

myKWS MAIZE

NEWSLETTER | ISSUE 20 | SUMMER 2024



3 UPDATE: SFI Options for Maize

Tom Turner takes an in-depth look at all your options, the costs and benefits

4 Farm Case Study

The Hughes family detail how KWS Exelon and KWS Portabello silage is used to buffer grazed grass shortfalls on dairy and beef cattle

6 Farm Case Study

Holstein Friesian breeder Geoff Spence explains that he was so impressed with his trial strip of KWS Pasco that he has now sown several hundred acres

SEEDING
THE FUTURE
SINCE 1856



Welcome...

...to the summer 2024 issue of the myKWS quarterly newsletter, which contains topical advice and information to help you make the most of your maize crop.

In this issue, Andrew Cook of KWS gives tips on maximising harvest results this year and highlights the risk of eyespot. We also cover two case studies, with the Hughes family of Pembrokeshire describing how maize silage is used to buffer grazed grass shortfalls on their dairy unit.

Travelling further North, noted Holstein Friesian breeder Geoff Spence explains that he was so impressed with his 2023 trial strip of KWS Pasco that he has sown several hundred acres of the variety for this season. His maize agronomist, Rob Bowes of Agrii, adds some advice on maize nutrition and general husbandry.

Meanwhile, Tom Turner of KWS unpicks the complexities of the new SFI maize options, so that growers can make informed decisions on whether to sign up and which options might best suit their systems.

SEASONAL REVIEW

ANDREW COOK, KWS

Looking back on the season to date, few maize growers have escaped the effects of the cold, wet start.

Planting was put back by up to three weeks this year and the situation was very frustrating for growers. The knock-on effect could be a delay in harvest by perhaps two to four weeks, depending on geographic location and varietal choice. This will apply even if the weather improves and there is a degree of catch-up.

This type of season is when ultra early (also known as short season) varieties really come into their own. Standard maize varieties will take about 160 days to reach maturity, whereas the figure for ultra early varieties can be as little as 130 days. The challenging weather led to a rush of orders for our ultra early varieties and we have options to suit every farm situation. They offer a degree of insurance if conditions are less than ideal, which is the only way to describe 2024.

The stop-start planting period may mean staggered growth rates for crops and this is combined with the differences in progress where more than one variety has been sown. To get the best results from maize, it must only be harvested when it is ready. Ideally, some flexibility should be introduced for this year, so it may be worth making plans early and perhaps speaking to the contractor about the options or factoring it into harvest work planning for staff.

A lot will depend on factors like soil type, field location, variety and the autumn weather. A minority of farms may realise the full yield and quality potential of their maize varieties, but results are not expected to break any records on the five-year average.



“Splitting harvest dates could help to ensure a successful crop.”

Andrew Cook

UPDATE: SFI Options for Maize

TOM TURNER, KWS



SOH4

- Cover crop establishment following early maize harvest or maintaining a cover crop previously established by undersowing/companion cropping
- Cannot be stacked with CIPM3 or CSAM2*
- Applies to arable cropping land; temporary grassland; arable land lying fallow
- Aim to establish by mid-October
- In theory, can be grazed by livestock from mid-October, provided aims of action are reasonably met
- Can include total or part area in a land parcel
- Can be used at the same location each year for the agreement duration, or move locations in years 2 and 3
- Must be well established, which means leafy vegetation to protect the soil surface
- No set date for cover crop destruction
- Establishment costs will vary, according to selected species

CSAM2

- Can be taken up in conjunction with CIMP3 or as a stand-alone
- Two post maize harvest options: multi-species mix stitched into previously established undersown crop or establishment of a new multi-species mix
- Choose from a minimum of two different species from the list: brassicas; herbs; grasses/cereals; legumes. For example, sanfoin and Italian ryegrass or Westerwolds ryegrass and white clover. Avoid Italian ryegrass in arable rotations with a blackgrass problem

