnel:**

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**Summary:**

MT Sidney spring wheat variety was planted and applied with four different Miller Chemical & Fertilizer, LLC seed treatments: Cytokin, Cytoplex, WIN-ASC, and Miller 2361. Two control treatments were used: one was treated with CruiserMaxx Vibrance Cereal (farmer's practice), and the other was untreated.

Yield, quality, and other in-season measurements were insignificant (data not presented). The falling numbers (indicative of late-season amylase activity) are well above the critical level (320 seconds).

**Table 1.** Management Information

<b>Seeding date:</b>	5/5/2023 (125 Julian)	<b>Field Location:</b>	R7
<b>Seeding rate:</b>	24 plants/ft <sup>2</sup>	<b>Harvest date:</b>	8/15/2023 (227 Julian)
<b>Previous crop:</b>	Alfalfa	<b>Soil type:</b>	Flathead Sandy Loam
<b>Herbicide:</b>	CleansweepM 1pt/A, Axial Bold 15oz/A	<b>Tillage:</b>	conventional
<b>Insecticide:</b>	N/A	<b>Soil residual nutrient (NO<sub>3</sub><sup>-</sup>, P, K lb/A):</b>	81.5-5-58 (Fall, 2022)
<b>Fungicide:</b>	N/A	<b>Nutrient fertilizer applied (N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O lb/A):</b>	90-35-60 (Spring, 2023)