

Wherever black-grass is an issue, the new BASF herbicide, Luximo, is poised to radically change the look and feel of herbicide programmes. It's available for the first time this autumn, and while many have seen it in trials, a number of farmers have had the chance to try it on their own farm

dward Vipond is part of the BASF Real Results Circle - a collaborative group of farmers who host trials and provide feedback on their in-field experiences - and been putting new BASF herbicide Luximo through its

"We've done two years of Luximo trials," he explains. "Last year it was applied with Avadex (triallate) to a crop of Skyfall in mid-October and it proved to be a good product. It's a very useful tool."

Mr Vipond is the farm manager at Troston Farm near Bury St Edmunds and is responsible for over 1,400ha. Extending over a distance of 25 miles, the acreage is farmed in blocks.

"When I first joined the team seven years ago, there was quite a lot of blackgrass. It was at a level which undoubtedly affected yields,"

Across the acreage there's a range of soil types from blowing sand to heavy clay, with everything in between. That variation is reflected in the cropping, with sunflowers and rye grown on the very light land and first and second wheats and winter beans on the heavy soils. Unsurprisingly, black-grass dominates on the heavier land.

Cultural controls: drainage, delayed drilling and rotation

Mr Vipond says: "Some areas weren't well-drained or wellstructure,d so we started tackling the black-grass with mole ploughing and deep

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cultivations. It helped reduce the amount and extent of the wet areas in fields. In combination with delayed drilling, rotation, herbicides, hand-rogueing and spraying

off patches, we've got on top

"As frustrating as it is, spray it off and move on."

Mr Vipond no longer grows OSR, saying the risks associated with the crop are too great. Today, the rotation on the heavy land is first and second wheat, spring barley, followed by another cereal and

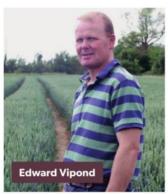
"We stopped growing rape three years ago," he says. "It does cause an issue because we're left with just the beans as a break crop. There is too much white-straw crop in the rotation at the moment. We did try forage rye on the heavy land in an attempt to remove the black-grass seed, but that didn't work particularly well. Currently I am looking at oats, but with no grassweed herbicides available, I am concerned it will open the door for black-grass again."

Delayed drilling is essential in Mr Vipond's eyes and he is strict about not drilling wheat until mid-October. "If the weather closes in, we will drill a spring crop rather than make a mess and forcing

> a winter one. Not only do you damage the soil, but you compromise the preand postemergence herbicides, and get a suboptimum

establishment of the crop. That combination is perfect for black-grass so I'd rather hold back and put a spring crop in.

"We've lost the cushion that was the BPS, so we have to



make sure that we're making the right decisions and not putting ourselves in a lossmaking position with any crop," he adds.

One cultural control tool which he doesn't use is the plough. He prefers to workdown the seedbank in the top soil, keeping the rest of the black-grass seed buried.

Chemical controls: then and now

The herbicide programme starts with one or two applications of glyphosate. The first being applied midfallow and the second, shortly before drilling. At preemergence, Edward applies Crystal + diflufenican along with Avadex (triallate).

He explains: "We have historically followed up with a post-emergence application of Atlantis (mesosulfuron and iodosulfuron) or Pacifica (mesosulfuron, iodosulfuron and amidosulfuron). That used to go on in the spring, though we did try to bring applications forward to the autumn but we didn't have enough black-grass last year."

"Without a doubt, Luximo will feature in herbicide programmes here. It's a robust product and trials over recent years have shown that it does the job. But it's not in isolation – it's in combination with cultural and other chemical controls. It's part of a toolkit."

Regarding last year's trial, Mr Vipond says: "It was a third cereal and it looked really good throughout the season. The black-grass control was as good as I've seen it for a number of years. In the end, it yielded a shade under 9t/ha. Proteins were a little low so it may not get full-spec milling, but it should go for low-grade milling wheat."

Luximo contains cinmethylin, anew mode of action, classified by the Herbicide Resistance Action Committee (HRAC) as a fatty acid thioesterase inhibitor (group 30), as opposed to the very long-chain fatty acid synthesis inhibitors (group 15), which include many of the other residual herbicides, such as flufenacet, triallate and prosulfocarb.

It inhibits cell membrane production. In the field, growth is inhibited so often weeds never emerge. Where they do emerge, there is discolouration and yellowing of leaves, before the plant withers and dies.

Proven effective on blackgrass, ryegrass, annual meadowgrass, poppy and a wide range of broadleaved weeds, Luximo will be available this autumn as Luxinum Plus and will be sold with Stomp Aqua.

Application advice is similar to that of other residual chemistry, though the manufacturers note that Luximo requires less moisture to 'activate' than flufenacet – 3mm of rainfall over a five day period rather than 7mm.

"We will need to look after Luximo," says Mr Vipond.



"And that means using it in combination with other actives, applying it at the right rate and getting the timing right. Increasingly here, we're focused on water volumes. We won't spray any black-grass with less than 200L water/ha and travelling no more than 10-12km/hr. Droplet size is also important.

This season, the lack of rain has been a real concern and caused Mr Vipond to adapt his approach.

"This year, pre-harvest we rogued everything we could. We've harvested and chopped the straw, and shallow cultivated to fill in the cracks. That's more to ensure that when rain arrives, the water permeates the soil surface rather than running straight off into the cracks.

"The land that currently harbours the worst black-grass is going into spring barley. I'll be trying to get that black-grass to chit so that I can spray it off at least once, if not twice, before going in with a deep tine cultivator. This season we have had to wait patiently for some moisture to arrive."



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- Only approved for use on winter wheat and winter barley
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