CIPM3

- Undersowing mix drilled at 5-6 maize leaf stage (usually in June)
- Risk factors – avoid damage to young maize plants when sowing. Ensure adequate soil moisture to limit threat to maize plant growth
- Approximate establishment cost £70/hectare for seed, fuel and labour

Growers who combine CIPM3, CSAM2, PRF1 and PRF2 will have a total additional annual income of £254/ha

The new SOH4 is similar to the SW5 option within the Countryside Stewardship Scheme. SOH4 and CSAM2 rely on early maize cutting, and a poor autumn could hinder winter cover crop establishment, making early maize varieties (aka short season varieties) worth considering. Although historically early varieties came with a slight yield penalty, recent breeding advances means some varieties can match (and even outcompete) mainstream hybrid performance. The post-harvest options, including PRF1 and PRF2, aim to prevent soil erosion, enhance soil health, and provide early forage. They should produce a return on investment, even if a contractor must be brought in. In my opinion it is worth evaluating these options for your farm system. An important point to note is that growers with companion crops for maize can apply for a payment this year.

HOW TO CHOOSE BETWEEN SOH4 & CSAM2 OPTIONS THIS AUTUMN

Forage maize growers who are not planning to drill a winter crop may prefer the higher-paying SOH4 option, either by continuing with an existing undersowing programme or by planting a winter cover crop following maize harvest. For arable producers and mixed farmers who plan to sow a winter crop, SOH4 is not a preferable option and cannot be combined with CSAM2 or CIPM3. Producers in this category may find that the lower support payment through CIPM3 offers a better fit for their rotations and protecting soils through harvest.

NEW SOH4	NEW PRF1	NEW PRF2	CSAM2	CIPM3
Post-harvest winter cover option. Payment £203/ha/year. Three-year scheme. Launched May 2024	Variable rate nutrient application for maize. Payment £27/ha/year. Three-year scheme. Launched May 2024	Camera or remote sensor guided herbicide spraying. Payment £43/ha/year. Three-year scheme. Launched May 2024	Post-harvest option for stitching in or establishing a multi-species seed mix. Payment £129/ha/year. Three-year scheme. Launched spring 2024 (originally called SAM2)	Spring undersowing maize with a grass/clover mix. Payment £55/ha/year. Three-year scheme. Launched spring 2024 (originally called IPM3)

FARM CASE STUDY

Maize Silage – Dairy and Beef Cattle

NICK & KRISTY HUGHES, THE OLD CROFT, MILFORD HAVEN, PEMBROKESHIRE

Nick and Kristy Hughes milk 260 New Zealand type crossbreeds, which calve from March in a 10-week block. The current average yield is 6,500kgs at 530kgs of solids, with the cows milked twice a day and milk sold to Arla.

“The cows are content on the maize silage and it balances the spring grass. It acts as a safety net within the feeding programme.”



Nick & Kristy Hughes

Key to the system is maximising milk from forage, and maize silage mainly fits in as a buffering option for supplementing early spring grazing. Fed in bunkers in the collecting yard, it is offered alongside grass silage to plug the gap from about February until early May. The ration is balanced with concentrates fed in the parlour.

“The initial maize silage feeding programme utilised the crop for the period up to service and for fresh calvers, but its use has been extended,” says Kristy.

“This is a dry farm,” she comments. “The light soils do not hold moisture effectively in a drought situation. This has led to grass burn-off over the past three seasons, and the supplementary forage is necessary to maintain production to make the most of the autumn seasonality payment. Once grass growth gets under way, the cows may also receive maize and grass silage when bad weather prevents 24-hour grazing. For the same reason, maize silage has been fed in the autumn on occasion.”

“Maize silage is also given to our beef cross calves from the dairy herd. It is offered in the final 60 days of the finishing period as one of the ingredients in their total mixed ration. It puts an excellent finish on the cattle and keeps the muck very consistent. The ration also contains grass silage and may include a purchased blend, if needed.”

