

# Welcome...

...to the thirteenth issue of the myKWS quarterly newsletter. This series offers you timely information and advice on maize growing, to help you get the best out of your crops.

In this issue, we look at the implications of the widespread lack of rainfall across the UK, with an expert providing some tips for livestock producers whose grass and maize yields have fallen short of expectations this year. We also highlight three of our top varieties and give details of our Maize Harvest Competition, as well as celebrating the launch of our Maize Variety Portfolio for 2023. It is packed with information to make it easier to choose the right variety for the intended use on your farm.



# **HARVEST** REVIEW

ANDREW COOK, KWS

This year's maize crop results have been highly variable, with some growers satisfied with yield performance and others facing a potential forage shortage this winter, particularly as silage grass growth was also compromised by the prolonged spells of drought in many areas. On the bright side, we have heard reports of crops that have matched past performance despite being harvested in August!

At KWS we have two maize-growing sites at our HQ in Gloucestershire. They supply the farm's biogas enterprise and are also used for demonstration and trial purposes. Our field at sea-level in Woolaston reliably outperforms our less favourable site in Lydney, but this time Lydney came out on top and produced its best-ever results. Among our flagship varieties, KWS Pasco and KWS Anastasio looked really good in the demo plots and we have had very good reports about Debalto.

Plant dry down tended to occur earlier in the season compared with the norm, and stalk dry matters fell rapidly, while in a number of cases the cobs remained milky. The aim is always for a crop dry matter range of 32-35%, but on some farms the figure was closer to 38% or above. Our KWS expert, Susanna Montag, has some suggestions for you about how to manage forage stocks for this winter and beyond.



# **GRAHAM RAGG. MOLE VALLEY FARMERS**

**Graham Ragg acknowledges that the** dry conditions caused problems for maize growers this year, although he also points out that some of his clients have enjoyed a bumper harvest for the crop. He believes that another factor may be partly responsible for some lower-yielding crops, especially on farms which did not benefit from localised spells on rainfall.

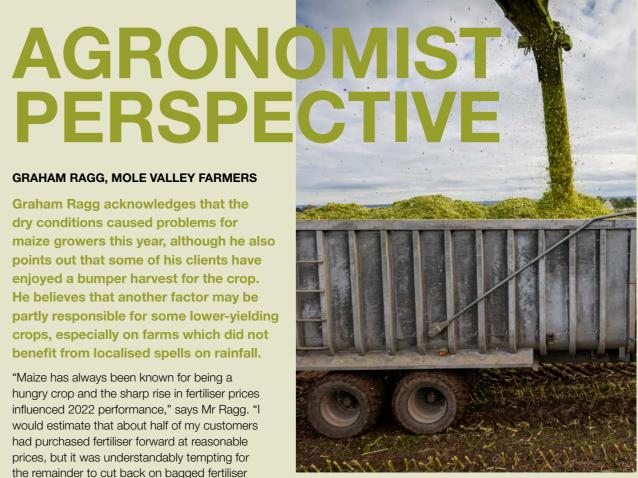
"Maize has always been known for being a hungry crop and the sharp rise in fertiliser prices influenced 2022 performance," says Mr Ragg. "I would estimate that about half of my customers had purchased fertiliser forward at reasonable prices, but it was understandably tempting for the remainder to cut back on bagged fertiliser applications. This had a knock-on effect on yields.

"The fertiliser price rises also affected decisions on grassland management and some growers opted to allocate most of their slurry and farmyard manure to the maize crop. This left their grassland lacking in vital nutrients and compounded the issue, resulting in lower grass silage yields.

"It simply does not pay to withhold fertiliser on crops. I would advise growers to go back to the fertiliser programmes they were using before the prices rises. Obviously this will incur extra costs, but efficient maize forage and maize AD production requires yields to be maximised on each acre of land. The first step should be to ensure that the soils are tested before planting, so that fertiliser requirements can be worked out accurately."

Variations between maize yields occurred from field to field, but there were also reports of production differences within individual fields; probably due to variations in soil depth, he adds.

"Unfortunately, some livestock farmers are likely to emerge from the winter with little, if any, forage stocks to carry over. I expect producers who have experienced low yields this season to put extra land into growing forage crops including maize for next year, to build up their reserves," says Mr Ragg.



