



An Agricultural Sciences Company



The foundation for good yield starts with Impact® Endure.



Blackleg (*Leptosphaeria maculans*) is a significant disease affecting canola production. It poses a threat to canola production by causing yield losses of up to 50% and reducing the quality of harvested seeds. Impact® Endures active ingredient Flutriafol, plays a crucial role in the integrated pest management (IPM) of blackleg in canola crops, while also complementing varietal genetic tolerance during vulnerable early crop stages.

Blackleg survives on canola stubble producing fruiting bodies that contain enormous quantities of airborne spores (capable of travelling several kilometres). As these spores release following rainfall and quickly establish new fruiting bodies on canola cotyledons and young leaves, the fungus can rapidly spread and invade the vascular system of the plants crown where it causes canker. Severe canker restricts movement of water and nutrients in the plant, thus reducing the plant's ability to produce high yields.

Across trials, the 200 mL/ha rate delivered the strongest yield protection, producing a clear yield advantage over the 100 mL/ha rate and the untreated control. In the Kojonup trial, the higher rate more than doubled yield compared to untreated plants.

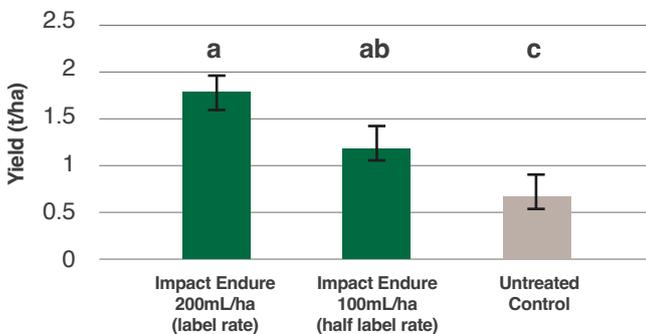


Figure 1. Yield increase from preventative blackleg control using Impact® Endure, Kojonup Western Australia 2022 - auc-22-60

For the control of blackleg, fungicides should be used primarily as a preventative of disease. In situations that disease has established within the canopy, fungicides may not produce optimal results and there is risk to select for fungicide resistance.

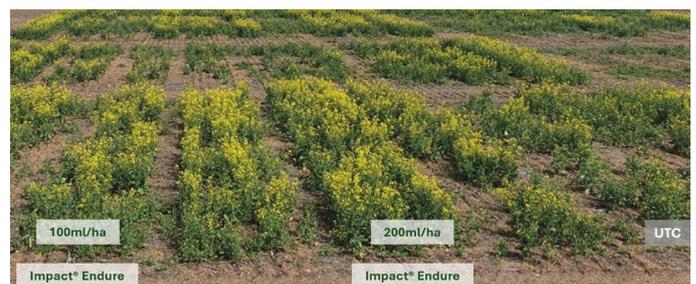
In high risk disease environments, integrated disease management approach should be used to reduce fungicide resistance risk including growing canola at least 500 m from previous seasons canola stubble, the use of resistant varieties, using alternative fungicide modes of action and stubble management such as knocking down and/or strategic burning.

Impact® Endure is the original, trusted name for in-furrow fungicides. Impact® contains 500 g/L flutriafol, a highly systemic fungicide that plays a key role in the integrated management of blackleg in canola. It is the most systemic triazole fungicide available and when applied in-furrow at planting, it is taken up by the roots of the crop rapidly and acts by inhibiting the development and spread of the fungus within the plant. Impact® Endure provides long lasting activity in canola and insures your crop against losses from preventable diseases.

37% yield reduction was recorded in Bonito Canola due to 98% plant infection rate of Blackleg. Protect your canola yield with Impact® Endure in-furrow.

(Always read and follow label directions)

Trial AUC-22-60 - Kojonup, Western Australia.





Impact[®] Endure In-Furrow & Fertiliser Treatment Guide

Highlights

- Proven in-furrow performance with fertiliser across wheat, barley and canola, backed by FMC label and technote guidance.
- Reliable, high-quality SC formulation designed for consistent handling and pumping—stable viscosity over time and temperature stress.
- Viscosity stability reduces risk of blockages, improves metering on augers and applicators, and supports uniform fertiliser coverage.

