

Sticking with the earlies

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BEN LOWE

Following a favourable year for maize this past season, might this be enough to tempt growers back to later maturing varieties, despite the risks associated with delayed harvest dates? *CPM* takes a look at some of the options available.

By Janine Adamson

Maize was subjected to drought and an exceptionally early harvest for many UK growers in 2025. However, in the Scottish Borders and south Wales in particular, the optimum combination of adequate soil moisture and warm temperatures proved a perfect scenario, points out Agrii’s Ben Lowe.

“This came off the back of another wet autumn in 2024, meaning growers had reached for earlier maturing varieties to ensure a prompt harvest and good entry for the following crop in the rotation,” he continues.

“The demand for forage also continues to be high. But, despite an extreme year for maize and the temptation of potential additional yield from later maturing material, we must encourage growers to stick with early varieties.”

He adds that on paper, the yield performance of ultra early varieties is often perceived to be low compared with later options, due to the way BSPB

descriptive list trials have historically been harvested. “In harvesting at 40% dry matter, this means ultra early varieties are being cut around 3-4 weeks later than convention, and the data reflects that.

“Subsequently, those growers who’ve taken a leap of faith and opted for an ultra early type have found the crop has exceeded their yield expectations.”

SHIFT IN PROTOCOL

Ben explains that the DL is now moving to a three-cut system to accommodate harvesting early, as well as harvesting ultra early varieties at a more appropriate time, although this will take around three years to reflect fully within data. “Therefore regional on-farm trials are critical in supporting the DL during that transition period,” he comments.

Looking at some of the options Agrii has been trialling at Field Hall Farm near Uttoxeter in Staffordshire, LG Gema has continued to be reliable, thus leading the way, suggests Ben.

“At FAO 150 it’s among the first to truly mature, offering 17.3tDM/ha, 107% relative starch yield, and 95% relative ME.

“It delivers an early harvest without paying significant yield penalties – we believe Gema set the stage of a new beginning for ultra early varieties.”

According to Ben, Gema has proven to be one of the most popular varieties in the local region (south Staffordshire), but with seed supply limited in 2024, a valid alternative would be KWS



Trialling and testing

While BSPB descriptive list trials transition to a three-cut system, regional on-farm trials will be critical to support decision making, suggests Agrii’s Ben Lowe.

Leto (FAO 150). “Leto is arguably the stand-out variety, especially when it’s grown in challenging conditions.

“It seems drought tolerant and able to hold itself, perhaps due to its extensive rooting system. It’s also an additional 8-10 days earlier to mature, and still achieves nearly 17tDM/ha.

“The only watch-out is that Leto retains its colour well – it’ll be greener for longer – which provides a wider harvest window, so it can be deceiving to know when it’s actually ready to harvest.”

Then, in the ‘early’ camp, is LG Harmony

at FAO 170. Ben believes this is a ‘next level’ variety based on its high yield, starch and ME levels, in addition to offering an early harvest date. “Harmony has been an exceptional variety for both favourable and less favourable regions.

“If you planted an area of Harmony in addition to Leto, it’d stagger harvest dates and on-farm workloads nicely,” he suggests.

Also at FAO 170 is KWS Pasco, which has been a benchmark variety at the trial site in Staffordshire, raises Ben. “We believe this should be a variety which

sticks around for a while, after all, growers don’t like swapping for no reason.”

Finally, among the latest maturing varieties that Ben is recommending to growers in the area is DSV Fortuno (FAO 190) – an early maturing type with proven performance. “This would be ideal for those growing maize rotationally.

“It’s smart and robust with smaller spindles, it’s a great all-rounder that really suits those growing maize as a cash crop. Fortuno was identified within Agrii trials for its suitability and position within the UK market,” concludes Ben. ●

Making the most of maize for biogas

How two brothers have complemented their thriving renewable energy business by growing maize

Although Willen Biogas in South Hertfordshire has been in operation since 2016, it was the fallout of Covid-19 that made brothers Howard and Adrian Williams turn to maize.

A diversification of Cattlegate Farm, the business is centred around an anaerobic digestion unit located 15 miles north of Piccadilly Circus, producing enough energy to power around 3500 houses each year.

Pre-Covid-19 it was easy to source ample AD feedstock from retailer and end-user food waste, explains Adrian. However, during lockdown, many restaurants and catering businesses closed or scaled down, and suddenly feeding the plant became a problem.

“This is when we introduced energy crops into the farm’s rotation, maize and rye, which both process well through the plant,” adds Adrian. “Although food waste has picked up again now,



Delivering on biogas yield

DKC2742 is a variety that offers compact, starchy cobs with high dry matter yields and optimum biogas production once processed.

the energy crops are complementary and remove the sensitivity of daily production. There’s also the added benefit that they help to stabilise the bacteria and bugs in the AD plant.”

Currently, the plant operates at around 90% food waste and 10% energy crops, although maize is here to stay, says Howard. “As a break crop it’s helped to replace oilseed rape in the rotation, as part of our approach to risk management.

“We not only feed our own AD plant with maize and rye, but we also supply other renewable energy businesses as well as livestock farmers looking for forage. Energy crops seem to fit well into the farm, plus they facilitate establishing cover crops for added soil health benefits,” he highlights.

Critically, Cattlegate Farm’s 900ha is spread across two contrasting sites with varying soil types – heavy London clay through to gravel. This means paying particular attention to variety selection, points out Howard. Working with specialists from ProCam, he’s been exploring the most appropriate maize varieties to grow for not only the farm’s soil types, but to maximise biogas production.

“On our heavier soils we’re looking for FAO 150-160 varieties to enable wheat to be planted once the maize has been harvested. Then on our lighter land, we can push to later types around FAO 200,” he comments.

According to seed specialist Hayley Wellings, once the correct maturity has been identified, the focus should be on optimum dry matter and energy yields. “When you’re selecting



A powerful solution

Howard (L) and Adrian Williams (R) started growing energy crops to feed their AD plant when the local supply of food waste dwindled during Covid-19.

for biogas yield, unlike forage, cell wall digestibility and starch levels are less important.

“A variety we’ve been trialling at Cattlegate Farm is Bayer’s DKC2742 which really seems to be the leading choice for biogas, delivering more energy per hectare. At FAO 190 it is in the maincrop maturity bracket which is important to ensure the following crop can be planted in time,” she says.

With a full suite of agronomic traits working in its favour, among DKC2742’s key characteristics is its establishment speed, highlights Bayer’s Richard Williams. “It’s very vigorous and tends to rocket out of the ground across all sites, whether that’s early or late drilled.

“Once established, it develops large, flat green leaves meaning more light interception and photosynthetic activity, while also offering better weed suppression under the canopy. This translates to compact, starchy cobs with high dry matter yields and optimum biogas production once processed.”

The variety also boasts strong resistance to root lodging and brackling, as well as robust eyespot and fusarium resistance, concludes Richard.