Aviator® Xpro®
Sclerotinia Control

Risk factors and conditions favouring disease outbreaks

(GRDC Sclerotinia Rot in Canola Fact Sheet March 2014)

- **Soil moisture and temperature.** Conditions must favour the development of fruiting bodies (apothecia), which then release spores (10 days of wet soil conditions in mid to late winter, with temperatures of 1°C to 15°C).
- **Spring rainfall.** Epidemics of sclerotinia stem rot generally occur in districts with reliable spring rainfall and long flowering periods for canola.
- **Frequency of sclerotinia outbreaks.** Use the past frequency of sclerotinia stem rot outbreaks in the district as a guide to the likelihood of a sclerotinia outbreak. Paddocks with a recent history of sclerotinia are a good indicator of potential risk, as well as those paddocks that are adjacent. Also consider the frequency of canola in the paddock. Canola is a very good host for the disease and can quickly build up levels of soil-borne sclerotia.
- **Commencement of flowering.** Conditions at the commencement of flowering can be a good indicator of the likely severity of a sclerotinia outbreak. Spore release, petal infection and stem infection have a better chance of occurring when conditions are wet for extended periods, especially for more than 48 hours. Canola crops, which flower earlier in winter when conditions are cooler and wetter, are more prone to disease development.
- **Extended wet periods during flowering.** Allows infection to develop from spores settling on petals; and
- **Extended wet periods during petal fall**. And suitable temperatures (15°C to 25°C) allow the disease to spread from infected petals to other parts of the plant. Dry conditions or low temperatures at this time can prevent development of the disease, even if petals have initially been infected.

Fungicides

- Application timing is critical but not all fungicides offer the same levels of curative and protectant activity.
- Fungicides are the only option for managing sclerotinia stem rot after sowing.
- Growers need to weigh up yield potential, disease risk and canola prices against the costs of fungicide application when deciding to apply a foliar fungicide.
- To be effective, fungicides should be applied before stem infection is evident.
- Optimal timing for application is generally at 20 to 30 per cent flowering stage. The aim of the application is to achieve penetration of the fungicide product into the crop canopy and onto lower stems and leaves, protecting potential infection sites from falling petals.
- Main stem infections are considered to cause higher levels of yield loss compared to lateral branch infections. The primary aim of foliar fungicide applications is to prevent main stem infections and reduce potential yield loss.
- In districts that regularly experience high levels of stem rot, or for long-flowering varieties, two spray applications could be considered. An early application at around 20 per cent flowering may be followed with a second at a later flowering stage.
- A well timed application of Prosaro® fungicide at 450 mL/ha will offer up to 3 weeks protection from sclerotinia, Aviator® Xpro® fungicide at 800 mL/ha rate has been shown to provide an additional 5-7 days protection in some situations.

www.crop.bayer.com.au

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Aviator Xpro

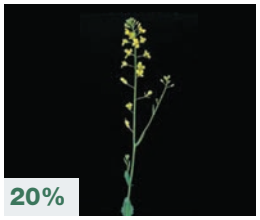
Sclerotinia Control

CROP	DISEASE	RATE	WHP	CRITICAL COMMENTS
Canola	Sclerotinia stem rot	550 – 800 mL/ha	Not required when used as directed (H) 4 weeks (G)	Apply between 20% and 50% (full bloom) flowering. For best results apply as a preventative application at 20-30% flowering prior to significant disease expression (refer to General Instructions – Disease control in canola). Good coverage throughout the entire canopy is essential, particularly ensuring spray coverage down to the base of the canopy is important. Using a water rate at the higher end of the range (see application instructions) will improve spray coverage. Apply the higher rate (up to 800 mL/ha) under high disease pressure. A second application may be required if seasonal conditions are conducive for continued disease development or when the risk of disease is high. A maximum of two applications may be made per crop with a minimum re-treatment interval of 21 days. DO NOT apply after 50% (full bloom) flowering growth stage.