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Graham Rago

# ? DID YOU KNOW?

### **Seed Production**

Due to the high commodity prices last year, the availability of land suitable for seed production was in short supply for Spring sowing this season. The extended periods of extreme heat, lack of moisture and a ban on irrigating in some areas have resulted in a shortage of seed availability in some hybrids. Therefore we recommend that your orders are placed as early as possible to ensure you secure your variety of choice.

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# BUFFER FEEDING THROUGHOUT AUTUMN/WINTER -

Coping with forage shortfalls



### SUSANNA MONTAG, KWS

This season's continuing hot weather and lack of rain has led to some serious forage shortages on farms across the UK. While grass growth slowed down or stopped altogether, farmers were forced to buffer feed their herds throughout the year to make up for the lack of grazing. This will result in low

grass silage stocks in store for this year's winter feed. Farmers who harvest maize for silage have faced similar challenges.

Major challenges as we approach autumn and winter feeding:

- Low forage stocks
   (fresh grass, grass and maize silage) harvest yields too low, and no fresh grass)
- Low forage quality



## ? DID YOU KNOW?

Maize silage should ideally be left to settle for at least six weeks before analysis.

### FORAGE STOCKS CALCULATION

Know what you have and what you need for winter feeding to avoid a shortage.

When planning for autumn / winterfeeding it is essential to evaluate your current forage stocks by calculating your available tonnes of grass and maize silage. Measure your silage clamps and count the number of bales in the yard. These will influence your feeding and feed-buying strategies for the winter period.

Two easy calculations to work out the total volume and tonnes of your silage clamp:

Volume = Length (L) x Width (W) x Height (H)
Tonnes = volume x density / 1000

Crop	Density kg/m³
Grass silage (32% DM)	700
Maize silage (32% DM)	750
Fermented wholecrop (40% DM)	500

### FORAGE QUALITY

### Know what you are dealing with.

Understanding the nutritional value of your silage is crucial to efficiency and more targeted feeding of concentrates. Grass silage quality varies this year depending on the region, but analysis of first cut crops has shown reasonable quantity but lower nutrient content. This will have an implication on feeding regimes. The quantity of second cut was about average and while further cuts from autumn growth will be lower in energy, they will fill up silage clamps and secure winter feedstocks.

# SOLUTIONS TO UPGRADE YOUR BUFFER FEED, AND EXTEND FEEDING RESOURCES

- alternative feedstuff (moist feeds)
- whole crop
- fodder beet
- late cut silage or sourcing forage from other areas
- bulk up and mix your ration with chopped straw (youngstock and dry cows)
- balance the ration with high fibrous feeds (soyahulls, dried beet pulp)
- higher concentrate rates

High D-value grass silage, maize silage, whole crop, fodder beet or moist feeds should be prioritised to feed to post-calving and high-yielding milking cows. Maintaining milk and milk solids production with minimal dietary changes is the aim.

When feed stocks are tight and silage quality is average or poor, alternative feeds (brewers' grains, pressed pulp, Trafford Gold, etc) will increase your feed stocks and improve the overall diet in terms of energy or protein. They will also enhance palatability and dry matter intakes. Wholecrop cereals or fodder beet (bought in or home-grown) can also be a great addition to up the energy concentration and digestible fibre content in the diet without increasing concentrate rates in the parlour.

If weather conditions allow, baling or clamping a late cut as well as extending the grazing season will be critical for most farms to make up the current deficits in silage stocks. A late cut will be low in quality but will help with your feed budget. Fast-growing grasses, forage rape or kale can be used when planted in stubbles for either clamping, baling or grazing.

If later cuts or extended grazing is not making up your forage deficiency, chopped straw will bulk up your buffer feed and can meet ration demand throughout the winter. Youngstock in particular will do well on a straw and concentrate-based diet. For all diets, is important to have the right straw length (2-4cm long) and mix it well through the silage to reduce sorting, while adding molasses will increase palatability. It might be necessary to add water to the diet, in order to maintain the correct overall dry matter level (45% DM).

With lower feed stocks, farmers might have to source additional dry matter through concentrate feeds. However, be aware of the acidosis risk when feeding higher levels of concentrates, especially if lush and leafy grass is introduced alongside this system.

