

Cost to pay if don't delay?

“When it comes to drilling, low disturbance is key.”

Technical Grassweed control

Delayed drilling is the backbone of grassweed control programmes, with mid-October the ideal in blackgrass situations. But with drills moving from mid-September, where does that leave grassweed control. CPM finds out.

By Lucy de la Pasture

The hum of combines was an intermittent sound during a mainly dull and dank August which delayed harvest progress for many. But a kinder September means a significant area of early wheat drilling has taken place in reaction to the impossible conditions experienced in autumn 2019 and again in 2020, believes Hutchinsons' regional technical manager Cam Murray.

So how is this scenario likely to impact weed emergence, competitiveness and the application of both cultural and chemical control measures?

“The consequence of two extremely wet establishment periods means that many were forced to abandon winter crop plantings and revert to spring options, the majority of which were sown in March or early April. This resulted in a significant reduction in grassweed seed return,” says Cam.

“Even where blackgrass is present, the very fact that it was restricted to spring

establishment will have reduced seed return by a factor of 10 compared with autumn-established situations.”

In contrast to 2019, many more wheat crops were in the ground last autumn but residual herbicide input was severely impacted due to a turn in the weather which put the kybosh on application.

Significant seed return

“Herbicide treatment was applied post-emergence at best, but in some cases no treatment went on in the autumn at all. Where a herbicide was applied, sequences were rarely possible and this has led to a significant return of blackgrass seed,” he says.

Cam suggests growers should start to plan their grassweed management this autumn using a traffic light system to rank fields from green to red, with fields in the red zone requiring spring cropping to re-establish control.

“Earlier sowing obviously has the consequence of reduced germination time for any treatment of weeds prior to autumn sowing. Where crops were cleared relatively early, a reasonable degree of soil moisture may have encouraged some growers to produce stale seedbeds immediately post-combining in the hope of encouraging significant germination during August and early September.

“However, it's been clearly established that the majority of blackgrass doesn't germinate until late September, with the first 10 days of October being the optimum germination period, so we can expect the same scenario in 2021,” he comments.

“Planting winter wheat likely commenced from mid-September where there was the

intention to sow early. Good seedbed conditions will give the potential for better and more rapid establishment — not only of the crop but also for grassweeds.”

That could leave growers with a tricky grassweed problem to manage, with a higher dependency on herbicides, he says. “Drier seedbeds reduce the efficacy of residual herbicides, so the optimum utilisation of these must be given serious consideration to counter the emergence periods of grassweeds this autumn.”

While blackgrass has been the number one enemy over the past 20 years, there's also a new kid on the block to consider and that's perennial and Italian ryegrasses.

“The fear is growers are so focused on blackgrass that they may be blindly walking into the hurricane that is ryegrass. Why the concern? Well, if you've had the pleasure of dealing with resistant ryegrass then you're ▶



The majority of blackgrass doesn't germinate until late September, with the first 10 days of October being the optimum germination period, explains Cam Murray.



Wrong footing a lower population of grassweeds emerging into a competitive wheat crop, coupled with a spread of herbicide applications could have advantages, says Dick Neale.

▶ already well versed in the battle.”

Should you take a zero-tolerance approach? Cam's fairly emphatic that the answer is yes. “If you have the chance of stopping ryegrass problems early on then make sure you do.”

One of the key elements for controlling grassweed species is crop rotation. “As with blackgrass, spring crops — and in particular spring barley — are very competitive. Pulse crops, where you can get at the grassweeds



Increasing the elements of the pre-em stack will have little impact in dry seedbeds, so spreading applications to maintain the active dose as emergence occurs may be more effective.

with graminicides, can also be useful — providing there's no ACCase resistance present,” he advises.

Cultivations are another important consideration. “In non-inversion systems, grassweeds love this philosophy and ryegrass will proliferate in this environment. So, as in crop rotation, use a cultivation rotation — the plough still has a place in this instance — even if it's every few years,” he believes.

“When it comes to drilling, low disturbance is key. Just as with blackgrass, the more you move the soil, the more ryegrass will germinate.”

Knowing whether herbicide resistance is present, and what type, is important knowledge that will underpin herbicide programmes so testing is a must, says Cam. “If you suspect ryegrass isn't being controlled, then get it tested. Half the battle is knowing what you're fighting in the first place — time spent on reconnaissance is never wasted.

