> *As an investment, sound weed control is an invaluable asset to have.*

Technical Weed control survey

Shifting strategy

Blackgrass has dominated the headlines as the weed to watch for, but now it appears other issues are causing similar headaches. *CPM* has teamed up with Bayer to get a better handle on autumn strategy and how growers can maximise spring weed control.

By Charlotte Cunningham

There's no denying that the rising occurrence of grassweed issues have been a heavy burden carried by farmers over recent years. However, while much of the focus has been on blackgrass, other yield-robbing grassweeds have been creeping up, causing problems right across the country.

In a recent survey carried out by *CPM* and Bayer, 84% of growers and agronomists revealed that it's actually wild oats that top the list when it comes to the number one weed to control in winter wheat crops — compared with blackgrass which got 78% of the votes.

"Where you are geographically will have a massive influence on your key weed burden," says Ben Coombs, herbicide campaign manager at Bayer. "Blackgrass is still a huge issue, but there are also many other weeds out there, and thought needs to be given to those too."

Brome also ranked high in the weed control league table, with 67% noting it as a key issue to control in winter wheat. "One thing I've picked up in my experience, is that bromes and other grassweeds and broadleaf weeds are starting to appear where farmers are making decisions not to use certain products to control blackgrass," he adds.

While surprised that blackgrass didn't sit head and shoulders above the rest, AICC agronomist Peter Brumpton agrees that this could indeed be as a result of a shift in product choice.

"In the case of wild oats, I wouldn't say there's an increasing population. However, the move away from products like Atlantis (iodosulfuron+ mesosulfuron) could be resulting in a greater presence of other weed burdens."

Residual chemistry

Though there have been arguments to suggest that the longevity of residual chemistry is running out of steam, the strength of such products could put weight behind the declining focus on blackgrass, adds independent agronomist, Luke Cotton. "A lot of money goes into residuals and blackgrass tends to be dealt with by using those."

So as a broader range of weeds creep into the forefront of priorities, how exactly has the weed control outlook and strategy for winter cereals changed in recent years?

More than half (53%) of growers and agronomists revealed that while blackgrass was still a challenge, the autumn is the key time for control and less of a focus in the spring.

In Peter's opinion, little can be done if there's a high blackgrass burden in the spring so pressure needs to be put on in the autumn. "Once you've got to the spring and have grassweeds that are resistant, then it's game over and you need to focus on the broadleaf weed control."

Ben agrees: "Blackgrass control in the autumn is effective and arguably better than in spring. Spring control is really the last piece of the puzzle, rather than the body."

Across the same time frame, 26% claimed their blackgrass problem has improved — compared to 23% who said it's getting worse. But what do our experts think?

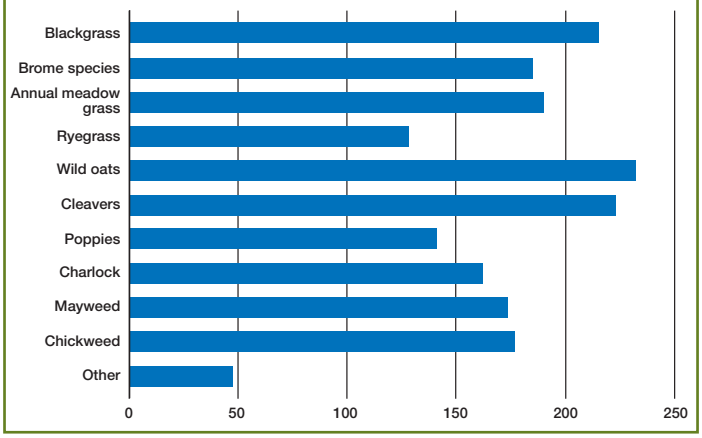
"Over the past three years, in general, there has been pretty decent control of blackgrass," explains Ben. "Spring 2016 was a very challenging year, but since then, it has been pretty good. However, that's not to say blackgrass isn't a severe issue from an individual farm perspective."

For those growers experiencing an improved blackgrass outlook, this is likely to be as a result of incorporating cultural controls, believes Luke. "Certainly in my area, there's been a big push on optimising cultural controls. The fact of the matter is, we simply can't rely on post-em chemistry for blackgrass control.

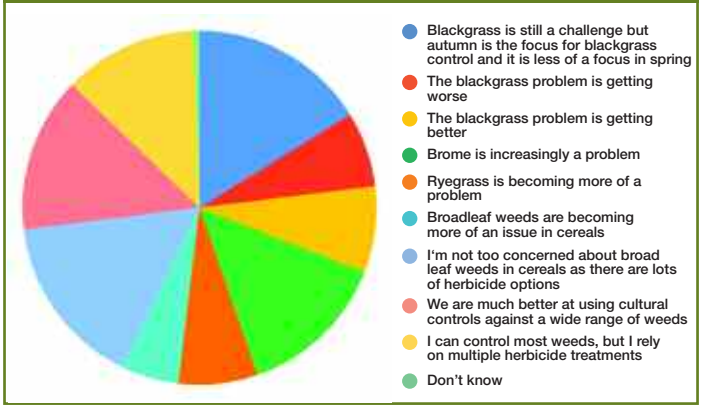
With less efficacy from post-em products against blackgrass, it's perhaps no surprise that more than half (53%) of growers and agronomists said that the spring window is now for focusing on broadleaf weed control,

Be pragmatic with decision making, says Ben Coombs.