The entrepreneurial couple moved to the farm a decade ago and set about converting the unit from

arable production to dairying. Maize silage was introduced in 2020, but it was not until two years ago that they decided to grow their own crop. Last year saw a successful year for KWS Exelon, while KWS Portabello has been added this season to make up the 47 acres dedicated to maize. Underperforming grass silage fields are selected for sowing and they must have the potential for a relatively easy harvest, if conditions are challenging, she comments. Contractors are brought in for all field operations.

“We had an arrangement with a neighbour to produce maize for us, but this will be our second year of growing maize on our own land. A high percentage of crop nutrition comes from slurry from the cubicle shed, alongside farmyard manure from the loose housing for the beef cattle.”

Kristy, who qualified as a vet, points out that maize silage is beneficial for rumen health.

“The cows are content on the maize silage and it balances the spring grass. It acts as a safety net within the feeding programme, especially if third and fourth grass silage cuts turn out to be disappointing. The crop has not been widely grown in this region, but more and more local farmers are finding maize varieties that will perform reliably and produce a silage that will complement the other dairy cow feedstuffs.”

“Like many farms around the country, maize planting was delayed this year due to the poor start to the season,” she says.

“Sowing did not start until 2nd June. However, harvest went well last autumn and the crop was cut on 16th October. We were pleased with the results and the remaining maize silage will probably have to be utilised later on in the summer. We have tried growing wholecrop cereals in the past, but results were variable and there were always concerns over difficulties with the autumn harvest. Maize gives us more bang for our buck,” says Kristy.

2023 Maize Silage Results (KWS Exelon)

Yield	18t/acre / 15t DM/Ha
Dry matter	34%
Starch	34%
ME	11.9 MJ/kg/DM

FARM ADVISOR COMMENT

Nick and Kristy are advised on maize agronomy and varietal choice by a representative from Lydney, Gloucestershire-based Hunt Agri.

He says: “Milk butterfat levels used to dip at turnout due to an energy imbalance, because spring grass is high in oil and protein and low in energy. The high oil level suppresses milk butterfat production and concentrates fed in the parlour were not the solution, because these products are also high in oil.”

“Maize silage provides an ideal complement for spring grass, as it has the reverse qualities, containing high energy levels and low protein. It slows down processing in the rumen and improves feed utilisation. The Hughes’ feeding system gives the opportunity to leave maize to mature in the clamp over the winter, which increases starch content levels at spring feed-out.”

KWS EXELON FAO 170

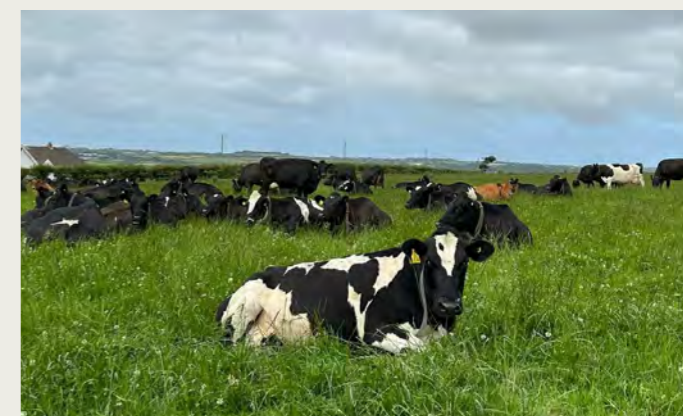


- Early/Maincrop variety
- DM yield 18.5t/ha DM; starch 34.6% (average)
- Excellent vigour across all soil types
- NIAB first choice variety for favourable sites (2024)
- Low ear insertion height for good standing power

KWS PORTABELLO FAO 160/170



- Super option for early sowing
- Very high DM and starch content in official trials (1st year)
- Outstanding early vigour



EYESPOT

ANDREW COOK KWS

TOP TIPS!

