

The business case for premium priced fungicides in canola: a cost versus value analysis. (2024 trials protocol, August update)

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Background

In 2023, Laconik, in partnership with a local grower, west of Munglinup, WA, established Laconik Combine® trials to measure grain yield and economic returns from Prosaro® and Aviator® Xpro® applied in canola at early flowering. The key findings from these trials were:

- Prosaro® & Aviator® Xpro® increased grain yield and delivered a positive return on investment (ROI).
- Prosaro® delivered a 70 kg/ha increase in grain yield compared to the untreated, resulting in a \$33/ha profit increase.
- Aviator® Xpro® delivered a 200 kg/ha increase in grain yield compared to the untreated, resulting in a \$117/ha profit increase.
- Investing \$1/ha in Prosaro® delivered a \$2.73/ha ROI. Investing \$1/ha in Aviator® Xpro® delivered a \$3.44/ha ROI.

Based on feedback from growers and agronomists wanting to know more about the value of premium-priced fungicide in canola, Laconik has established five Laconik Combine® trials across the high rainfall zone of Western Australia this season. The trials are evaluating 1) Miravis® Star (fludioxonil and pydiflumetofen), 2) Revystar® (mefentrifluconazole and fluxapyroxad), and 3) Aviator® Xpro® (bixafen and prothioconazole). Each trial also includes an Untreated Control.

This document serves as an interim report to industry stakeholders, providing an update on the ongoing trials. The results are expected to be published in early 2025.

If you want to visit the trial sites this season, please get in touch with Laconik staff. We welcome the opportunity to guide you through the trials.

Methodology

| Item | Description | Comments |
|------------------|---|--|
| Trial Locations | Five trial locations: - Dandaragan - Beverley - Kojonup - Bremer Bay - Condingup (to be applied in early September 2024) | All trials are in canola and in paddocks in a continuous cropping rotation. |
| Trial Treatments | Four treatments per trial: 1. Untreated (No Fungicide) 2. Aviator® Xpro® @ 750ml/ha 3. Miravis® Star @ 750ml/ha 4. Revystar® @ 750ml/ha | All fungicides are applied at 750 mL/ha, a registered rate for all products to control Blackleg and Sclerotinia. |

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| Experimental Design | Laconik Combine® design. See Figure 1. | Each fungicide treatment has been sprayed out individually using the grower's boom. After applying a treatment, the grower returns to the water point, drains and flushes the boom, refills with the subsequent treatment, and then repeats the process until all treatments have been sprayed. |
| Application Volume & Timing | Minimum 100L/ha application rate. | Trials have been sprayed out at 10-20% flowering. |
| Products | Purchased by Laconik from a local retailer. | This is an independent trial organised and managed by Laconik. |
| Trial Size | A maximum of 15 replicates per paddock (a block of four plots makes up one replicate). Paddock sizes range from 100-200 hectares. | The plot size is 36m wide by 60m long. |

Figure 1: Example of a Laconik Combine® trial layout. Each colour represents a different fungicide treatment. Non-coloured plots have not had fungicides applied.

