Patience will pay this autumn

"A good stale seedbed and October drilling are the easy wins for grassweed control in cereals."

CHRIS MARTIN

An early harvest has created a valuable window for weed management, but experts warn that success this autumn will depend less on speed, and more on timing, moisture and discipline. *CPM* reports...

By Andrew Watts and Janine Adamson

Herbicide resistance continues to complicate grassweed control across a range of species, raises Dr Will Smith, ADAS senior weed management consultant. And while blackgrass has dominated programmes for decades, it's Italian ryegrass that is increasingly being viewed as the greater emerging threat.

Unlike blackgrass that's established across much of England, ryegrass remains more regional, with significant pockets in Essex, Kent and South Yorkshire. But according to Will, those boundaries are shifting.

"Ryegrass is starting to spread outwards from these hotspots and onto farms and into regions where it previously wasn't detected," he says. "Growers have to be mindful of the routes to transmission, be it on machinery or in straw."

The cultural controls used against blackgrass — balanced rotations, delayed drilling and strong crop competition — all remain relevant, but ryegrass brings different growth characteristics and how best to manage it is still being understood, notes Will. The challenge is that profitable rotations often rely heavily on winter wheat, leaving weed control competing with commercial priorities.

RESISTANCE CONCERNS

Equally, glyphosate resistance has been confirmed in Italian ryegrass, with cases reported in Kent, Somerset, Essex and North Yorkshire. Then, more worrying for many programmes is reduced sensitivity to flufenacet, raises Will.

"This active is fundamental to most programmes and yet there are instances where it's providing

Increasing threat

Ryegrass is starting to spread outwards onto farms and into regions where it previously wasn't detected, highlights ADAS' Dr Will Smith.

Balancing act
Agrovista's Chris Martin would rather apply propyzamide in late October or early November and accept reduced control than risk not getting it on at all.

limited control. It pays to know your enemy, so when you suspect reduced performance, send samples for testing."

As widely reported, brome is increasing too, encouraged by establishment changes, narrower rotations and reduced use of spring ALS herbicides such as Atlantis (mesosulfuron-methyl+ iodosulfuron-methyl-sodium). "Brome remains particularly difficult in barley, where tri-allate is likely to offer the most useful control," suggests Will.

Although broadleaf weed resistance attracts less attention than grassweeds, a narrowing choice of herbicide modes of action means the risk is increasing. This is potentially a dormant issue as far as growers are concerned, but the length of time that ALS herbicides have been used on farm means selection pressure has been high, and resistance is starting to be detected in some species.

"Where you suspect that resistance could be an problem then I'd recommend growers check the status of their own populations with a resistance sample, allowing for proactive management if issues are identified," says Will.

For oilseed rape growers, dry soils are only part of the decision-making challenge, highlights Agrovista's Chris Martin. Pre-emergence herbicides and products with strong residual activity remain the best starting point, but poor establishment and cabbage stem flea beetle risk mean many growers are reluctant to spend before they know they have a viable crop.

"Growers know that pre-em sprays are the best means of weed control, especially in OSR. But the risk of losing a crop means few are willing to contemplate the spend, or the following-crop restrictions, unless they're confident of establishment," he says.

Where there's enough moisture, residuals such as clomazone remain a relatively inexpensive pre-em option for broadleaf weeds including chickweed,

Question everything when tackling grassweeds

Reviewing grassweed populations and management practices will help to stay ahead of evolving threats

Speaking at Hutchinsons' recent Cambourne Grassweed demonstration open day at South Sea Farm near Cambridge, technical manager Dick Neale said changing emergence patterns mean control strategies have to adapt.

"Blackgrass is changing, so you have to question everything, from how and when you move soil, to when crops are drilled, and the timing of herbicide treatments."

Dick said two years of trials at the 40ha site, hosted by the Clear family, were already shaping control strategies and building on a decade of work at Hutchinsons' previous Brampton demonstration site.

The work has shown that blackgrass numbers at Cambourne and elsewhere were generally decreasing, but emergence had become more protracted and individual plants had greater tillering capacity, he explained.

