

# Propyzamide

Joe Martin AUTUMN 2022

#### Propyzamide



- Stewardship
- Best Practice
- Dose
- Timing and rates Trial data
- Soil degradation
- Resistance Management
- Stewardship
  - Tactics to reduce run off
  - Corteva initiatives



#### **Product Stewardship is...**

Development

the responsible management of a product from its inception and development through to its use and lifecycle











#### **Kerb and AstroKerb**





Propyzamide works best when applied to cold, moist soils, but this must be balanced with the need to protect water.



### APPLICATION TIMING

From 3 leaf of crop (1st October) up to before 1st February.



Soils should be at 80% field capacity (1-2.5 cm of moisture).



#### **SOIL TEMPERATURE**

(at 30 cm) maximum 10°C and declining.

#### DOSE

Only use the maximum rate of 840 gai/ha for severe blackgrass situations. 750gai/ha or 500gai/ha are recommended for less severe blackgrass or other grasses and broadleaf weeds (see product labels for details). Only use one product containing Propyzamide per crop per year.







#### Dose

Data from 12 trials

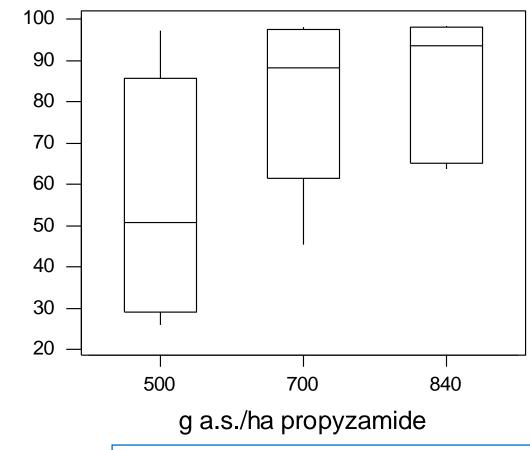
Application Dates: 1 Nov – 7 Dec

Blackgrass Growth Stages at application:

11-22BBCH

Blackgrass populations at evaluation:

50-731 plants/m2



Kerb Flo 500 Kerb Flo 500 Kerb Flo 500 1.0L/ha 1.4L/h 1.7L/ha



## Soil degradation

Physical and chemical characteristics of the molecule

Soil type

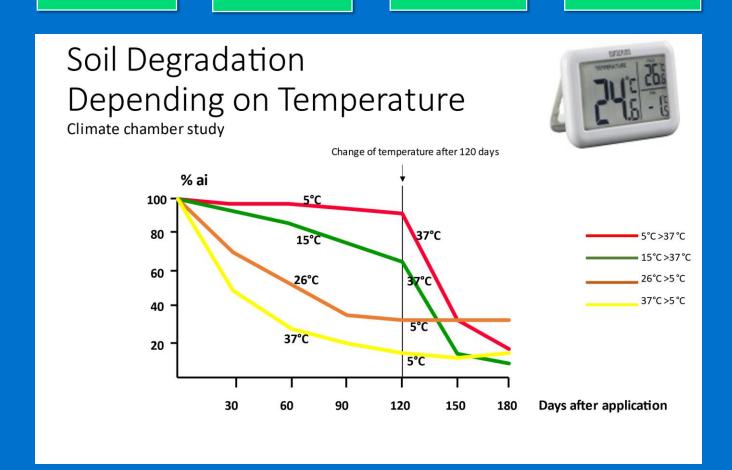
Amount of precipitation and temperature

**Cultivation type** 



#### **Propyzamide**

- Average soil half life
   35-40 days
- Persistence varies from 2-9 months depending on soil type and climatic conditions
- $K_{oc}$  548 1340 mL/g





2021/22 Trial Data

# Blackgrass control from applications of Propyzamide at varying rates and timings



How does the timing and rate of propyzamide applications (Kerb Flo 400SC) impact control of Blackgrass?

