

A matter of maturity

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CHRIS PASHBY

While it’s been a challenging year for maize with many crops maturing far earlier than usual due to drought conditions, R&D work has to continue. CPM attended Hutchinsons’ maize open days to learn the latest.

By Janine Adamson

Those who love maize will likely always champion the crop. In a good year, it offers a host of rotational benefits – from providing an opportunity to control grassweeds to disrupting pest cycles – plus a usually high demand across various end market sectors.

This year, however, has proven challenging including for those hosting maize trials, as experienced at Hutchinsons’ autumn open days. In fact at Sutton Lodge Farm in Broughton Ashley in Leicestershire, just the variety trial plots were left standing on 9 September following an extremely dry spring and summer and early harvest.

Despite this, the mood was buoyant among attendees, who presented a mix of those growing maize for livestock and AD feedstock. Hutchinsons agronomist Greg Hopkinson shared that he believes

there’s increasing potential for maize in the region, driven by demand.

To delve into this further, Greg introduced Pioneer’s promoter for the North West, Chris Pashby, who discussed his priorities for selecting a hybrid maize variety. “It’s key to consider what the yield of the variety is, its end market, and of course what the following crop will be,” he said.

LIVESTOCK VERSUS AD

If growing maize to feed livestock, he added that requirements should also include high starch content, high digestibility, and an earlier harvest maturity so the crop can be off the ground in a timely fashion.

“For AD, we’re then looking at the later maturing hybrids, still focusing on what the following crop is because that dictates how late



Word of caution

Pioneer’s Chris Pashby advised that anyone considering later maturing hybrids, should trial them on their own land and see how they react to the individual circumstances.

► it can be pushed. However, this is determined by site selection and potential heat units,” he said.

While usually the advice would be to attend a regional trials open day, or test a small area of a variety on a grower’s own farm, Chris noted that this year had thrown a spanner in the works. “We’ve had so many heat units it’s been very hard to objectively assess performance – a lot of our later maturing material has been ready very quickly.”

He also offered further thoughts on what to consider in the future, based on breeding pipelines. “There are two primary types of maize – Flint and Dent. Flint genetics are cold tolerant, hardy but lower yielding. Conversely, Dent genetics are higher yielding, offer more available starch and better plant health, but are later maturing with no cold tolerance. The main aim

for breeders is to produce a hybrid between the two,” he explained.

Currently, Pioneer’s push is towards Dent genetics due to the uplift in yield and starch quality, noted Chris. “But the main thing for us is for livestock farmers, Dent genetics have high rumen degradable starch at harvest

time – an aspect that we’re now proactively focusing on and should be showcasing during the next few years.”

With maize growth having accelerated during this this past

season’s drought conditions, Chris reminded attendees about what to look for with cob maturity. “Snap a cob in half and look at the pointy end; you’re looking for the milk line in the grain which generally starts developing from the top of the kernel and travels down.

“When the cob is fully mature, this appears at the very bottom of

the kernel and a black layer at the base forms, which means the maize has stopped accumulating starch and it’s then about dry down.”

He added that in early August this year, with dry weather meaning crops were receiving a lot of heat units, some varieties were drying down at around 8% every week. “Generally at this time of year, it’s only 2-3% a week if we’re lucky.”

OLD TRUSTY

Considering specific varieties, Chris highlighted that P7326 has been in the market for around 10 years and has remained a faithful and consistent performer. “On trickier ground it can favour heavier conditions, but being FAO 180 it’s dried down very quickly this year while generally speaking, would be harvested from mid-September onwards. It’s not at the top of the list anymore, but has long been a popular top seller.

“However, P7381 (FAO 185) has proven a significant step forward in genetics; there’s an 8% yield difference for

Taking a chance on maize pays off

How a plan B has turned into plan A for one Yorkshire farmer

Farming near Scarborough in north Yorkshire, Luke Backhouse grew maize for the first season in 2024 following a severe attack of cabbage stem flea beetle in the farm’s oilseed rape crop, rendering 6ha unviable.

