



In the second of our series on making profit from maize, experts offer the latest advice for success this season.

How to achieve high quality maize cobs

Growers who missed the planting window made available by the warm weather in early season should resist the temptation to reduce seed rates, stresses Brendan Paul of agronomy services provider, Agrii.

"Some people believe seed rates should be lowered when drilling later, because too many plants will make the crop dry out more rapidly. This is simply not true. Drilling dates should not influence seed rates; the

required plant population selected should reflect only the soil type and previous cropping," he says.

Mr Paul also recommends sowing seed in narrow rows of around 50cm, which should prevent excess moisture loss and limit weed competition, by encouraging the rows to close over rapidly. To maximise sunlight uptake, it is best to drill north to south, he adds.

Early growth stages
Mike Corp of Procarn's Chemega emphasises phos-

phate is essential for maize development. The nutrient needs to be placed within 2.5mm of the plant root for maximum uptake. However phosphate will lock up in cold conditions, with full availability only reached once the soil temperature reaches 21degC.

"Last year, the soil remained at a low temperature for a long period of time. This led to a situation where the maize was being starved of phosphate," says Mr Corp.

"While eventually the plants themselves looked normal – and in some cases appeared to be a bumper crop – many failed to produce strong cobs and feed values in general were low.

"It is understandable growers like to see tall crops, but plants high in stature do not produce the best feed value, in terms of ME and starch. Nutritional content has become more important, particularly as the price of livestock concentrates has risen sharply."

High quality cobs will only develop when the plant has established strongly and has everything it requires for the next stage, he adds.

"Cobs are triggered when the maize has a good rooting system and the leaves are strong and healthy. Another way to describe it would be when the plant has set up its 'solar panel' for efficient photosynthesis. That is why maize grown under plastic is usually shorter in length with excellent cobs; its needs have been met by an ideal growing environment – don't forget maize is a tropical plant."

Some of the newer varieties available in the marketplace have superb performance potential, he says.

"These plants have been bred for their ability to adapt to



Nigel Walley says one ultra-early in particular has surpassed all expectations this season.

our UK climate, with low heat and little sunshine. Progress has been rapid; the NIAB list for 2012 shows a yield increase of 20 per cent, compared with 2006 figures."

Phosphate advice

David Lewis of W.E. Jameson and Son echoes Mike Corp's views on the importance of adequate phosphate in the soil. He recommends clients ask contractors to set up their drills to add mono-ammonium phosphate at a rate of 125kg/ha.

"The product needs to be placed below and just to one side of the seed, so it is within easy reach of the roots as they grow downwards," says Mr Lewis.

"At about £490/t it is not cheap, but it will pay dividends at harvest and it could mean the

difference between a successful crop and a failure, particularly on marginal land."

Geographical coverage

Nigel Walley of Agrovista says one new variety which stands out from the rest is performing so well it looks set to become established in parts of the country previously considered marginal for maize growing.

Many ultra-early varieties lack vigour and are slow to

emerge, he says. However the same cannot be said of the KWS variety Ramirez, an ultra-early which has surpassed all expectations.

"Ramirez does not only succeed at the establishment and early growth stages, it has produced yields equivalent to some of the more mainstream varieties. It ticks all the boxes, and looks set to become a key selection for growers going forward."

RAMIREZ – KEY POINTS

- Bulky plant type with extremely early ripening
- Rapid vigour: (8.9) for easy establishment
- Dry matter: 38-41 per cent at harvest
- ME: 11.5-12.0 MJ/Kg
- Starch: 41 per cent plus
- Can be used for early feedout when grown ahead of main crop varieties
- Suitable for forage or ground ear maize/CCM, as a source of extra energy



Drilling north to south maximises sunlight uptake, says Brendan Paul.



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