ARABLE

Maize could be an attractive option this spring where growers have suitable sites and a market for the crop.

Farmers Guardian gets some top tips on how to get crops off to the best start.

How to get maize off to a good start

ood nutrition, soil structure and a low weed burden are essential for good maize yields.

Growers are urged to

Growers are urged to assess these three prerequisites now and take appropriate action to rectify any concerns if crops are to get the best possible start this spring.

That is the view of Maize Growers Association technical lead Jon Myhill, who says the first task on the list is to get a soil nutrient and pH analysis done before planting.

"Then you can work out how much fertiliser your crop will require this year, taking into account any manures, slurry or digestate that you may be applying," says Mr Myhill.

Maize is a lazy rooter and will not tolerate compaction, so his next recommendation is to go out with a spade, do some digging and look for any sign of structural issues.

Compaction

If compaction is present, measure its depth so that cultivations can be set up to tackle it.

Lastly, weed control is a crucial element in maize establishment, adds Mr Myhill, with losses of up to 50 per cent not uncommon if weeds are allowed to get ahead of the crop.

Problem weeds, such as fat hen, can out-compete maize seedlings very quickly, while cranesbill is an increasing problem in maize grown in arable rotations.

Ploughing will provide a reset, but

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BE AWARE OF LABEL CHANGES

FAT hen, black nightshade and common orache are among the main weed threats to maize, but these and a range of other weeds can be controlled with Diva (pyridate), says Certis Belchim technical manager James Cheesman.

In Certis Belchim trials, a combination of Fornet 6 0D + mesotrione + Diva has also given good control of cranesbill, which is an increasing threat in maize grown in arable rotations.

Mr Cheesman says: "It is a moderately susceptible weed, so has to be sprayed at a very early stage and in sequence with dimethenamid-P + pendimethalin."

He explains that a typical approach to weed control in maize comprises a preemergence application of pendimethalin followed by a Fornet 6 OD + mesotrione +/- Diva mix, applied post-emergence.

While mesotrione provides control of fat hen and black nightshade, there has been a reduction in the label rate for some products.

Losing efficacy

"A lot of labels are down to 0.75 litres/hectare, which is fine, but given the fact that it has been 20 years since mesotrione came out, the general consensus is that it is losing a bit of efficacy," says Mr Cheesman.

Adding Diva to the mix will give quick control of emerged broad-leaved weeds, from the cotyledon stage to 4 expanded



true leaves of the weed, until the residual starts to work.

"That is quite important because when the weather turns against us, when it gets hot and dry, weeds generally shut down against any herbicide," says Mr Cheesman.

There is also an option to apply a split dose of Diva where no pre-emergence spray has been applied, he adds, with the first split applied from 2-leaf of the crop, provided the crop is in good condition.

"It is an option. Reducing early weed pressure helps the crop retain moisture and nutrition, and you could come back in at 4-6 leaves with a top-up of nicosulfuron for grass-weeds, mesotrione for residual activity and you could add in some more Diva if you have emerged weeds," says Mr Cheesman.



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if maize is to be established using min-till or strip-till, it is important to consider what is growing in the field and factor in a pre-planting application of glyphosate to clear.

He recommends use of a pre-emergence herbicide, even in dry conditions, as the most important objective of weed control is keeping crops weed-free until the 4-6 leaf stage.

"It sensitises weeds and allows for the post-em to be a little bit more planned. And if there is a delay to the post-em application, weeds will not be running away."

A post-emergence spray can then be used to lay down residual



actives to pick up any late-germin-

ating weeds.
"With the catchy springs we seem to be getting, potentially we may not be able to travel with the sprayer until after the 4-6 leaf stage of the crop. We have to be mindful of how we are going to deal with weeds if we miss that window. I would try to use a pre-emergence, even if it just three litres per hectare of pendimethalin, to reduce that risk.

Herbicide programmes are typically based around pendimethalin pre-emergence and nicosulfuron and mesotrione post-emergence, says Mr Myhill.

Then there are other actives, such as pyridate, that we can mix with them, depending on the weed spectrum, to create a robust strategy that is still crop safe," he adds.

Cultivations

Hampshire-based independent agronomist and Association of Independent Crop Consultants member Richard Cromie is currently reflecting on the prospects for maize establishment following above average rainfall figures for the season.

Advising growers across Hampshire, Wiltshire and West Sussex, Mr Cromie cites an example of one grower whose 12-month rainfall rolling average to March 1 was 1,193mm, up from a long-term average of 813mm.

Plough and power harrow remains the favoured approach to maize establishment among his clients, although interest is growing in strip tillage establishment, which is delivering cost savings with very little yield penalty, he says.

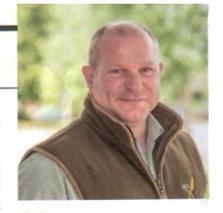
His first tip for good crop establishment is to ensure there is no soil compaction; his second is not to rush seedbed preparation and make sure there is plenty of tilth.

"You want to be able to bury the toe cap of your boot in a really nice tilth before you go drilling," he says.

The tillage system employed to some extent drives weed control, he adds.

The risk posed by a spell of dry weather after planting needs to be factored in if a solely post-emergence approach is being considered, he says. In hot, dry conditions weeds will 'wax up' to prevent water loss, and they are harder to kill, adds Mr Cromie.

His pre-emergence herbicide choices include pendimethalin as a standard, and on dirty fields, S-metolachlor, followed post-emergence with Fornet 6 OD (nicosulfuron) and mesotrione.



You want to be able to bury the toe cap of your boot in a really nice tilth before you go drilling

RICHARD CROMIE

Where there are larger weeds to control Diva (pyridate) will be added to a nicosulfuron + mesotrione mix.

"I add Diva if weeds are getting on the big side, if the weather has caught us out, for example, and the place I definitely use Diva is where I have got cranesbill issues," says Mr Cromie.