“The trouble was, we’d applied Astrokerb (aminopyralid+ propyzamide), so following with spring cropping a cereal would be troublesome. However, with cattle on the farm we decided to try maize, opting for early maturing variety, KWS Debalto (FAO 170),” he explains.

The land was ploughed before using a Sumo Trio, and rolled both before and after drilling. But, with the farm located 400ft above sea level, Luke says he knew the maize crop would have to hit the ground running.

“We drilled at the end of April with DAP down the spout and thankfully it grew well. The pre-em herbicide worked effectively and follow-up foliar nutrition helped to get the crop past the ‘purple’ stage.”

At harvest, the crop delivered around 37t/ha, leading Luke to perceive the chance experiment as a success. “It’s

a great entry for wheat, where we try to wait until the end of September into early October for drilling.

“Also, as we typically only plough for potatoes, having maize means we get fields turned over a bit quicker, aiming to grow it where we have brome issues – a good herbicide and plough seem to reset the weed seed-bank and then the next few years of cereal crops and OSR get the fields back in control.

“Maize has helped widen our rotation and offers another option for spring cropping. While it doesn’t represent the same returns as some other crops, it has rotational benefits and we can feed it to cattle and not rely as much on silage, meaning those areas can go back into cereal production.”

Since starting with maize, Luke highlights that any excess grown on the farm is sold to neighbouring livestock businesses. He has, however, noted some specific management requirements.

“I’ve learned it does require moisture early on and with the dry springs we seem to be experiencing now, I’d



Wider benefits

While maize doesn’t represent the same returns as some other crops, it has rotational benefits and can be fed to cattle, notes Luke Backhouse.

avoid ploughing early. It also doesn’t appreciate compaction, but if required, definitely roll to get good seed-to-soil-contact. Luckily we can roll with a CTIS (Central Tyre Inflation System), so pressures are low with a wide footprint to avoid overlapping on headlands etc.”

He also notes that this season has been particularly challenging. “The crop has really suffered in the dry conditions. In fact, we had to change cropping plans late on and the original field planned for maize didn’t happen, so lots of compromising was necessary,” concludes Luke.



Tricky conditions

At the Hutchinsons' maize day in Leicestershire, just the variety trial plots were left standing on 9 September following an extremely dry spring and summer.

virtually the same maturity. As with all of our varieties, we've seen this 4-5 years before national listing, so can understand how it performs early on. It's definitely a dual-purpose, early maturing variety with good yields and high starch quality."

Chris pointed out that new for last year was P72847 (FAO 180), which appears to favour hotter conditions. "With Dent genetics in the mix it'll require adequate heat units at flowering to make sure it comes through to maturity.

"Equally, I'd be cautious about recommending a move towards later-maturing varieties. Recent seasons have demonstrated just how unpredictable growing conditions can be, making final outcomes difficult to forecast. A more reliable approach may be to focus on establishing crops earlier by bringing drilling dates forward where conditions allow.

"The advice for anyone who is considering later maturing hybrids, trial them on your own land and see how those varieties react to your individual circumstances," he urged.

Over at Hutchinsons' Carlisle site, hosted by Smalmstown Farm, compared with much of the

country maize seemed to have fared well. So much so, Hutchinsons' Jim Clark was confident that crops should produce good dry matter and starch, with reasonable yields.

NOT BOMB-PROOF

"While maize likes the heat, it's not infallible to running out of moisture, especially on lighter land. We've seen where growers pushed drilling slightly later into May, perhaps to get a cut of grass in first, crops put a lot of energy into growing, but cob sizes generally don't seem as big as in crops that were sown earlier (typically mid-April) and had more time to get their roots down," he explained.

More than 20 varieties were trialled at site this year. "Apart from perhaps one variety, you wouldn't be disappointed with any of them given the season. A few appear to have withstood the conditions better than others – P7034 was the stand out variety at Carlisle and yields so far have been 40-50t/ha at 33-35 dry matter. P7326, P68106, LG Highlight also did well," he concluded.

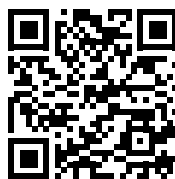
For part two of this event coverage, which includes using drones in maize, visit page 42. ●



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