

Rotational Crop Plantback Intervals

For Northern Australia

(For the black soils of the northern NSW and Qld cropping zones)

Where areas have received limited rain after herbicide application, there is potential for herbicide residues to still be present in the soil prior to planting a sensitive crop, unless there are mild temperatures and adequate moisture at least a month or more before sowing.

Conditions required for breakdown

Warm, moist soils are required to break down most herbicides through the process of microbial activity. For the soil microbes to be most active they need good moisture and an optimum soil temperature range of 18°C to 30°C.

Extreme temperatures above or below this range can adversely affect soil microbial activity and slow herbicide breakdown. Very dry soil also reduces breakdown.

To make matters worse where the soil profile is very dry it requires a lot of rain to maintain topsoil moisture for the microbes to be active for any length of time.

Risks

In those areas that do not experience conditions which will allow breakdown of residues until just prior to sowing, it is best to avoid planting a crop that is sensitive to the residues potentially present on the paddock, and opt for a crop that will not be affected by the suspected residues. In most cases, cereals or canola would be better options as these crops are comparatively less affected by herbicide residues for Corteva Agriscience residual herbicides.

If dry areas do get rain and the temperatures become

milder, then they are likely to need substantial rain (more than the label requirement) to wet the sub-soil, so the topsoil can remain moist for a week or more. This allows the microbes to be active in the top-soil where most of the herbicide residues will be found.

Sensitive crops include legume pastures (eg. clovers, lucerne or forage legumes) pulse crops (eg. chickpeas, mungbeans, or faba beans) or oilseed crops (eg. cotton, sunflowers or soybeans).

Crop or weed indicators

Any volunteer pulses or legumes such as clover or medic that germinate during the summer/autumn fallow period, can act as a reliable indicator for the presence of herbicide residues. Areas to be aware of include headlands and header trails where crop residues can be heavier and may retard residue breakdown.

Application rate

For herbicides with residual activity, the higher the rate that is applied the longer the time to plantback to sensitive crops. This factor is very important in the case of high rates being applied to control weeds such as fleabane in the summer fallow, prior to planting a winter crop.

Read the label

This technote provides an overview of re-cropping intervals and conditions of northern cereal and fallow herbicides. Always refer to the product label for detailed information and contact your local Corteva Agriscience representative if you have any concerns.

Product	Rain	Rate/ha	Cereal	Oilseed	Pulse / Legume
FallowBoss Tordon® (300 g/L 2,4-D + 75 g/L picloram + 7.5 g/L aminopyralid) (See notes)	-	<700 mL	4 months for barley, sorghum, wheat, oats & maize	4 months for canola 12 months for cotton, sunflower	6 months for chickpeas, faba beans 12 months for lucerne, mungbeans, soybeans
		1 L	4 months for winter cereals	Plant back data not available for rates above 700mL	
Garlon® 600 (600 g/L triclopyr)	nil	<160 mL	7 days for barley, maize, sorghum, wheat & oats	7 days for sunflower 14 days for cotton	7 days for chickpeas & soybean
Grazon® Extra (300 g/L triclopyr + 100 g/L picloram + 8 g/L aminopyralid) (See notes)	100 mm	200 mL	2 months for barley, wheat	2 months for canola	4 months for chickpeas, faba beans 6 months for lucerne
		300 mL	2 months for barley, wheat	4 months for canola	4 months for faba beans 6 months for chickpeas 9 months for lucerne
		400 - 600 mL	4 months for barley, wheat	4 months for canola	6 months for chickpeas, faba beans 9 months for lucerne
Lontrel® Advanced (600 g/L clopyralid) (See notes)	100 - 150 mm	<40 mL	1 week for barley, maize, oats, sorghum, wheat	1 week for canola 3 months for cotton, sunflowers	3 months for chickpeas & soybean 9 months for lucerne
		40 - 150 mL	1 week for barley, , oats, wheat 2 weeks for maize, sorghum	1 week for canola 6 months for cotton, sunflowers	6 months for chickpeas, faba beans, mungbeans & soybean 9 months for lucerne
Paradigm® Arylex® active (200 g/kg Arylex® + 200 g/kg florasulam) (See notes)	100 - 150 mm	25 g	1 week for barley, triticale, wheat 4 months sorghum & maize 6 weeks for oats ❶	6 months cotton & sunflower 8 months for canola ❷	5 months mungbeans 6 months soybeans 8 months for chickpeas, faba beans, field pea, lucerne ❷
			Pixxaro® Arylex® active (16.25 g/L Arylex® + 250 g/L fluroxypyr) (See notes)	100 mm	300-400 mL ❸ For rates above 400mL/ha contact your Territory Manager
Rexade® Arylex® active (50 g/kg Arylex® + 150 g/kg pyroxulam) (See notes)	100 - 150 mm	100 g	7 months barley, oats 6 months ryegrass 5 months maize, sorghum	5 months sunflower 7 months canola 8 months cotton	5 months mungbean 8 months for chickpeas, faba beans, lucerne, soybean

