

Barley Plant Growth Regulator

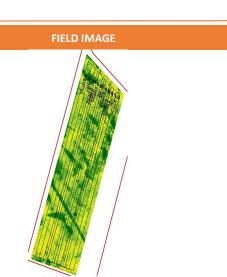
Trial ID: 2021-BPGR01 — R.M. of Woodlands

Objective: The purpose of this project is to quantify the impact of two different plant growth regulators on plant height, lodging, yield and quality of barley

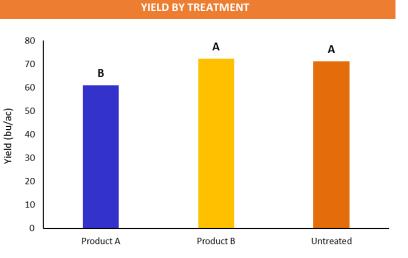
| TRIAL INFORMATION | | | | | | |
|----------------------|--|--|--|--|--|--|
| Treatment | Product A vs Product B vs Untreated | | | | | |
| Location | Marquette | | | | | |
| Previous Crop | Soybeans | | | | | |
| Soil Texture | Clay | | | | | |
| Tillage | Conventional Tillage | | | | | |
| Planting Date | April 27, 2021 | | | | | |
| Variety | Claymore | | | | | |
| Row Spacing | 10" | | | | | |
| Seeding Rate | 140 lbs/ac | | | | | |
| Fertilizer (N-P-K-S) | 100N 40P | | | | | |
| Application Date | June 07 & 10, 2021 | | | | | |
| Application Timing | Product B—GS30 (5L), Product A—GS32 (6L) | | | | | |
| Application Rate | Product B—40 ac/jug, Product A—24 ac/jug | | | | | |
| Harvest Date | August 16, 2021 | | | | | |

| BARLEY RESPONSE | | | | | | | | |
|-----------------|-----------------|------------------|--------------------|--------------|--|--|--|--|
| | Plant | Lodging | | | | | | |
| | Height (cm) | Incidence (%) | Severity (1-10) | Protein % | | | | |
| Product A | 49 ^B | 0 | 1 | 14.4 | | | | |
| Product B | 59 ^A | 0 | 1 | 14.0 | | | | |
| Untreated | 59 ^A | 0 | 1 | 14.4 | | | | |

| OVERALL YIELD | | | | | |
|---------------|-------------------|--|--|--|--|
| | Mean (bu/ac) | | | | |
| Product A | 61.0 ^B | | | | |
| Product B | 72.4 ^A | | | | |
| Untreated | 71.3 ^A | | | | |
| P-Value | 0.0023 | | | | |
| cv | 4.11% | | | | |
| Significance | Yes | | | | |



| PRECIPITATION [†] | | | | | | | | |
|----------------------------|-----|------|------|-----|-------|--|--|--|
| | May | June | July | Aug | Total | | | |
| Rainfall | 36 | 32 | 12 | 14 | 95 | | | |
| Normal | 51 | 65 | 55 | 40 | 211 | | | |



Summary: There was a significant yield difference between Product A vs. Product B plant growth regulator application and the untreated check. There was a significant reduction in plant height with the application of Product A plant growth regulator. There was no lodging observed within the trial. Rainfall was well below normal for the growing season.



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