**HERBICIDE** 

**Kerb**<sup>®</sup> FLO 500

HERBICIDE

**Topic Sheet** 



Farmers and agronomists may be tempted to apply Kerb® Flo 500 or Astrokerb® early where the blackgrass problem is acute and conditions are ideal for grassweed growth, based on concerns that a delay will reduce efficacy as roots develop to depth. The period of residual control will be significantly shortened but they believe that the majority of the blackgrass has germinated anyway.

#### Best advice

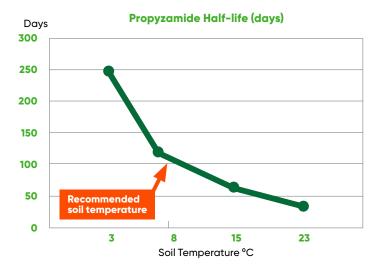
For the best results to be achieved with Kerb Flo 500 or Astrokerb for blackgrass control, the temptation to apply too early, in case weather conditions prevent later applications, should be avoided.

Propyzamide, the active ingredient in Kerb Flo 500 and Astrokerb, in common with other residual herbicides, breaks down quickly in warm soils. If you treat when the soil is too warm, the speed of break-down may lead to insufficient concentration of propyzamide in the rooting zone of the blackgrass, possibly leading to poorer levels of control of blackgrass which is already emerged.

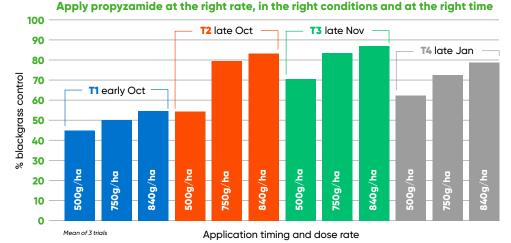
Corteva Agriscience has consistently advised waiting to make applications of Kerb Flo 500 until the soil temperatures have got down to 10°C and falling at 30cm depth, and there is sufficient moisture in the soil for plant uptake. These combined criteria are rarely met in the main oilseed rape growing areas of the UK before November. Soil temperatures taken from less than 30cm fluctuate more and are less consistent.

The investment Corteva has made in developing and refining this advice means Kerb Flo 500 is regarded as a reliable herbicide for the control of blackgrass, as well as other grass weeds.

Best advice remains to wait for the correct temperature before making applications of Kerb Flo 500 to winter oilseed rape. Application when the soils are too warm may result in 5% and possibly 10% less control of the blackgrass.



As Astrokerb will mainly be used for blackgrass, this should drive application timing.
Astrokerb has both contact and root activity on poppies and mayweeds and in our extensive trials programme, when optimally timed for blackgrass control even where canopies were large, control of these broad-leaved weeds has been good.





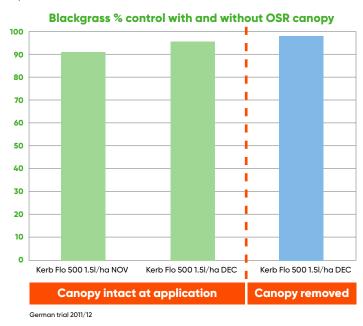
Plan your propyzamide applications with the **Kerb Weather Data** service from Corteva Agriscience. The 24/7 decision support system provides an easy postcode checker and traffic light system for local weather conditions, helping farmers and advisors to make local tactical decisions to optimise their Astrokerb and Kerb Flo 500 applications, and therefore their activity against blackgrass. It also indicates wind, rainfall and provides a soil temperature summary to help plan spraying workload more effectively.

For Kerb Weather Data with advanced functionality, download the free Corteva Arable App. https://www.corteva.co.uk/kwd

#### **FAQs**

## Will large crop canopies interfere with blackgrass control?

Trials have shown that even where canopies are dense, excellent blackgrass control can be achieved once optimum soil conditions are met.



## If I wait, won't the blackgrass roots be too big/too deep for outstanding control?

Propyzamide, the active ingredient for blackgrass in Kerb Flo 500 and Astrokerb, works mainly by root uptake in the top 5 cm of soil. If the oilseed rape has been established using min-till techniques, the majority of the blackgrass will be shallow rooted and even when it develops a more extensive root system, is still likely to have sufficient roots in the Kerb activity zone for uptake. If severe frosts are experienced before Kerb application, there may be some shear of surface roots. In this situation adventitious roots may subsequently develop, which will take up propyzamide from a later application. In this scenario we have seen excellent results from December/January application. Symptoms however, can take up to 12 weeks to manifest themselves.

### How can I improve blackgrass control?

Applications of Kerb Flo 500 or Astrokerb at 1.7L/ha are considered as cornerstones of any blackgrass control strategy in winter oilseed rape. Best results are seen when applications are timed to soil temperatures at 10°C and falling with adequate soil moisture combined with a crop establishment strategy that does not disturb blackgrass seed below the top 5cm (or so) of soil.

Blackgrass will germinate throughout the autumn; independent trials have shown that a programmed approach to blackgrass control in oilseed rape can maximise the opportunity to achieve improved blackgrass control.

Such an approach may include metazachlor applied pre-emergence (see the manufacturers label) followed by a 'dim' herbicide such as clethodim (please see the manufacturers label as to application timings and restrictions) followed finally by Astrokerb or Kerb Flo 500 when suitable conditions are met. Be aware that if clethodim is used in the programme then 'fop' chemistry must be used for volunteer cereal control. Another approach is Astrokerb or Kerb Flo tank mixed with cycloxydim for enhanced blackgrass control.

N.B To ensure good coverage of the target weeds, when either applied alone or in tank-mixture, Kerb Flo 500, Astrokerb and all propyzamide formulations should be applied in a minimum of 200 litres water per hectare.

# Can I apply two applications of propyzamide containing products to increase control of blackgrass?

- Corteva supports only 1 application of propyzamide, either as Astrokerb or Kerb Flo 500, per season per OSR crop.
- The maximum amount of propyzamide that can be applied to an OSR crop in a season is 840gai/ha. A full rate application of either Kerb Flo 500 or Astrokerb delivers a dose of 840gai/ha of propyzamide.
- All applications should be made with due regard to water stewardship.
- A well-timed application (late-October to mid-December) will give a good level of blackgrass control, there is no evidence that an earlier or additional application will improve the overall level of control achieved.
- Early applications of propyzamide are unlikely to be effective, high soil temperatures will mean that propyzamide will break down quickly and fail to give adequate control.