If your maize crop has suffered from eyespot this year, you will obviously be looking for robust, resistant varieties for 2025 that will minimise the risk of infection, just in case we get a repeat of this year’s conditions. However, it is also a good idea to ensure that maize stubble is finely chopped and incorporated into the soil, where appropriate, as the spores can overwinter in maize debris and germinate the following spring.

The most immediate potential threat to the national maize crop is eyespot, although changes in the weather conditions over the next few weeks will determine possible infection levels.

Maize eyespot, not to be confused with cereal pathogen, thrives in a combination of low temperatures and high rainfall; two conditions which have typified the season to date in most regions. The disease can cause losses of up to 25%, although the figure can be higher, in cases of severe infection.

“Signs of eyespot include yellow lesions with small, roughly circular brown patches appearing on the leaves and they may appear translucent when held up to the light,” says Andrew. “It is worth checking the interior of the field on a regular basis, as eyespot can spread rapidly, with the spores carried to other areas on the wind. The only control option is to apply the fungicide, Comet (pyraclostrobin).”

FARM CASE STUDY

Maize Silage – Dairy Cattle

Geoff Spence, Low Fields Farm, Northallerton, North Yorkshire



Geoff Spence

Geoff Spence runs a large Holstein Friesian unit with his son, Chris. The high-yielding cows are housed in sand-bedded free stalls and put through a 32:32 herringbone parlour three times a day, with milk sold to co-operative, Arla and heifers calved down at 22 months.

Maize has been a total mixed ration ingredient since 2010 when the crop was previously bought in. Today, it is grown on a large acreage of rented land and the field operations are managed by contractor. Maize yields average 50t/ha fresh weight.

A small strip of KWS Pasco grown last year performed so well among the other varieties in the on-farm trial area that about 500 acres have been drilled with the variety for the 2024 season.

“The KWS Pasco stood out from the crowd and was an obvious choice for 2024 sowing,” says Geoff.

“Maize silage is a rumen-friendly ingredient in a TMR. It helps to maintain yields, by providing plenty of available starch. It meets a lot of the cows’ needs.

“The idea is to have maize silage available all year round. A compactor is used in the ensiling process. It compresses the crop in the clamp and improves silage fermentation. Feeding dairy cows is all about attention to detail.”

Geoff has overseen the growth of the business since his father, Tom, moved to the unit with just 25 cows in 1957. Geoff has given his son, Chris the encouragement to expand the unit for the benefit of the next generation. Meanwhile Geoff’s other son, Andrew is a cabinet maker and joiner who runs his own company, Lowfield Joinery.

“My father was a phenomenal breeder of cattle and he also had a photographic memory,” he says. “When the herd size got to 120 cows, he could still recall

the names of families for generations back. He laid the foundation for our breeding programme and cow performance still serves the business today, despite all the changes in dairy farming over the years.”

Geoff, who has seven grandchildren, has plenty of thoughts about how to run a successful dairy unit, although he admits that he is always ready to take new ideas on board and to adapt to market conditions.

“It’s all about embracing change and continuing to move forward,” he says. “Like my father before me, I like to follow my heart and my gut feelings when making decisions, big or small. Running a large dairy farm started off as my father’s dream and I was happy to follow in his footsteps. I’m very fortunate, because my son Chris also shares the family dream and it’s what gets us up in the morning.”

“A family dairy farm requires regular investment, especially in staff, and constant striving to make progress. That means keeping a close eye on income and expenditure and focusing on profitability,” says Geoff.

MIRESDALE HERD TMR
Grass and maize silage
Maize meal
Soda wheat
Soya hulls/soya meal
Spey syrup
Whey permeate
Protected fat
MetaSmart (rumen function protectant)
Minerals

AGRII FARM AGRONOMIST COMMENT

Agrii agronomist, Rob Bowes, oversees some of the maize acreage at Low Fields and advised Geoff to plant the small trial strip of KWS Pasco last year.

