

Weed worries shouldn't drive spring sprays

“Getting good control can be a worry, but Pixxaro seems to get you out trouble.”

Technical Weed control

Dow AgroSciences' new broadleaf herbicide Arylex makes promises of a more relaxed approach to spring weed control. A CPM/Dow survey finds out what that means to growers.

By Tom Allen-Stevens

Growers want a herbicide that will tackle tough broadleaf weeds in the spring, but don't want to compromise fungicide timings in order to apply it. When it comes to controlling weeds, weather is a key concern.

A massive 98% of growers who responded to the CPM/Dow AgroSciences survey on spring broadleaf-weed control agreed that weather affects when they can spray (see chart on p24). Almost nine out of ten find it affects the level of control they achieve, and less than half believe keeping weeds in check is easy.

Better control of tough weeds, a broader spectrum and different chemical groups to

address the threat of resistance are what growers are looking for from new broadleaf herbicide solutions.

“Growers want efficacy from the herbicides they use, especially on weeds that are difficult to control, but they also want to use their time efficiently as they have priorities elsewhere on the farm,” notes Stuart Jackson of Dow AgroSciences.

Septoria control

“The main one here is septoria control — with less eradicant activity by fungicides, let timings slip on disease because your focus is elsewhere and you're hammered. Once septoria is in the crop you'll struggle to be free of it. Growers can't afford to delay fungicide applications to wait for the right conditions control to broadleaf weeds.”

The pathogen priority is borne out in the survey results (see chart on p24). When asked what they would do with time from a herbicide that offered more flexibility, more than two thirds of respondents said they'd focus on getting fungicide timings right.

“The beauty of Arylex (halauxifen-methyl) is it allows you do that,” continues Stuart

Jackson. “No matter when you apply it, as long as the weed is there, it'll perform.”

The herbicide was introduced last year as Pixxaro, in a formulation containing fluroxypyr (as in Starane). Zypar, containing florasulam (as in Spitfire), has just been cleared for use (see panel on p27).

Dick Neale of Hutchinsons reckons ▶



You can apply Pixxaro safe in the knowledge that it will stay there until it's needed and do the job, says Dick Neale.



Cranesbill is one weed that's getting tougher to control.

► Arylex is a valuable addition to the herbicide armoury. "Pixxaro is a very effective herbicide for the weeds it controls. You can apply it safe in the

knowledge that it will stay there until it's needed and do the job.

"That's especially useful in cold conditions, when the efficacy of other

actives is generally compromised — notably fluroxypyr on cleavers and sulfonyleureas on other weeds. But you do have to understand the weed spectrum you're dealing with — Pixxaro is particularly effective on poppies and cleavers. It controls cranesbill, chickweed, fat hen, small speedwell and a number of other target weeds. But volunteer oilseed rape, mayweed, pansies and large speedwell fall outside its target range."

Biggest weed worry

According to the survey, cleavers remain growers' biggest broadleaf-weed worry, in both spring and winter cereals (see chart on p27). Brassica weeds and speedwells come next in winter cereals, while chickweed and fat hen are major concerns in spring-sown crops. Cranesbill features as a common weed in winter crops, while poppies occur commonly in both winter and spring cereals.

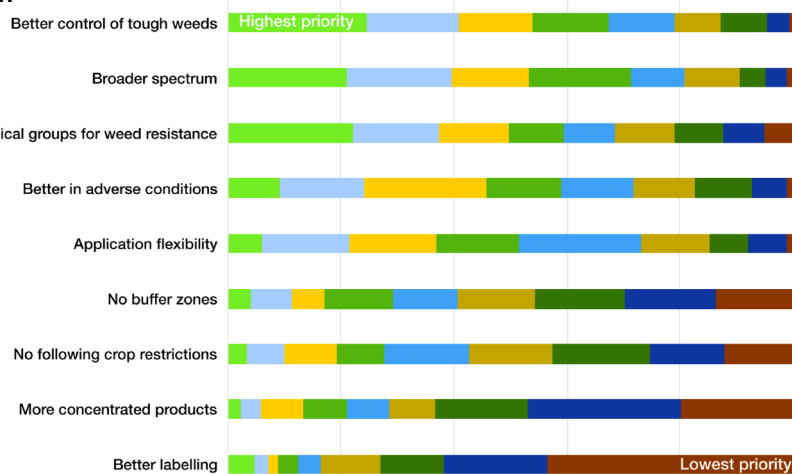
"What stands out is that cleavers are still the number one weed worry," notes Stuart Jackson. "We have the chemistry to control them effectively, but they always reappear in cereals, and where they do, they can be responsible for significant yield loss. It means whatever you use to control them, you can't afford for that product not to work."