#### **Timing**



A – Early Oct

B – Last Week Oct

C – Last Week Nov

D – Last two weeks Jan



3 Trials, Essex and Kent



500 g ai/ha

750 g ai/ha

840 g ai/ha

Blackgrass populations

Application Dates and Crop Growth Stages

A - 07-08/10 4-7 leaves

B - 25-28/10 5-8 leaves

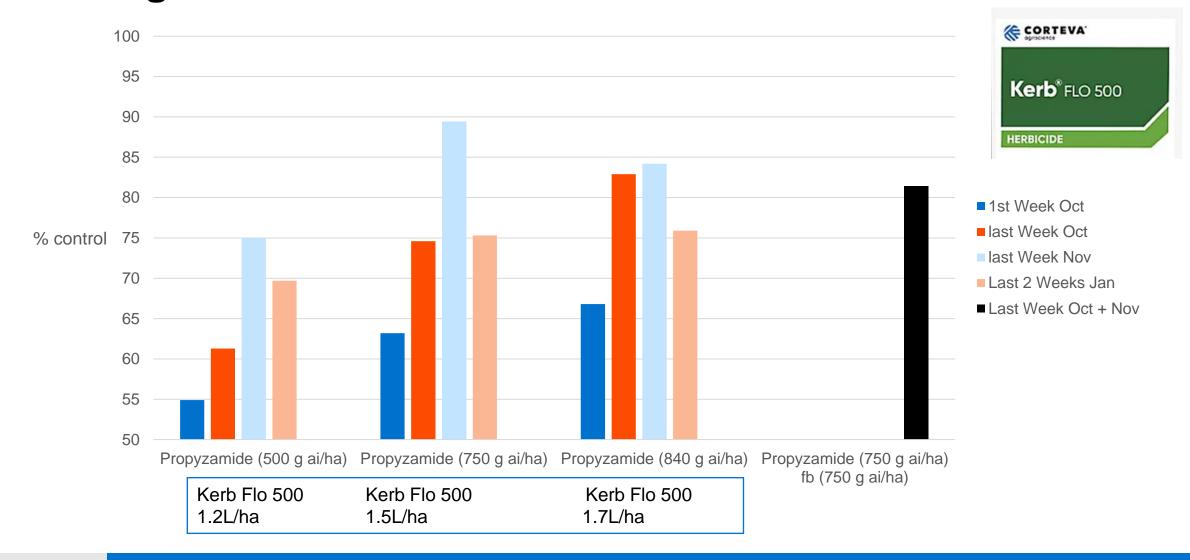
C - 22/11-01/11 7-9 leaves

D – 26-27/01 7 leaves – stem extension

	Trial 1	Trial 2	Trial 3
A	1-3 leaves, 64/m <sup>2</sup>	1-3 leaves, 105/m <sup>2</sup>	1-3 leaves, 10/m <sup>2</sup>
В	1 If – 1 tiller, 73/m <sup>2</sup>	1 lf – 1 tiller, 143/m <sup>2</sup>	1-3 leaves, 14/m <sup>2</sup>
C	2lfs – 1 tiller,79/m <sup>2</sup>	2lfs – 1 tiller,131/m <sup>2</sup>	2 lfs-6 tillers, 33/m <sup>2</sup>
D	2lfs – 3 tiller, 115/m <sup>2</sup>	2lfs – stem ext'n, 125/m <sup>2</sup>	2 lfs-9 tillers, 51/m <sup>2</sup>