Flowering stages:

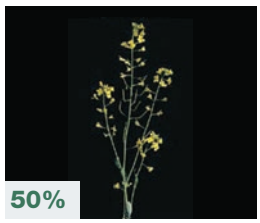
Flowering stages should be assessed on the main stem and take into account both flowers that are open and any developing pods:

10 flowers open on main stem

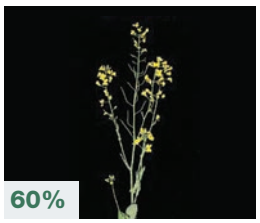


14 -16 flowers open on main stem

20 or more flowers open on main stem



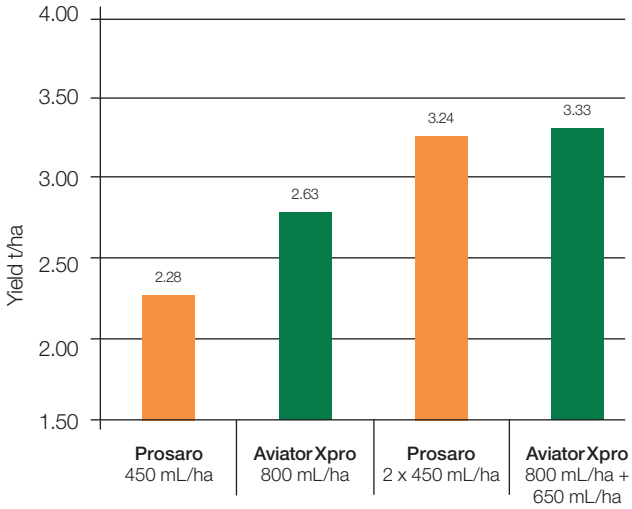
All flowers are open or have opened on the main stem, crop is at its most intense yellow



Flowering intensity is beginning to decline

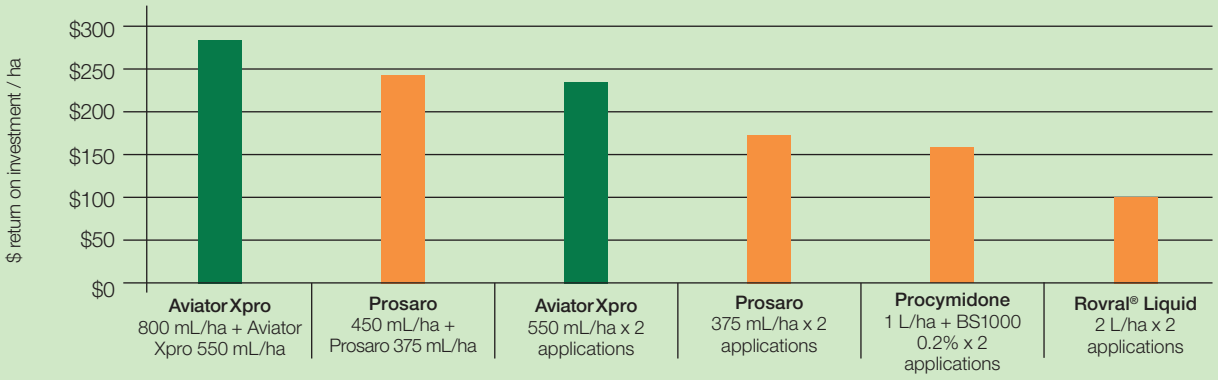
Aviator Xpro results

Aviator Xpro vs. Prosaro commercial application
Yield map, Dookie, Vic 2016



Aviator Xpro recorded excellent disease control in this trial on moderate disease levels. Using the maximum Aviator Xpro label rate of 800 mL/ha at the 25% flowering timing increased residual disease control and allowed the crop to achieve its yield potential and a positive return on investment.

16WE31: Sclerotinia control, Hyola 559 TT Badgingarra, WA 2016



- Small plot trial with 3 replicates
- Application made at 25 and 50% flowering timings
- $ return on investment/ha (Untreated – 3.61 t/ha)
- ROI (inclusive of oil bonification) CAN1 Kwinana $528)

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