In-Furrow & Fertiliser Treatment Guide

Application to granulated fertiliser: Spray undiluted product evenly onto dry, relatively dust-free fertiliser and mix immediately in a mechanical mixer or auger. Position spray nozzles at or near the base of the auger and run the auger at half speed to assist secondary mixing. Calibrate planters for any change in fertiliser flow after treatment.

Typical in-furrow rates: 200 mL/ha for canola (blackleg); 100–200 mL/ha for wheat (stripe rust); 200 mL/ha for wheat (take-all, Septoria tritici blotch); 100–200 mL/ha for barley (powdery mildew, scald). Observe a 4-week grazing withholding period after fertiliser application.

Impact[®] Endure is also compatible for injection into liquid fertiliser streams, offering flexibility for growers using liquid delivery systems at seeding. This allows accurate placement in-furrow while maintaining product stability and flow.

Formulation Viscosity Stability (Lab Trial)

Method summary: Viscosity at 20°C (RVT #2 @ 6 rpm) measured initially, after 1 week and 2 weeks at 54°C accelerated storage for Impact[®] Endure vs two generics in the market.

Why Impact[®] Endure Formulation Matters

Maintain even coating on fertiliser granules with consistent suspensibility and sieve results.

- Tight viscosity control for dependable pump/line performance across pack sizes and transfer systems.
- High concentration (500 g/L flutriafol) in a robust SC base simplifies logistics and on-farm handling.
- Impact[®] Endure is formulated in Australia, ensuring consistent quality, reliable supply, and a formulation specifically developed to local farming conditions. This supports dependable performance across Australian seeding systems and fertiliser programs.

Practical Tips & Compatibility

Coverage:

If application volume on fertiliser is below 250 mL/100 kg, dilute with water to improve coverage. Ensure treated fertiliser is dry before sowing.

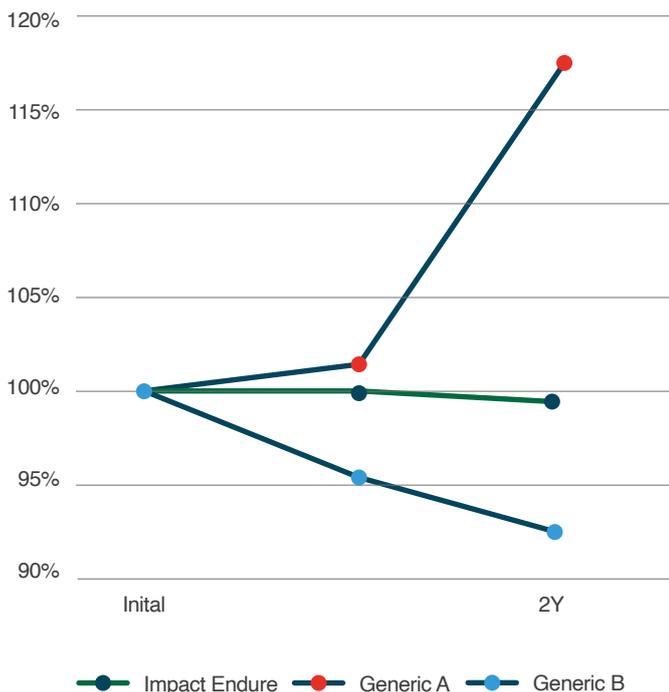
Flow:

Treated fertiliser may alter flow characteristics; check metering and distribution.

Rotation & resistance:

Impact[®] Endure is Group 3 (DMI). Rotate modes of action according to resistance guidelines.

Flowability ease of use comparing flutriafol 500C formulations with Impact[®] Endure



	RESULTS MEASURED AT 54°C		
	INITIAL	1 Y	2 Y
IMPACT ENDURE	100%	100%	99%
GENERIC A	100%	101%	118%
GENERIC B	100%	96%	92%

Figure 1: Relative viscosity stability of flutriafol formulations @ 20°C RVT #2 @ 6RPM). Impact[®] Endure remains within a tight viscosity specification, while competitors showed larger shifts: Generic A +17.9%.