### TIPS TO CONTROL ACIDOSIS RISK

- Slow changes within the diet and feed concentrates as consistently as possible
- Observe cows for acidosis signs (loose dung with gas bubbles, excessive ruminating, emptylooking cows)
- Feed additives (yeasts, rumen buffer, sodium bicarbonate)
- Try to balance energy levels in the diet without too much concentrate feed (max. 8kg through the parlour)

### TAKE CARE OF WHAT YOU HAVE

Losses and spoilage are avoidable if silage (maize, grass, etc) is stored and clamped correctly. The biggest challenge is achieving aerobic stability. The aim is to minimise nutrient and dry matter losses through heating and limit the growth of spoilage micro-organisms, such as yeasts and moulds. Correct silage preservation is even more vital this year, when forage stocks may be lower than usual.

- Clean surface
- Minimum removal rate (1.5m/week in winter; 2m/ week in summer)
- Clean and smooth removal technique
- Remove plastic sheets only as far as needed to avoid air penetration and rain getting into the clamp
- Monitor plastic sheets regularly (no holes, ensure weights on the sheets)

### PLANNING AHEAD FOR TOMORROW

The years 2018 and 2022 showed what to expect with long dry spells during summer. Maximising the quality and quantity of home-grown forage has never been more important. Making the right decisions about maize (or grass) varieties, optimum drilling and harvest date as well as the correct use of inoculants are among the most important factors required to produce high quality, homegrown forage.



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# Your guide to selecting the right KWS maize variety for your field.

It is packed to the rafters with comprehensive information on all of our current maize varieties, which are categorised according to their maturity segments. There is also an 'at-a-glance' system to show a variety's suitability for the various end uses... livestock forage, biogas, corn cob mix, etc, as well as pointers on how to choose the variety which will give you the best results on your farm. Download the booklet from our website at www.kws-uk.com or order a paper copy by emailing maize@kws-uk.com or phoning 01594 528234.

For anyone familiar with using QR codes, the booklet also has a code which allows users to access our Maize 360, which is an online video tour of our maize demonstration site in Gloucestershire. The site is open to visitors every year during the month of September.



# THREE KWS MAIZE VARIETIES ADDED TO 2023 RECOMMENDED LIST

Three KWS maize varieties have been added to the BSPB Forage Maize Descriptive List for 2023. These represent one third of the total new varieties added to the Descriptive List for next year's planting, with KWS Pasco holding the number one position for starch yield across the entire Descriptive List.









# ED A

## DEBALTO FAO 170

#### FARIY

Debalto (FAO 170) is a multi-use, early variety with a range of good qualities, including reliable yield performance and a high starch content of 34.5%. It produced a 18.9t/ha DM yield average across all sites, while its favourable grain: stover ratio offers the potential to produce an energydense silage. Ideal for forage, AD and grain, Debalto is also renowned for its good early vigour and its suitability for the production of corn cob mix; a high energy feed for dairy cows or beef finishing. Livestock producers who are looking to increase their percentage of home-grown cattle feed need look no further than Debalto!



# KWS PASCO FAO 170/180

#### FARI

KWS Pasco is a reliable choice for producers looking for a flexible, high-performing crop for forage, biogas, or corn cob mix. It has an outstanding yield of 19.3t/ha DM, while its balanced starch content of 34.5% makes it ideal for high maize inclusion diets for dairy cows or beef finishing. KWS Pasco falls into the early/maincrop category and has an FAO, or maturity rating, of 170/180. It has shown good early vigour on all soil types and that will help to get the crop off to a solid start in the spring. KWS Pasco provides an exceptional combination of high yeild, energy density, and starch content, and should be a go to variety for the majority of mainstream growers.

# KWS ANASTASIO

#### EADLY/MAINCROL

FAO 180/190

KWS Anastasio is the ultimate all-rounder, providing growers with harvest flexibility and a wide range of options for end use including forage, AD, corn cob mix and crimped or dried grain. It will fill forage or AD clamps with its high yield potential of 19.6t/ha DM, while maximising cattle performance with its superb starch content and ME of 11.57 MJ/kg/DM. KWS Anastasio has shown excellent early vigour across all sites and is an early/maincrop variety.

## ? DID YOU KNOW?

Approximately 40% of maize crops in Denmark are irrigated. The country is a large producer of potatoes and therefore many growers already own a set of irrigation equipment.

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