

Black-grass in winter barley

LIVING WITHOUT IPU AND TRIFLURALIN

TECHNICAL UPDATE

Autumn 2008

In Brief

- Around half of all herbicides used in winter barley contained isoproturon (IPU) or trifluralin (TFL)
- Their withdrawal will have an even bigger impact here than in winter wheat
- New solutions are available containing the residual herbicide DEFY
- An AXIAL programme has been developed which is not only IPU and TFL free but which can help manage the issues of residual sprays



Black-grass in barley

Factors which can affect pre-emergence residual herbicide performance

- **Too wet** – heavy rain causing leaching
- **Soil too dry** – causing reduced uptake
- **Knobbly seedbeds** – leading to uneven soil coverage with herbicide
- **Weed resistance or reduced sensitivity**
- **Cold weather**

Implications of the loss

The loss of IPU and TFL removes two of the cornerstone herbicides relied on in winter barley black-grass programmes.

Alternative residual options exist, but they may not provide sufficient control if used alone. This could be especially the case if soil conditions are poor (e.g. conditions are dry).

Chlorotoluron carries varietal restrictions. With pendimethalin there have been concerns expressed of over-reliance within programmes and black-grass sensitivity shifts.

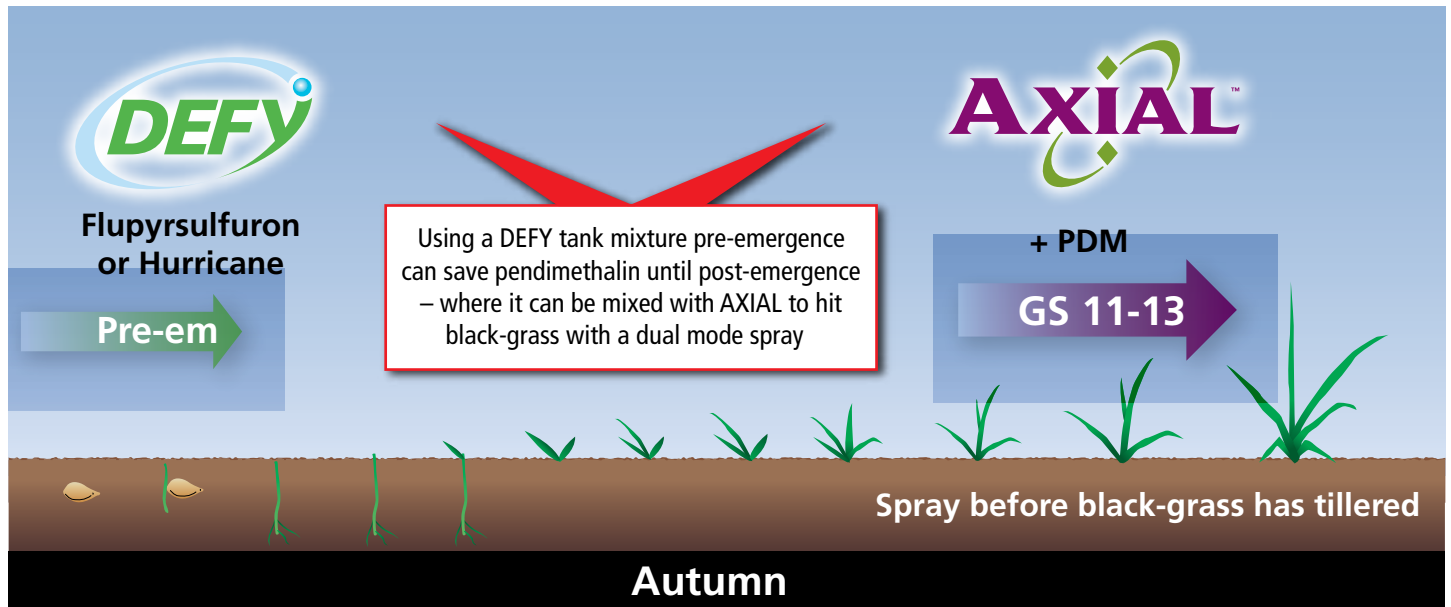
Suggested actions

- Make greater use of cultural methods for the cleanest possible start e.g. stale seedbeds
- Begin programmes with robust pre-emergence herbicides to further reduce black-grass pressure early on – e.g. DEFY mixtures which are pendimethalin and trifluralin free
- Add a contact-acting partner to residual herbicides post-emergence to fortify programmes with an extra mode of action and help 'iron out' any variability in control
- Optimise application technique and nozzle choice to ensure maximum performance from both pre and post-emergence sprays

Getting the best from AXIAL

- Spray at 1-3 leaves of black-grass for optimum control and use maximum rate approved
 - 0.45 l/ha to 31 December
 - 0.6 l/ha from 1 January
- Apply with the forward-angled HAWK nozzle for improved results
- Always use with ADIGOR adjuvant at 0.5-1.0% of spray volume

Black-grass in winter barley – replacement strategy for IPU and TFL



Advantages of AXIAL and DEFY

IPU and trifluralin free

Pre-emergence:

- Use the low resistance benefits of DEFY
- Reduces reliance on pendimethalin – by reserving it for post-emergence use only

Post-emergence:

- Use AXIAL to boost contact activity
- AXIAL + pendimethalin mix allows black-grass to be targeted with a dual mode of action approach

Other AXIAL benefits:

- Broad-spectrum activity against other grass weeds e.g. rye-grass and wild oats
- Cold weather performance
- Excellent crop safety
- No following crop restrictions (always check restrictions of any other products used in the crop)

Performance of AXIAL programmes in winter barley