Product	Rain	Rate/ ha	Cereal	Oilseed	Pulse / Legume
Starane® Advanced (333 g/L fluroxypyr) (See notes)	nil	225- 450 mL	7 days for barley, maize, sorghum, wheat	7 days for soybeans, sunflower 14 days for cotton	7 days for chickpea 14 days lucerne
		900 mL	7 days for barley, maize, sorghum, wheat	7 days for sunflower 14 days for soybeans 28 days for cotton	7 days for chickpeas
Trezac® Arylex® active (30g/L Arylex® + 25g/L aminopyralid)	100 mm	200 mL	3 months sorghum 4 months barley, oats & wheat	4 months canola 5 months sunflower# 9 months cotton#	5 months mungbean & soybean# 7 months chickpea, faba bean & lucerne
Verdict® 520 (520g/L Haloxyfop)	-	150 mL	3 months barley, maize, oats, sorghum & wheat	Nil canola, cotton & sunflower	Nil chickpea, fababean, lucerne, mungbean & soybean

FallowBoss Tordon®

Plant-back periods for rotational crops following application of FallowBoss TORDON up to 700 mL/ha on black cracking clay soils. These plant-back periods are also required for fallow crops and are based on normal rainfall pattern. During drought conditions (or when rainfall is less than 100 mm for a period of 4 months or greater) the plant-back period may be significantly longer. Under such circumstances a soil bioassay is required, before planting the next crop.

Grazon® Extra

Plant-back periods for rotational crops following application of Grazon Extra for rates up to 600 mL/ha on black cracking clay soils. These plant-back periods are based on normal rainfall pattern. During drought conditions (or when rainfall is less than 100 mm for a period of 4 months or greater) the plant-back period may be significantly longer.

Lontrel® Advanced

If planting susceptible summer crops at least 100 mm rain or irrigation is required. If planting susceptible winter crops at least 150 mm rain or irrigation is required.

For all situations, sufficient rainfall or irrigation to enable soil wetting for at least one week is essential to enable residue breakdown before planting susceptible crops. Where these requirements have been met the listed plantback periods apply. Susceptible crops should not be sown for at least two years where Lontrel Advanced at more than 150 mL/ha has been used in Northern Australia. Cereals and canola may be safely planted immediately after application. However, post-emergent weed control may be reduced due to soil disturbance if one week is not allowed after application.



Paradigm® Arylex® active

- ❶ Minimum rainfall requirement from application to planting 25 mm.
- ❷ Minimum rainfall requirement from application to planting 100 mm.

Relatively quick breakdown will occur with extended periods of soil moisture when soil temperatures are warm. Breakdown may be slow in very dry seasons, or in cold, waterlogged soils, extending the plant back interval to susceptible crops. Plant back intervals may be extended when more than 50% of the required rainfall totals are intermittent, light rain, which does not maintain soil wetting for at least a week.

Pixxaro® & Trezac® Arylex® active

The reduced plantback intervals (compared to the current label recommendation) is based on recent field research that will be subject to an upcoming registration submission.

- ❸ Minimum rainfall requirement from application to planting 100 mm. Plantback periods for rotational crops following application of Pixxaro for rates up to 400 mL/ha or Trezac at 200 mL/ha on black cracking clay soils. These plantback periods are based on normal rainfall patterns. During drought conditions (or when rainfall is less than 100 mm for a period of 3 months or greater) the plantback period may be significantly longer.

Rexade® Arylex® active

Plantback periods as listed apply on vertosol soils where 50 mm or more rain or irrigation has occurred. On shallow, duplex or low organic soils and/or where rain or irrigation in one fall or over subsequent days is insufficient to thoroughly wet soil to 10 cm for one week or more in summer to autumn period, extended plant back times will apply and susceptible crops should not be planted for at least 12 months after application of Rexade herbicide.

Starane® Advanced

DO NOT plant susceptible crops, including cotton, pigeon peas and other pulse crops, into irrigated fields with soils containing less than 25% clay content, within 12 months of treatment with Starane Advanced.

For more information contact your local Corteva Agriscience representative on 1800 700 096