With other weeds, his advice is to look carefully at what's in the field. "Those growers with grassweed issues will already have applied a fairly robust autumn stack of residual herbicides. Speedwells and pansies, for example, are generally taken out by flufenacet, diflufenican and pendimethalin applications.

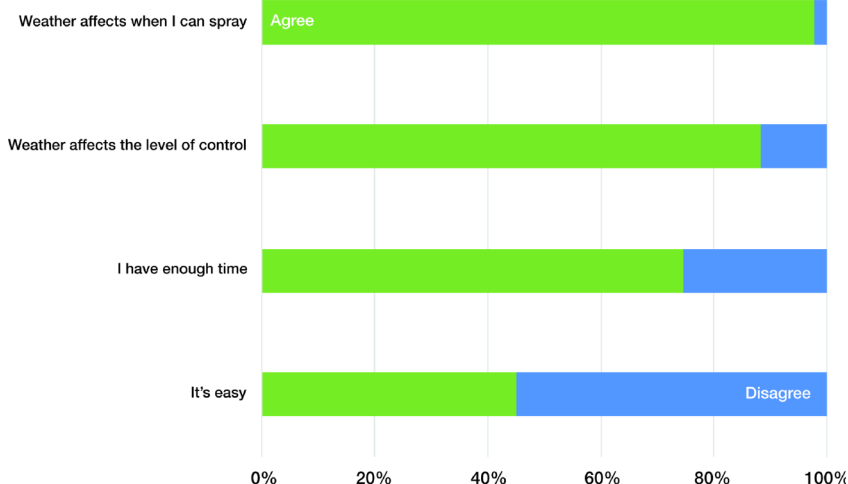
"Cleavers will frequently appear in the ►

Broadleaf weed control – the priorities

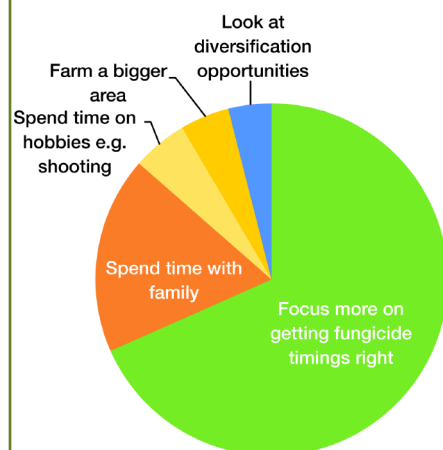
If you were to develop new broadleaf herbicide solutions for farmers, what would you work on?



What about broadleaf-weed control in cereals on your farm?



If a herbicide offered you more spray days, what would you do with the time you gained?





Colin Woodward was faced with large weeds to control in cold April conditions.

► spring, as will cranesbill, poppy and the odd brassica weed.”

Dick Neale confirms that cereal crops are coming into spring growth looking generally free of broadleaf weeds. “It’s probably the cleanest start to the season we’ve had for some time. This is mainly down to later-drilled crops and the heavy herbicide stacks growers have applied for blackgrass control. For the most part, these have done a fantastic job.

“The downside of later drilling is that there’s less crop cover early in the spring, which means weeds are stimulated to grow and compete with the crop. This will become

more evident as nitrogen applications are made — cleavers especially are stimulated by N — so be ready to react.”

Poppy problem

Heavy clays in particular will harbour cleavers, some speedwells, cranesbill, charlock and volunteer OSR, he notes. Poppies are often more of a problem on lighter soils with bindweed and knotgrass coming in later in the season.

“In the past, many growers have tended to go with a specific application to clear up broadleaf weeds at around GS32, or wait until GS37 if crops are clean and cleavers are the only target, when they’d go with Starane,” notes Dick Neale.

“Arylex gives you more flexibility to control those key target weeds when it suits you — it’s a very good product in that respect, as long as you know its weed spectrum.”

Oxon grower Colin Woodward used Pixxaro on his winter wheat last year. He manages 900ha of arable cropping based on the Great Tew Estate, near Chipping Norton. “The main reason we used Pixxaro was that it was cold when we applied it in April, and the weeds, especially poppies, were quite large,” he notes.

“It turned wet after mid Oct the previous autumn, curtailing herbicide applications,

so by the spring, the weeds in some fields were particularly bad. We’d heard that Pixxaro could be used on big plants in conditions where other herbicides wouldn’t perform.”

The application was made with the T0 spray in mid April, tank-mixed with chlormequat, chlorothalonil and manganese. “Pixxaro mixes well with T0 and T1 chemistry. There were some big, overwintered poppies, chickweed and cleavers, but they were beautifully controlled by the herbicide. In adverse conditions or with larger weeds, getting good control can be a worry, but Pixxaro seems to get you out trouble.”