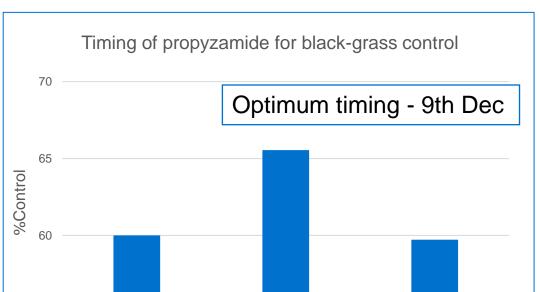


### %Blackgrass Control — Visual (165-168 DAT, 21st-24th March, mean of 3 trials)





#### NIAB Trial – Sustainable blackgrass control in OSR

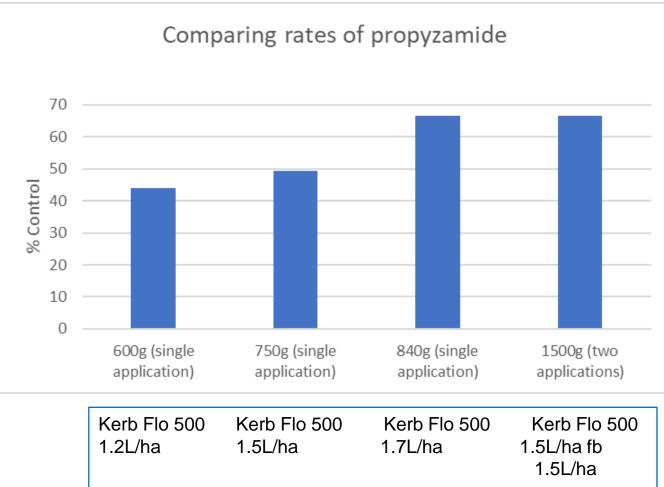




Optimum

Good rate effects from single timing Two doses doesn't give any benefit





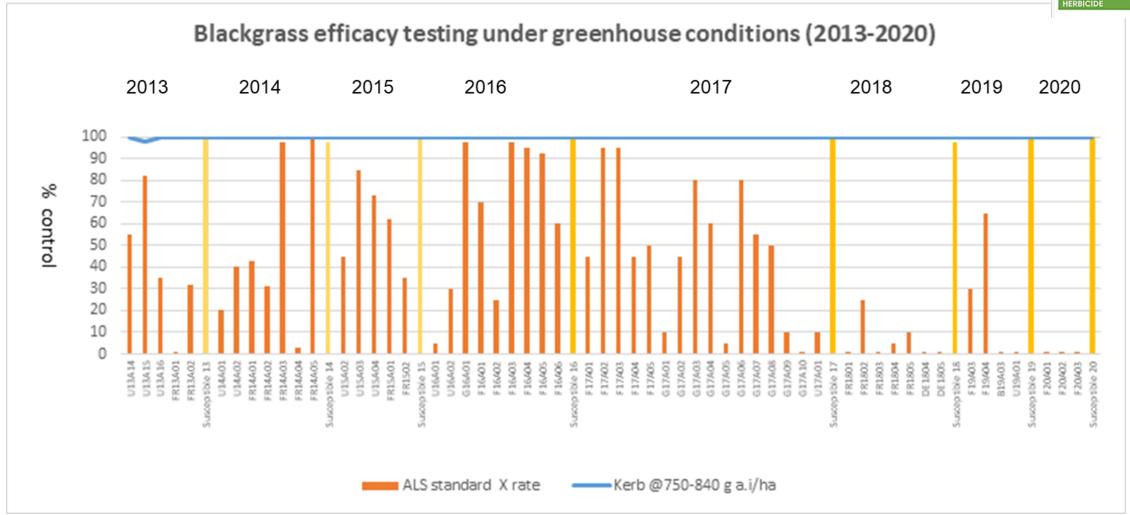


Early



#### **IPM:** Resistance management









## Checklist for high risk areas



If at least 5 of the following criteria are met, then the risks to water will be significantly reduced

1

There is no risk of heavy rainfall within 48 hours of application

2

Field drains are not flowing and unlikely to flow within 7 days of application

3

Field slope is less than 5% (1 m fall in 20 m)

4

The field is NOT bordered by a watercourse

(5)

The field has a 6m grass buffer strip adjacent to water

6

There are NO field drains



The field has NOT been deep sub-soiled (below plough layer) or mole-drained within the preceding 6 months



The crop has been established with true minimum tillage working the top 4-6cm only or by direct drilling



## Corteva initiatives for propyzamide stewardship



# Kerb weather tool update

Launch earlier to help with planning re OSR drilling and which field to select for OSR



## Label statements

Label amendment maximum dose of 840g/ha per year per crop – awaiting CRD response



# Farmers Weekly online training

in OSR, propyzamide and best practice



# Water companies

Leaflets on propyzamide stewardship and field work in collaboration with water companies



#### **Trial data**

Trials program

2021/22 – review of
 propyzamide
 blackgrass control
 strategies – Year 2
 to start Aut 2022



#### Kerb Weather data app

Kerb weather tool helping farmers plan their propyzamide applications to oilseed rape



Optimise the application timing of:

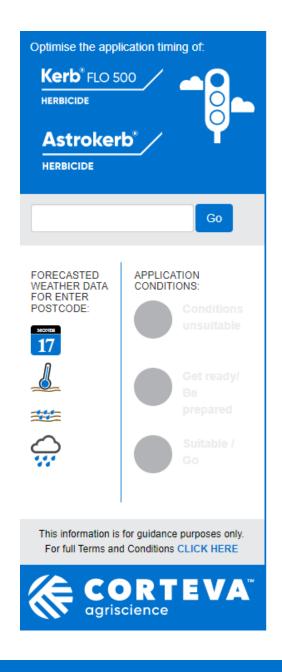
Kerb® FLO 500

HERBICIDE

**Astrokerb**®

**HERBICIDE** 

Allowing farmers to make local tactical decisions to optimise their <u>AstroKerb®</u> and <u>Kerb® Flo</u> applications and thus their activity against blackgrass.





## Thank you!



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