Last line of defence

“Chemical controls are the last line of defence in an IPM strategy — not that you want to rely on herbicides too much — but plan to attack any plants when they're small.”

Mixing modes of action is another strategic move, suggests Cam. Aclonifen (Bandau), launched last autumn, has shown promising results on ryegrass in its first real season of use on UK crops, he highlights.

Triallate and aclonifen all have pre-emergence approvals. “These are key products for successful control of blackgrass, ryegrass and bromes, so dry seedbeds will see them compromised from the off.

“Avadex 15G is well known to be among the most effective in drier seedbeds but as a



September drilling means there's less opportunity to make use of glyphosate to produce a stale seedbed.

liquid formulation, dry seedbeds are a serious hindrance to the efficacy of Avadex Factor. Like diflufenican, aclonifen is a predominantly a broadleaf weed killer, but it's synergistic to grassweed herbicides — offering in excess of 10% improvements in control when partnered with flufenacet. But that improvement in efficacy can only be utilised in damp and cooling seedbeds,” says Cam.

“Prosulfocarb (Defy) at the full 5.0 l/ha (4000g ai/ha) rate is highly effective — however, you have crop caveats at that rate. Triallate (Avadex) is a highly useful addition, followed up by flufenacet. But with flufenacet's resistance issues becoming more pronounced, caution is needed and it's important to test and know your resistance status.”

Increasing the elements of the pre-em stack will have little impact in dry seedbeds, so spreading applications through late September and October to maintain the active dose as emergence occurs will be far more effective, he believes.



Wrong footing a lower population of grassweeds emerging into a competitive wheat crop, coupled with a spread of herbicide applications could have advantages,” adds Dick Neale.

“It's likely to be no less effective than

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The early versus late debate

Bayer is expecting a large area of winter wheat to be sown this autumn, provided the weather holds, as the current buoyant wheat price encourages planting and forward selling of grain.

Like last year, there's a debate around the merits of drilling wheats early, says Tom Chillcott, Bayer herbicide campaign manager. On the plus side it ensures a large wheat area gets put into the ground but on the other hand, delaying drilling helps with grassweed control, septoria and BYDV.

"There is no right answer but based entirely on long-term weed control, it's best to delay. However, we know that all sorts of factors will push farmers to go earlier, in which case it's vital to squeeze every bit of control out of pre-emergence herbicides."

This season Proclus (aclonifen) is widely available to tank-mix with Liberator (flufenacet+ diflufenican) to provide better control of a wide

range of weeds, including difficult populations of blackgrass and ryegrass. Trials show improved ryegrass control (up to 37% in one trial) and an average of 10% more total blackgrass control, he explains.

"Adding aclonifen also helps prevent the development of resistance to flufenacet, which has been the mainstay of many pre-em programmes for over a decade but there are signs of resistance developing. It's really important that we work to protect and prolong the efficacy of flufenacet, which is an effective and easy to use active."

Aclonifen itself has a couple of features that may make it particularly important this season, he adds. "It's persistent, with a half-life of over 115 days, so it continues to control weeds into winter. This may be particularly helpful in earlier drilled crops which require longer protection against weeds."

"It also has some contact activity against smaller weeds. High workloads and large areas of wheat to drill may mean there's some additional germination just before drilling which aclonifen can help tidy up."

"Trials in potato crops using a slightly lower rate of aclonifen have shown good control of small germinated broadleaf weeds and annual meadow grass," he comments.

"But I would stress that this is very much 'plan B' — ensuring there's a completely clean seedbed before drilling is a better option. It's also important to note that aclonifen should only be used before the crop emerges."

There are other options for farmers looking for a pre-em with some contact activity, adds Tom. "Octavian Met and Alternator Met (both metribuzin+ flufenacet+ diflufenican) provide some control of emerged weeds because of the metribuzin component

sowing in early October — with a crop then finding itself emerging into the optimum period of grassweed emergence, with little chance of offering a robust competitive defence.

"Drilled in September, you get a big

strong crop that does compete with blackgrass emerging later underneath it. Delay only a bit to early October, having created stale seedbeds earlier, and the crop will emerge with the blackgrass and lack competition to beat it."

The rules to beat grassweeds have not changed, emphasises Dick. "But given that some people will ignore the rules by drilling early, it's important to understand the consequences for grassweed control and how best to minimise the impact." ■

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