This year is quite different, however, so Colin Woodward will be adapting his approach. “All the residuals have worked well and crops are looking clean. There are a few overwintered cleavers in fields with low levels of blackgrass that didn’t have a post-emergence follow-up. There’ll also be spring germinators, but I don’t think I need to worry about those until the T1 timing at the earliest, so there’s no panic this year.”

Across the rotation, broadleaf-weed control has improved with the recent introduction of Clearfield oilseed rape, he says. “That’s really helped us get on top of runch and charlock. We’ve also moved out of winter beans into spring beans, which

High awareness of resistance threat

Herbicide resistance in broadleaf weeds is a recognised threat on more than three quarters of UK farms, according to the results of the survey (see chart). The number of confirmed cases may be higher than the handful that official figures suggest, with 4% of respondents saying they have resistant broadleaf weeds.

A further 19% suspect they have cases on the farm, while 61% of growers said they recognise it as a threat that they believe they’ve so far avoided through careful use of herbicides.

“There’s no doubt the incidence of herbicide resistance in broadleaf weeds has increased,” notes Dick Neale. “There’s more awareness, which may be driving the increase, and for those with confirmed cases, they really know they have it, and have to adapt their herbicide practice.”

The most cases of resistance have been identified in poppies, mainly in eastern counties. The mutation has occurred at a target site for ALS herbicides in the plant, known as Proline 197, and the sulfonyleureas, particularly metsulfuron and tribenuron, are affected.

In resistant chickweed, found most commonly

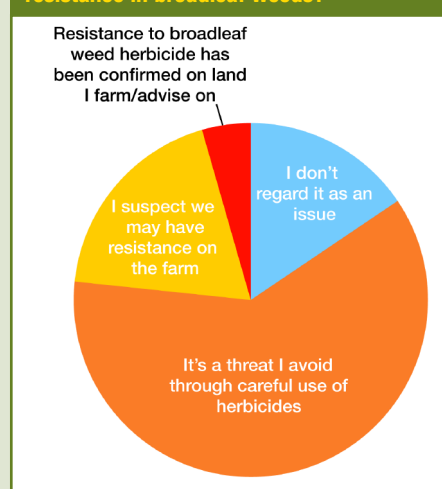
in Scotland, there are two known mutations. The more common one occurs at the Proline 197 position, conferring resistance to metsulfuron, but not to the triazolopyrimidine herbicide florasulam. Less common in chickweed is the mutation at the Tryptophan 574 position, which confers resistance to both metsulfuron and florasulam.

“Isolated cases of resistance in mayweed has been confirmed and we know of a few cases where groundsel has been particularly difficult to control,” adds Dick Neale. “It’s a threat, and growers should be aware of it. But resistance is relatively simple and inexpensive to avoid through using chemistry with different modes of action.”

Stuart Jackson advises growers who suspect resistance to get seed tested. “Those with confirmed cases will still achieve good control with Pixxaro or Zypar, but should apply full label rates — i.e. 0.5 l/ha and 1 l/ha respectively — with an adjuvant added for Pixxaro, and target weeds when they’re small.

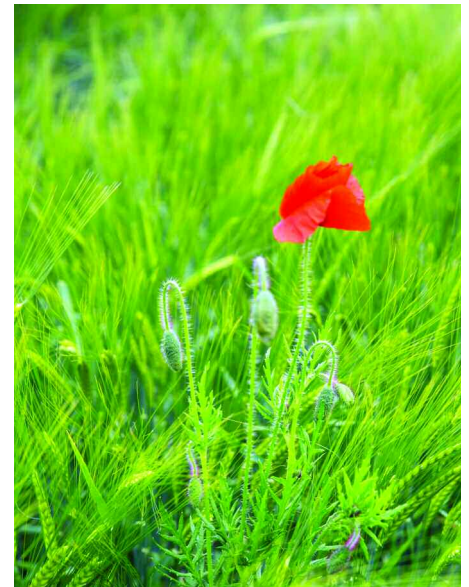
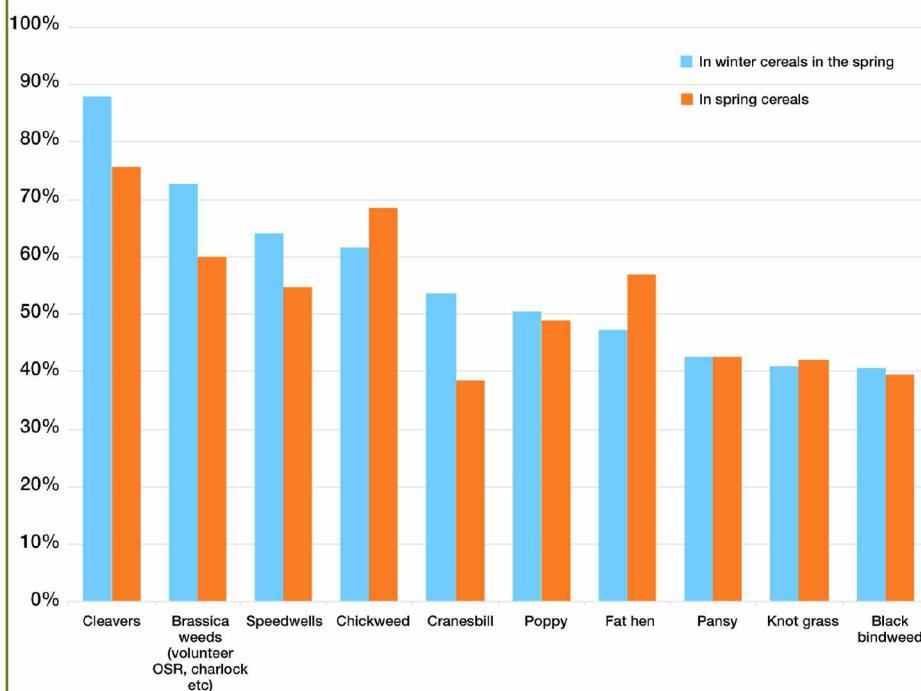
“Make full use of other modes of action — pendimethalin is good on poppies and clopyralid