Which weeds do you aim to control in your winter wheat crops?



Has the weed situation in winter cereals changed in recent years?



while pre-em programme is for grassweeds.

As well as this, a further 21% seconded this notion of change, stating that their focus has shifted from blackgrass control in the spring to a wider range of weeds.

"The use of Liberator (flufenacet+ diflufenican) in the autumn means that good control can be achieved then, freeing up farmers to focus on other issues in the spring," explains Ben. "Having to focus on blackgrass solely in the autumn and the spring was tiresome and gave no time to address other challenges."

This change in mindset has been reflected in the usage of post-em herbicides in the spring, with the number of growers using it to control broadleaf weeds increasing to 38% last year, compared with 30% five years ago.

In reverse motion, the survey also revealed that just 10% of growers prioritised post-ems for blackgrass control last year, compared with 18% five years ago, highlighting just how much strategy is being switched up.

So what is the best approach for maximising a broad-spectrum of control in winter wheat crops, without compromising on blackgrass management?

"How exactly you decide to use spring post-em herbicides really comes down to the individual situation," explains Ben.

Weed headaches

According to Luke, if you've got visible blackgrass in the spring — that has escaped the plight of pre-em controls — it's difficult to control. "However, what you don't want is a whole load of other weeds starting to cause headaches, so that's where you can optimise the use of spring post-em herbicides.

Peter agrees: "If you've got high blackgrass populations in the spring, the only thing you're going to control it with is glyphosate, as it's pretty much past the point of no return. So this window is the opportunity to manage other weed burdens."

In slight contrast, Ben believes that while blackgrass should ideally be controlled in the autumn, it shouldn't be ignored in the spring. "The focus needs to be on managing populations and reducing the number of seeds returning to seed banks.

We simply can't rely on post-emergence chemistry for blackgrass control, says Luke Cotton.

"Even in very challenging populations, some products can give 30-40% control which will really help to reduce seed return."

When it comes down to product selection in the spring, 27% of growers and agronomists noted good control of blackgrass as the key consideration.

This was followed closely by control of grass and other broadleaf weeds (20%) and 17% said cost was a major factor for them.

These results would, however, seem slightly contradictory given the lack of efficacy and proven shift away from blackgrass control in the spring, so what's the expert verdict?

"Ultimately, it comes down to selecting something that suits the weed spectrum that you're ▶

Wet, wet, wet

While getting onto fields to drill crops is something many are dreaming of at the moment — let alone applying pre-ems — consideration ought to be given to how the wet autumn conditions may affect spring weed control.

According to the survey, growers and agronomists revealed that their top two concerns at present are increased weed problems in the spring, and fears over not being able to travel on waterlogged ground.

Interestingly, 17% stated that they don't think there will be a huge difference this year. So what can we expect?

"The first is to think about is whether or not farmers got their pre-emergence products on or not," says Peter. "From a crop establishment point of view, the weather hasn't been so great. However, if the wheat isn't growing, neither are weeds."

"The pressure may not be there, so when we can travel, it might not be too big a job, and will hopefully mean less expenditure on chemistry."

Peter advises to also be aware of the effect the weather may have on the efficacy of products. "It's important to remember that in certain weather conditions some products don't work as well, so keep your dosage rates up.

"In the short-term, spring 2020 is going to be a bit different compared to a 'normal' year, so growers will possibly have to adapt their strategy. This autumn has seen it much more difficult to get the autumn programme on, so there's a great likelihood that a reduced amount of herbicides have been used."

The keynote message from Ben is to scrutinise the fields before doing anything. "If crops, or more importantly weeds, aren't growing then applying herbicides is a poor decision.

"There could also be more weeds — of all kinds — coming into spring 2020, and more blackgrass in the mixture because of the lack of pre-ems. So don't take the pressure off. One bad year can set you back several."

The move away from products like Atlantis could be resulting in a greater presence of other weeds, believes Peter Brumpton.

▸ presented with," says Peter.

Ben agrees: "From my perspective, controlling a broad spectrum of weeds is what you want from any herbicide, so selecting a product that covers as many bases as possible is key. Though other weed pressures may be on the rise, growers can benefit from a wide range of control options in the spring."

While cost undoubtedly has an impact, Luke believes growers are willing to shell out on products if they can live up to their claims. "Across all aspects of farming, cost does form the basis of a lot of decision making. If there was a product that could control blackgrass and broadleaf weeds in the spring, then I'm sure people would be willing to pay. In essence, if something is costly and ineffective, growers won't use it.

"What I would add though, is that there is no prescriptive strategy for broadleaf control — it's all about dealing with what's in front of you at the time."