In most trials at South Sea Farm, background populations rarely exceeded 50 plants/m2, but some plants produced up to 40 tillers.

Given the more protracted germination, trials clearly show that sequencing pre- and post-em herbicides is more effective than large stacks of chemistry. In the 2026 herbicide matrix trial at Cambourne, preliminary counts indicate around 80-85% control from a pre-em stack of Sovorna (cinmethylin+ picolinafen) plus Alternator Met (diflufenican+ flufenacet+ metribuzin), compared with 99% from a sequence of Avadex (tri-allate), Mateno Star (aclonifen+ diflufenican+ flufenacet), followed by Sovorna. Pre-em Sovorna alone gave 70% control over the untreated, which had 50 black-grass plants/m2.

According to Dick, delayed drilling and spring cropping remain important, but as earlier-emerging blackgrass has been reduced, full autumn cropping and slightly earlier drilling may be possible where populations are manageable and herbicide sequences are effective.

However, healthy soil with good structure, drainage and fertility is fundamental to establishing competitive crops and reducing grassweed pressure.

In that respect, Farmacy's Helen Huyton said drainage improvements at South Sea Farm had improved crop establishment, blackgrass control and the ability to travel on land for autumn herbicide applications. "Blackgrass doesn't necessarily like wet conditions, but it's far better able to cope than wheat."

Subsequently growers were urged to improve soil health through cover, catch and companion crops, and by reviewing cultivation type, timing and intensity. "Moving less soil definitely helps, but it must be to optimum effect and shouldn't compromise crop establishment," concluded Dick.

Evolving challenge
Although blackgrass numbers at Hutchinsons' trials sites are generally decreasing, weed emergence has become more protracted and individual plants have greater tillering capacity.

hedge mustard and cleavers. However, where soils are dry, many are likely to wait until the crop has established before switching to post-em contact herbicides.

Critically, CSFB pressure will be the tipping point, says Chris. “Given the conditions, most growers will wait for germination. Once they’re confident of even establishment, then they may opt for a metazachlor or quinmerac mixture at expanded cotyledon stage before potentially following up with a contact.

“Growers will also want to have a handle on CSFB populations; if there’s chance that it’ll wreak havoc, then growers may well decide to delay herbicides until it’s clear how much damage the crop suffers before either opting for post-emergence contact sprays, or abandoning it and re-sowing it with another crop.”

CLASSIC APPROACH

Belkar (halauxifen-methyl+ picloram) remains the mainstay of post-em contact programmes in OSR, while Corteva has introduced LaDiva, which combines halauxifen-methyl with aminopyralid and picloram to broaden options.

“Belkar is the obvious go-to product,” raises Chris. “Where chickweed is a problem, LaDiva offers some added activity, but the objective has to be control earlier rather than later. After this, it’s the propyzamide products such as Kerb or Astrokerb, remembering that they can’t be applied before 1 October.”

If no pre- or peri-em spray has been used, control may hinge on a small number of fast-establishing weeds. Chickweed, for example, can become too large for later-applied propyzamide products.

Chris says the lesson from autumn 2025 is to not wait too long for ideal soil temperatures. “For maximum efficacy, soil temperatures have to be at 8°C, but in an open autumn this may not be until December. I’d rather apply it [propyzamide] in late October or early November and accept reduced control than risk not getting it on at all.”

Broadleaf weed timing must also be balanced against grassweed control. That’s particularly important where Centurion Max (clethodim) is used, because many other herbicides can’t be applied within 14 days before or after it.

Looking beyond the can, in cereals, delaying drilling after mid-September remains one of the simplest ways to improve grassweed control. “For grassweeds, mid-September drilling is a disaster,” stresses Chris. “It’s tempting after an early harvest, but where ryegrass, blackgrass and bromes are a problem, early drilling does nothing to help.”

> ***“Brome remains particularly difficult in barley, where tri-allate is likely to offer the most useful control.”***

Dry soils may limit the value of stale seedbeds, but even early October drilling still improves the chances of success, he adds. “No herbicides work consistently under high pressure, but give them a chance and they all work well. A good stale seedbed and October drilling are the easy wins for grassweed control in cereals.”

