MAIZE matters

making a profit from maize

In association with KWS

The prolonged spell of cold wet weather has taken its toll on this year's crop, as we discover in the third of our series of articles on maize growing.

Mitigating the effects of weather on maize

John Burgess of KWS describes the 2012 maize growing season to date as 'disappointing, but not a disaster'. He says UK producers are not alone, however, in their struggle to get the crop back on track.

"Crops in Northern France, Northern Germany and Denmark have also suffered from a lack of spring sunshine," says Mr Burgess. "Drilling took place later than usual on most farms and consequently the crop is not looking as good as we'd like it to. While there is no need for alarm at this stage, harvest is likely to be moved back to around mid-October.

"Varieties with good early vigour usually give the best performance in difficult conditions, and I expect that will be true of this year. It is frustrating for producers, but as a plant breeder, this scenario offers opportunities for pushing plants to their limits and determining which varieties stand up best under pressure. On a more positive note, concerns that slug damage would be extensive have largely proved unfounded," he adds.

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> JOHN BURGESS

Brian Copestake of Limagrain also blames the weather. "The ideal time to plant maize is during the last week in April or the first week in May," he says.

"However this year, the weather delayed planting on some farms until the warm spell at end of May, shortening the growing season quite considerably.

"One of the few options available for trying to kick-start growth is to apply fertiliser. Plant progress was slow, which limited uptake, while heavy rain contributed to nutrient leaching. It might be worth applying around 50 units of nitrogen/acre, to give the crop a much-needed boost."

Blanket use of a pre-emergence herbicide for maize crops is advised to keep weeds at bay this season.

HERBICIDES

FRANCIS Dunne of Field Options strongly recommends the blanket use of a pre-emergence herbicide for maize crops. This year in particular has backed up his conviction, he says.

"It is argued a pre-emergence product won't work if the seedbed is too dry. But if that is the case, then the weeds won't be growing either," he says. "When it does eventually rain, then the chemical will be activated. A cheap product, such as Stomp, will usually achieve adequate control."

Strategy

On 30-40 per cent of farms, there may be no need to apply a follow-up post-emergence treatment. But if the need does arise, the weed level will be much reduced, with plants weakened by the effect of the first application. A strategy which does not include a pre-emergence spray will leave the crop vulnerable, especially if the weather delays application, or if contractors cannot get on to the fields at the optimum time.

Second spray

"Once a pre-emergence herbicide has been applied, then a second spray can be used where appropriate; this will often entail using a product designed to target a specific weed problem. I think this combination approach works best and helps to ensure that the crop will reach its full potential."

VARIETAL DIFFERENCES

MIKE Corp, of Procam's Chemega, says 2012 has highlighted the difference between varieties.

Stress

"This has not been the easiest of years for growing maize; certain varieties appear to have suffered badly, while others have come through looking good and are showing relatively few signs of stress.

"Severus is a variety which stands out from the rest. It is in the ultra-early maturity group [Group 10] and has shown good early vigour. This variety has a better colour, compared with others in our trial plots."

MAIZE UNDER PLASTIC

THE rapid progress achieved by plant breeders has allowed more scope for conventional growing methods in locations previously considered marginal. However the recent feed price rise makes a stronger case for investing in plastic in some areas, says Agrovista's Simon Nelson. He covers Cumbria and Dumfriesshire.

"We ran trials to test the starch yield improvement potential of maize under plastic. In four out of the five years, starch levels were 1.5-2 tonnes per hectare higher in crops under plastic.

"In the remaining year – 2009 – the difference was 1t/ha, when growing conditions here were good for conventional crops. That is why around 80 per cent of my clients choose this option, despite the extra expense."