What is your experience/view of herbicide resistance in broadleaf weeds?



is effective on mayweed, for example. Note that Zypar contains florasulam, which will not control chickweed with the rare Tryptophan 574 mutation. But Arylex is an auxin herbicide with no known resistance issues.”

Which of these weeds commonly occur on your farm?



Pixxaro is effective on poppies, which can be a problem in spring barley.

tend to be a cleaner crop. We also have spring barley in the rotation, and I note that Pixxaro is a nice fit for poppies, which can be a problem in the crop.”

Using the rotation and more effective chemistry are two ways in which Colin Woodward aims to prevent broadleaf weeds becoming too much of a worry. “We haven’t had any problems with resistance, but it’s something to be aware of. Meanwhile, cranesbill is one weed that’s getting tougher to control, and weather always plays the biggest role in how the spring progresses. So we need chemistry that fits in with what we’re doing and takes the burden out of weed control.” ■

Relaxed approach makes for weed winners

Three lucky *CPM* readers have each won 40ha Pixxaro for taking part in the *CPM/Dow* AgroSciences survey.

Richard Dungait of West Farm, Morpeth, Northumberland, Sam Paske in St Neots, Cambs and Philip Metcalfe of Foxberry Farm, Richmond, N Yorks responded to the survey and completed the tie-breaker question.

Their replies to the question asking them

what they needed to help them relax in the spring were deemed best by the judging panel. What’s more, the first 50 survey entrants have each received a pair of Bama welly socks.

The aim of the survey was to gather views on spring priorities and how broadleaf-weed control fits in. To take part in the next survey, make sure we have the correct details for you by emailing angus@cpm-magazine.co.uk

Zypar comes in for autumn use

Zypar has now joined Pixxaro as the second herbicide for UK growers from Dow AgroSciences that contains Arylex. This is formulated with florasulam, used in Spitfire, along with halauxifen-methyl, and is cleared for use in both the autumn and spring.

Autumn use is the key point of difference to its stable mate. A contact-acting herbicide, Zypar can be applied from early growth stages through to GS45 in all winter and spring cereals except oats. It controls cleavers, poppies, cranesbill, fumitory, fat hen, chickweed, brassicas, mayweed, and volunteer beans, notes Stuart Jackson, and will add flexibility and an alternative mode of action to spring weed control, too.

“The key difference in the weed spectrum is that Zypar is effective on brassicas and

mayweed. It’s a compatible product that sits happily in the tank with PGRs, trace elements, fungicides and other herbicides,” he says.

So how should growers use the two products? “Used at the T0 spray timing, Pixxaro at 0.375 l/ha will pick up weeds left by the autumn-applied residuals. Use the higher rate of 0.5 l/ha if poppies have passed the four-leaf stage and add an adjuvant if there’s no EC formulation in the tank-mix — if it’s partnered with straight chlorothalonil, for instance. Alternatively, use Zypar at 0.75 l/ha, with no adjuvant required.”

The advice would be pretty much the same at the T1 spray timing. “Just bear in mind the higher rates may be needed for larger weeds,” he adds.

“Those growers who will wait until the T2



The key difference in the weed spectrum is that Zypar is effective on brassicas and mayweed, says Stuart Jackson.

fungicide timing can use Zypar or Pixxaro to mop up weeds that have escaped treatment earlier in the spring, as well as clearing out late flushes of black bindweed which may come through in a wet season.”