Getting into the details of the individual products themselves, Fluroxypyr-based products came out on top in terms of grower preference, with 73% noting Starane and Spitfire (includes florasulam) as tools in their armory for post-em weed control in winter wheat last year.

Over half of growers and agronomists (58%) claimed to use broadleaf weed sulfonylurea-based products — such as Ally (metsulfuron) and Quantum (tribenuron) — while 51% opted for Mesosulfuron-based products like Atlantis and Pacifica.

But in the chemistry edition of Top Trumps, does one outweigh the other in terms of effectiveness?

"Chemistry choice really does depend on where you are on the weed spectrum," says Peter.

According to Luke, broad-spectrum issues are more likely to be prevalent and on a greater scale than specific problems, so the advice from him is to keep this in mind when selecting products. "I think, in general, broadleaf weeds tend to be more commonly found.

"If your following crop is something like OSR, you don't want a load of cleavers in the field, so the primary job is to take control of these adequately."

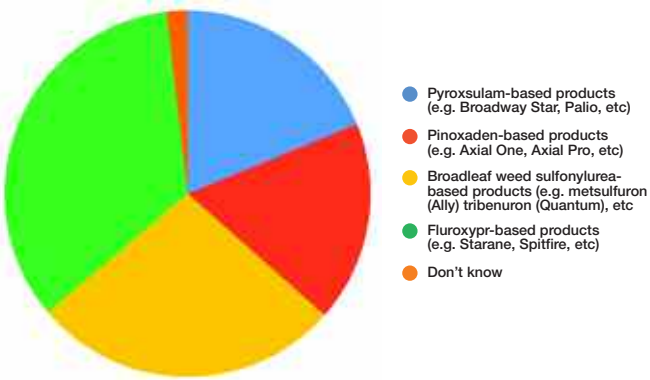
As well as this, the advice from Ben is to consider two main things when selecting a product. "The first is timing — particularly for grassweed-type products — so being realistic about timing fungicide programmes will weigh heavily on product choice.

"The second, of course, is the type of weed and weed pressure you're dealing with. It's important to take a bit of a horses-for-courses approach when it comes to weed control and to be pragmatic in your decision making."

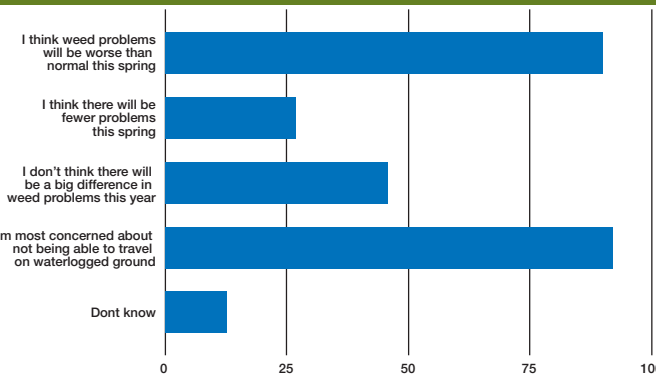
If grassweeds are the main problem, then going for something like Monolith (mesosulfuron+ propoxycarbazone) might be a good option, he adds. "However, if its broadleaf weeds that are causing you a headache, then opting for a product like Pacifica Plus — which will be available from spring 2020 (see panel below) — will offer very good control."

Despite what individual product you select for your situation, what's important to remember is that good products provide true, measurable value for money, finishes Ben. "As an investment, sound weed control is an invaluable asset to have." ■

Which products did you use for post-emergence weed control in winter wheat last season?



How are you expecting the wet autumn conditions to affect spring weed control?



Specifics on Pacifica Plus

As of next spring, the next generation of Pacifica — Pacificia Plus — will be available for growers and Ben believes this could change the game for broad-spectrum grassweed and broadleaf weed control.

"Pacifica as it stands is a really widely-known product that's proven in providing a robust level of grassweed control. The new Plus version boasts the addition of amidosulfuron which will extend that control again, and covers a really broad-spectrum of broadleaf weeds.

"With the proven ability to cover a wide range of grassweeds — and with the inclusion of meadow grass in the spectrum — we really do feel like it's one of the most complete products that will be available to wheat growers."

According to the label, Pacifica Plus combines mesosulfuron-methyl, iodosulfuron-methyl-sodium and amidosulfuron to provide foliar and some root activity against blackgrass, wild oats, ryegrasses, bromes, meadow grass, cleavers, common chickweed, mayweeds, charlock and volunteer oilseed rape in winter wheat.

While much of the practical application elements will remain the same, the only critical change is the use pattern, explains Ben. "Pacifica Plus can be used from 0.4kg/ha from 1 Feb and 0.5kg/ha from 1 Mar, so think about what broadleaf mixtures need to go in."

While the increased level of control means it's less likely to need a mixture — compared to standard Pacifica — it can be tank mixed with a residual herbicide such as Liberator to increase protection against late germinating grassweeds and followed with a specific broadleaf weed treatment later if required, he adds.