Maize Variety Portfolio 2024

A guide to selecting the right KWS maize variety for **your field**



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Velcome!

The KWS Maize portfolio is designed to help you select the right hybrids for your farming situation.

The guide is divided into 3 key sections:

- Ultra Early FAO 150-160
 For maximum drilling or harvest security.
- Early / Maincrop FAO 170-190 For all mainstream growing areas & maximum starch yield.
- Late / Biogas FAO 200-260
 Maximum DM yield, and lowest cost per tonne for biogas production.
- CCM (Corn Cob Mix) and Crimped Grain suitability are highlighted.

The FAO number is a relative index of maturity. The lower the number, the fewer heat units that are required to reach harvest time. You can check your farm's heat units and FAO suitability on the KWS website.

KWS Maize Variety List

Below are our key variety selections for next season. They are arranged in maturity order and by market sector. Other varieties are available – for more advice please contact a member of the KWS team.



ULTRA EARLY KWS TEMPRANO[†] (KXC1005) \checkmark 150 16 \checkmark **CITO KWS** ✓ 150 17 **✓** AUGUSTUS KWS 160 18 Image: A start of the start of **V SERGIO KWS** 160 19 PEREZ KWS \checkmark 160 \checkmark 20 KWS LETO[†] (KXC1002) NEW 160 **√** 21

	EARLY / MAINCROP				
22	AVITUS KWS	160/170	V		V
23	KWS PORTABELLO [†] (KXC2002)	160/170	V		
24	KWS CALVINI	170	V		V
25	DEBALTO	170	V	V	V
26	KWS REO† (KXC2006) NEW	170	V	V	V
27	AUTENS KWS	170	V	V	V
28	KWS RESOLVO	170	V		
29	EDGARD KWS	170	V		
30	KWS EXELON	170	V	V	V
31	RODRIGUEZ KWS	180	V	V	
32	KWS PASCO	170/180	V	V	V
33	AURELIUS KWS	180	V	V	V
34	KWS ANASTASIO	180/190	V	V	V
35	KWS ZIMO [†] (KXC2010)	190	V		V
36	PAPAGENO	190	V	V	V
	LATE / BIOGAS				
38		200	V		V
	AGROLINO [†] (KXC2012) NEW				
39		200/210			
40	KEOPS	210/220			✓
41	AMAROC	240			
42	KILOMERIS	260			

† Proposed name. Hybrid subject to a Pre NL Marketing Agreement.

Seed2FEED

Optimise your homegrown feed with **Boost Hybrids**

KWS

Tips for **choosing maize varieties** based on end use





Maize for Forage

- High dry matter
- 30% + starch
- Limit choice to a maximum of 180-190 FAO (maturity rating) range
- For TMR diets, ultra-early hybrids help to ensure an all-yearround supply, by bringing harvest forward into early September

Maize for AD

- Use a range of FAO varieties to spread drilling and harvest workload
- Target high freshweight yield and good disease resistance

Maize for Corn Cob Mix (CCM)

 Requires a compact or semi-compact hybrid with an FAO of 150-210, as well as a grain:stover ratio of 50% + and good standing power