Equally, later drilling usually improves the performance of residual herbicides by providing more moisture in the upper soil profile and cooler temperatures to support persistence.

Multi-mow strategy keeps blackgrass at bay

How Michael Kavanagh has been using a rotary mulcher to prevent seed return

For one farm manager tasked with creating a new enterprise while being faced with problematic blackgrass, little-and-often regrowth topping on end-of-life legume fallows is beginning to pay dividends.

To rewind a step, in early spring 2025, Michael Kavanagh moved 100 miles from a mixed farm manager's role in Shropshire to a new position in Oxfordshire; exchanging an established unit for a newly-formed one, and sandy loam soils for Cotswold brash. While the soils changed considerably, one familiar challenge remained: blackgrass.

Now managing the Chadlington Farming Partnership, Michael says he was initially recruited to help create a business that not only farms profitably, but that works with nature. "Farming with regenerative principles, working with nature to help manage soil and crop health, is something I've long been interested in," says Michael, co-founder of the Green Farm Collective.

On his previous farm, Michael says he gradually moved to a system using no synthetic phosphate or potash fertilisers, growth regulators or insecticides, while eliminating fungicides across most of the cropped area.

The result was lower costs, maintained yields and access to premium markets. Now at Chadlington, the ambition is similar. Nitrogen use has already been reduced to below 160kgN/ha, while seed dressings, growth regulators and insecticides have been phased out of the system.

Michael acknowledges that he's still learning about the farm and making changes slowly according to circumstances, but has made some considerable adjustments so far.

Cutting to control
In dense blackgrass areas, Michael Kavanagh waits until the weed has formed a seedhead and then goes through with the Cyclone mulcher before they can disperse seed.

Rotations have been broadened to include milling wheat, winter and spring barley, winter oats and winter oilseed rape, plus spring barley. "When moving to farm more regeneratively, it's easy to make the mistake of trying to do too much at once," shares Michael.

Cover crops, herbal leys and legume fallows have also been introduced, with livestock integrated to help build soil health and resilience. Composting

locally-sourced chicken manure is another key initiative aimed at raising organic matter levels and improving water-holding capacity.

He notes that an additional consequence of the changes has been blackgrass suppression. 40ha of problem land have been put into three-year herbal leys, while the worst-affected fields have been entered into SFI legume fallows. “For the legume fallows, mechanical topping with multiple passes is the preferred control method,” adds Michael.

To achieve this, Michael invested in a 6.3m Major Cyclone rotary mulcher and uses it to repeatedly remove blackgrass heads before the seed can shed. “In dense blackgrass areas we wait until the weed has formed a seedhead and then go through as high as we can with the Cyclone to destroy them before they can disperse seed,” he explains. “Last year, we made three passes, which really helped.”

The strategy relies on cutting high initially, encouraging further regrowth that can be targeted with subsequent passes. The mulched residue is then evenly spread and returned to the soil, supporting organic matter build-up while reducing reliance on herbicides.

Michael says the results have been encouraging. “Once sprayed off and drilled, when established with a robust pre-emergence herbicide, the following wheats have been blackgrass-free. It’s a suitable example of how good cultural methods can work together with chemical control to best effect.”

For Michael, the approach demonstrates how regenerative farming can address weed pressure, drought resilience and soil health while maintaining profitability. His advice to others is simple: “Make small, slow steps rather than attempting overnight changes,” he concludes.

- Cinmethylin and aclonifen can be highly effective, but only when conditions allow them to work.

This means in many respects, cultural controls should come first; fields with a high grassweed burden should where possible be drilled later to allow weed flushes to be controlled before sowing.

ACCUMULATION

It’s then allowing the smaller gains to add up: choosing vigorous varieties such as Bamford, Beowulf or KWS Arnie, raising seed rates to offset losses from stacked residuals, preparing a better seedbed and drilling slightly deeper. In fact, trials suggest drilling at about 4cm can reduce crop effects from cinmethylin and some other residuals on crop development.

