

CANOLA PRE-HARVEST TREATMENT DEMONSTRATION

Early in the 2025 growing season, Gateway Research Organization (GRO) established a fertility product trial at one of its research sites. Due to a planting error, the trial could not proceed as originally planned. After reviewing options for how to best utilize the seeded plots, GRO staff decided to pivot the trial to evaluate pre-harvest treatments on the canola plots.

Producer interest in this topic continues to grow, particularly in achieving more uniform crop maturity and dry-down prior to harvesting. Uniform plants can improve harvest efficiency and contribute to producing high-quality grain. However, input costs must still be considered, as some pre-harvest products are a significant expense. Demonstrating product performance and potential rate adjustments can help producers make more informed and economical management decisions.

TRIAL DESIGN:

To minimize the influence of the original fertility treatments applied earlier, the trial design was adjusted. Plots from the initial fertility trial were grouped together so that eight adjacent plots were combined into a single treatment strip. These treatment strips were then randomly replicated three times across the length of the field.

This approach reduced the potential impact of the original plot-by-plot fertility applications and allowed the site to be used effectively for evaluating pre-harvest treatments.

AGRONOMICS AND TREATMENTS:

Seeded: May 28, 2025

Fertilizer:

150 lbs/ac Actual N

35 lbs/ac and 21.8 lbs/ac Actual P

80 lbs/ac Actual K

10 lbs/ac Actual S

Herbicides: Avadex MicroActiv @ 19.3 lbs/ac on May 14, 2025

Liberty @ 1.6 l/ac on June 25, 2025

Pre-harvest treatments applied: September 17, 2025

Harvested: October 7, 2025

Three Treatments:

Reglone Ion – 100% labelled rate

Reglone Ion – 100% rate with fulvic acid added

Reglone Ion – 75% rate with fulvic acid added

MEASUREMENTS:

Following the pre-harvest treatment application, plant response was monitored by measuring the length of green stem remaining below the crop canopy at 6 days after treatment and again 14 days after first observation. This measurement provided an indication of how quickly plants were senescing and drying down following application and by comparing the green stem lengths between treatments, there could be a difference in the

relative effectiveness of the different application rates and product combinations in promoting plant dry-down.

OBSERVATIONS AND DISCUSSION:

This demonstration provided an opportunity to explore potential options for improving crop dry-down while considering product costs. Reglone Ion applied at full rate with fulvic acid seemed to speed up stem dry down initially, but when we checked again after two weeks, the pattern was not clear, so we cannot make any firm conclusions at this point. However, further testing across multiple environments and growing seasons would be needed to confirm the consistency of these results.

While the site was not originally designed for this purpose, adapting the trial allowed GRO to generate practical observations that may be of interest to producers considering different options with their pre-harvest management.

FUTURE RECOMMENDATIONS:

Future demonstrations could further evaluate reduced-rate strategies, additional product combinations, or different crop stages to better understand optimal application timing. Continued work in this area would help provide producers with locally relevant information on balancing harvest management, grain quality, and input costs.

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