Maize for Crimping

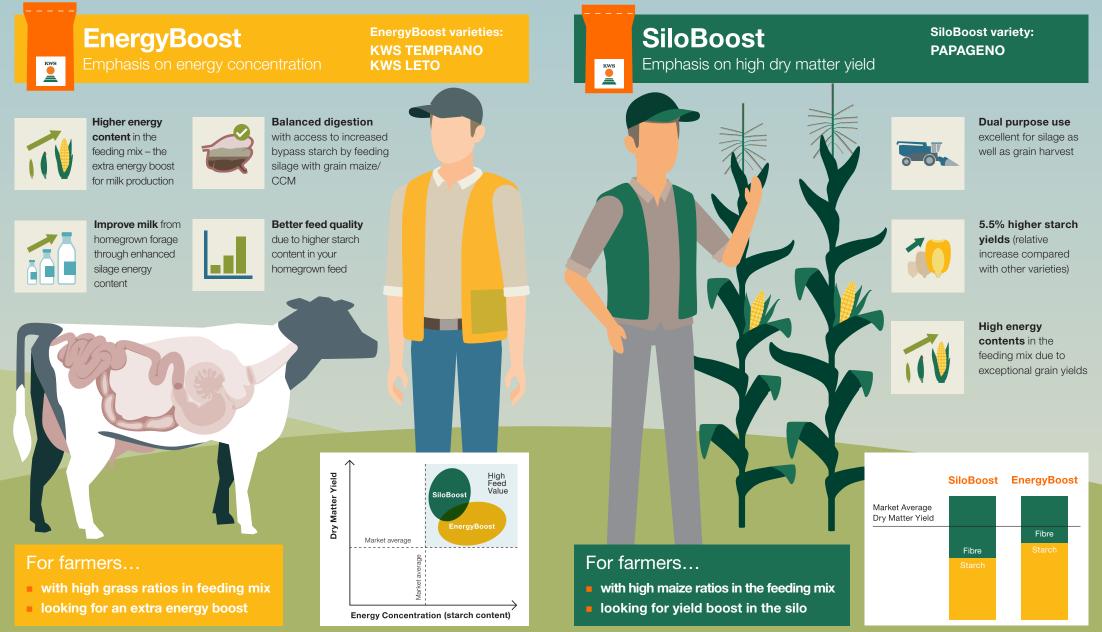
- Ultra-earlies are not recommended, due to the risk of brackling
- As with CCM, a grain:stover ratio of 50% + is desirable, together with good standing power

Seed2FEED empowers livestock farmers to optimise their homegrown feed in an economical and sustainable way



Boost Hybrids

Developed to help you grow better homegrown feed



The earliest - maturing hybrids

Characteristics and suitability

- Fewest days to harvest as little as 130 days
- Early sowing provides greater harvest security, and increased options for subsequent autumn drilled crops
- Excellent for later sowing on heavier soils or following early harvested forage crops
- Where conditions restrict growth e.g. altitude or more northern areas maturity and starch laydown is earlier
- Rapid dry down characteristics
- For sites with increased yield potential, consider early/maincrop varieties

Crop and animal performance

- Superb energy density, typically
 11.5-12 + MJ/kg DM
- Provides maximum opportunity to boost overall ration density for milk or meat production
- Highest starch content, typically 36-40%+ for increased milk yield and protein, and reducing days to finishing
- Increases rumen stability and overall animal health when compared to grass only based rations
- Highly suited to TMR rations where maize inclusion is 50% or lower

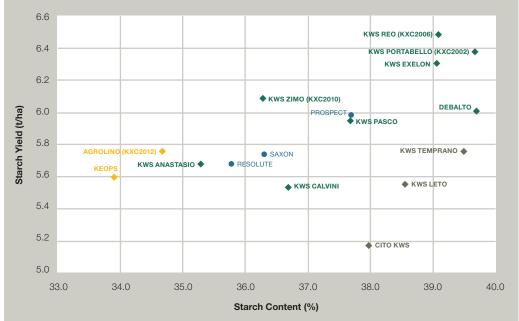


How do these varieties compare?

We have compiled the results below showing starch yield (t/ha) and starch content (%) – these are key targets in the ultra early hybrids.

A high starch yield makes maize extremely economical to grow in marginal areas or shorter growing windows, when combined with the protein and sugar from grass silage.

Starch Yield (t/ha) v Starch Content (%)



Data source: KWS LP250 2022 Average of all Sites.