Programme shape will then depend on the weed spectrum present. Avadex (tri-allate) is often the preferred partner in blackgrass, brome and wild oat situations, while Fundatis (bixlozone+ beflubutamid) is better suited to ryegrass. These will support the main players Luximo (cinmethylin) and aclonifen, with other selective residuals such as flufenacet, prosulfocarb or pendimethalin used according to the species present.

“It’s important to use as many modes of action as possible,” urges Chris. “Tri-allate, flufenacet and prosulfocarb are from the same mode of action group (Group 15), but they work in different ways, complementing each other,

Partnering up to power up

Use two specific herbicide actives in sequence to deliver maximum grassweed control in oilseed rape

While collaboration isn’t necessarily commonplace among ag chem manufacturers, two companies have pooled their product knowledge to help growers get on top of grassweeds.

Both clethodim (as in Centurion Max) and propyzamide (as in Astrokerb and Kerb Flo 500) have their own well-understood and specific benefits, but the message is strong for this season – consider using them in sequence, urges UPL’s Tom Wheelhouse.

“With the renewed confidence in oilseed rape this presents an excellent opportunity to reduce seed return for the benefit of the wider rotation,” he says. “For best practice, according to our stewardship, clethodim should be applied by 15 October to a crop at 6-leaf stage; weeds must also be actively growing. When applied with a true water conditioner such as X Change, trials demonstrate that efficacy can be improved further by 11%. And now, we recommend that applications of clethodim are followed by Astrokerb or Kerb Flo 500.”

Tom also stresses that despite generic alternatives coming to the market, not all clethodim-based herbicides are made equal. “Centurion Max has been proven for more than 10 years. Its formulation is superior with benefits across key attributes such as blooming, dilution, emulsion droplets

Unique action

Having been recently reclassified to HRAC Group 23, propyzamide offers a distinct mode of action within herbicide programmes, says Hugh Guinan.

so it’s worth incorporating them where possible to give yourself the best chance of success.”

From a wider rotational perspective, this autumn may also offer an opportunity to improve soil structure, adds Chris. “On self-structuring land that has cracked open, a light cultivation to about 5cm can flick small clods into cracks which will

and cold stability."

As for propyzamide, that's been fundamental to grassweed control programmes for 50 years, says Corteva's Hugh Guinan. During that period, weather patterns have shifted, so he says the best advice in the current climate is to apply as soon as crop and stewardship conditions are met.

"The optimum propyzamide window is typically late October through to early December. That's a sweet spot for persistency, stewardship, and soil conditions. Focussing on soil conditions ensures the active stays where it needs to, as while propyzamide isn't very mobile, soil particles containing it can be.

"Used in sequence with clethodim, growers should see improved blackgrass efficiency."

In terms of dose rates, Hugh warns growers against cutting back, recommending 850g ai/ha for large blackgrass, brome and ryegrass problems, while rates can drop to 750g ai/ha where grassweed pressure is lower, or wild oats are the target. A 500g ai/ha dose can only be justified for small meadow grasses or volunteer cereals.

He then highlights that the active ingredient was recently reclassified by HRAC, shifting from Group 3 to 23. "This is in response to deeper understanding regarding how propyzamide works. Critically, it's the only registered active ingredient in Group 23 in the UK.

Not all actives are equal

Centurion Max has been proven for more than 10 years and its formulation of clethodim is superior, stresses UPL's Tom Wheelhouse.

"This is positive news because it's recognition that propyzamide offers a distinct mode of action within herbicide programmes," he says. "It's unique, and that's a vital grassweed resistance management tool."

To round the discussion further, ADAS' John Cussans highlights that while pre-emergence OSR options like metazachlor may have fallen out of favour recently, they still offer value. "For high pressure situations where the crop was perhaps drilled early, this is an important option.

"And of course, all of this should be supported by the wider ethos of good OSR establishment and management, as promoted by the OSR Reboot campaign recently. For weed management in any crop, it's critical that the whole management package is considered," he concludes.

lodge at different depths throughout the soil profile.

"As these clods shrink and swell through winter, this can provide more natural structuring than any metal can ever do while also encouraging a weed flush once moisture arrives. On heavier or high-magnesium soils, it may be the only cultivation required this season, saving fuel and labour," he concludes.