“The KWS Pasco was the first variety to emerge and was a vibrant green from the four-leaf stage,” says Rob. “From the start, it was much taller than the five other varieties under evaluation and that continued all the way through the growing season. KWS Pasco produces a high starch maize silage, and it should be an ideal fit for the ration. Individual variety yields and quality were not recorded for 2023, but in general it was a good year for maize.

“Slugs have been a huge problem across the board this year and the season at Low Fields got off to a late start, with sowing in late May/early June. Getting the nutrition right is the most important element of maize agronomy, in my opinion. All the maize fields are soil sampled before planting and lime and potash are applied if needed. I find an application of zinc very beneficial for giving the crop a boost.

“A lot of care is taken in setting up the soil, before any cultivations get underway. This type of preparation pays dividends in the long run, because once maize is up and away it tends to be straightforward to manage for the rest of the season.

“It looks as if harvest is going to be delayed by a couple of weeks this year. It is usually the last week in September/beginning of October, but it may have to be put back to mid-to-end of October this time. Having a large acreage of KWS Pasco at Low Fields will be helpful, as it is an early-maturing variety,” says Rob.

Maize Husbandry – Low Fields Farm, 2023 season

- Following forage rye and also failed winter wheat crop -maize mainly used on the rented land as a break crop

- Soil type – variable (medium to heavy). Soil phosphate index 3,4 and 5
- Planted last week in May/beginning June
- Liquid fertiliser applied just before drilling (29% N, 16% ammonium sulphate, equal to 120kgs/N/ha, unless slurry or digestate is applied.) Included Liquisafe, an environmentally friendly nitrogen and urease inhibitor to minimise leaching and volatilisation. Plus Release, a soil phosphorus activator which displaces phosphorus locked to elements like aluminium, calcium and iron in the soil, to maximise availability
- Seedbed prep – plough and power harrow
- Seed rate 42,000/ha
- Pre-emergence - pendimethalin
- Post emergence mix at four true leaves) – mesotrione (for broad-leaved weeds); nicosulfuron (grass weeds); zinc (nutrition and acts as a softener to prevent weed control product damage to maize leaves); phosphate and potash foliar feed
- Slug pellets – early June



“KWS Pasco produces a high starch maize silage, and it should be an ideal fit for the ration.”

Rob Bowes, Agrii

KWS PASCO FAO 170/180



- Early/Maincrop
- DM yield 18.7t/ha; starch 34.4% (average)
- Superb early vigour on all soils
- NIAB first choice variety for favourable and less favourable sites 2024
- Excellent for corn cob mix and high energy silage for dairy or enhanced beef finishing

Maize Open Days

Lydney, Gloucestershire – Open during September

We have 2 demonstration sites approx 10 mins apart.

One is close to sea level reflecting favourable sites, the other at 600ft showing less favourable conditions at altitude.

The sites are unique in the UK and showcase the full **KWS Maize Variety Portfolio**.

To book your visit please contact your merchant or the KWS Maize office:
maize@kws-uk.com



Meet the Team

KWS UK LTD – MAIZE

Atwoods Grange
Station Road
Woolaston
Lydney
Gloucestershire
GL15 6PN

www.kws-uk.com



Rob Hunt

Mobile:
E-mail:

Commercial Director
+44 (0)7979 290702
rob.hunt@kws.com



Andrew Cook

Mobile:
E-mail:

Maize Product & Sales Manager
+44 (0)7970 734363
andrew.cook@kws.com



Thomas Turner

Mobile:
E-mail:

Maize National Sales Manager
+44 (0)7855 205624
thomas.turner@kws.com



Alison Phipps

Telephone:
E-mail:

Maize Office Manager
+44 (0)1594 528234
maize@kws-uk.com

Follow us on social media and share your stories!



@KWSUKLtd



@KWSUKLtd



@KWSUKLtd



KWS UK Ltd



@KWSUKLtd