◆ Ultra Early (FAO 150-160) ◆ Early/Maincrop (FAO 170-190) ◆ Late/Biogas (FAO 200-260)

Lany/Wanerop

High-yielding hybrids for all mainstream growing areas

Characteristics and suitability

- Typically, 140–150 days to harvest
- Suitable for all mainstream sites, and higher heat unit areas
- High yields reduce costs per tonne of dry matter
- Superb options for crimped maize, and corn cob mix (CCM)
- Excellent for biogas and large growers seeking to stagger the harvest date
- Slow dry down provides a wide harvest window

Crop and animal performance

- Crops can exceed 18t/ha DM
- Highly suited to TMR diets up to 70% maize inclusion, promoting total DMI
- Provides an energy dense silage typically 11.5+ MJ/kg DM
- Starch is balanced for total higher inclusion rates, typically 31-37% starch, for improved rumen health



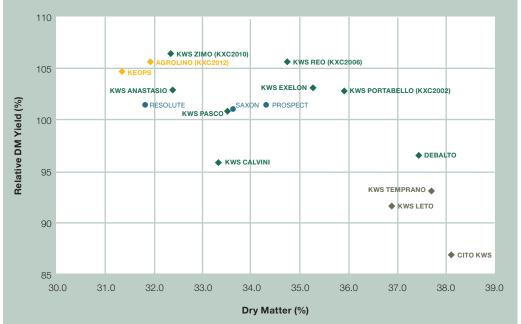


How do these varieties compare?

We have compiled the results below to show DM yield (t/ha) and DM content (%) – these are key targets to consider when looking at early /maincrop hybrids.

An economic yield of dry matter and early maturity are the priorities for the mainstream grower.

Yield (Relative DM Yield %) v Maturity (DM %)



Maize Variety Portfolio 11

CCM and Crimped

Provide increased levels of valuable bypass starch!

CCM (Corn Cob Mix) Characteristics and suitability

- ME average 13.0 MJ/kg DM
- Requires later harvesting for riper grain typically 3-4 weeks later than for silage
- Comprises the complete maize ear (grain, spindle and sheath)
- Row-dependent grain maize header and forage harvester a pre-requisite
- Storage requirement 50% of maize silage
- Options for clamp or ag-bag storage
- Almost zero effluent risk, as higher DM (45-55%)

Crimped Maize Characteristics and suitability

- ME Average 14.5+ MJ/kg DM
- Requires later harvesting for riper grain typically 3-4 weeks later than for silage
- Only the cobs are harvested, the stover is left on the ground
- The remaining stover on the ground significantly helps the later harvest conditions by increasing vehicle float and cleanliness
- Combine with maize picker header required for harvest
- Lowest storage requirement
- Options for clamp or ag-bag storage
- Almost zero effluent risk, as higher DM (65-70%)



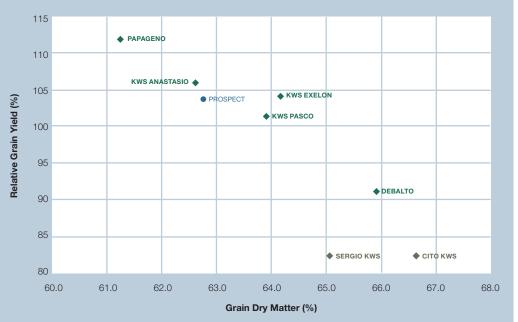


How do these varieties compare?

We have compiled the results below to show grain yield (t/ha) and DM content (maturity) – these are key traits we look for in our grain maize hybrids

Candidate varieties are trialled extensively to ensure they are suitable, with standing power, grain yield and threshability being key characteristics.

Relative Grain Yield (%) v Dry Matter (%)



Data source: KWS 248 2022 Average of all sites.

♦ Ultra Early (FAO 150-160) ♦ Early/Maincrop (FAO 170-190) ♦ Late/Biogas (FAO 200-260)

Late/Biogas

Maximise your energy yield per hectare with our varieties

Characteristics and suitability

- Typically, 150+ days to harvest
- KWS Late / Biogas varieties maximise total yield & energy yields/ha
- Ideal for all mainstream and highly favourable sites, high heat unit areas, and sandy soils
- Lowest £/t production costs
- Where drought tolerance is a factor, lower seed rates can help preserve yield
- Consider maincrop varieties as part of your strategy, depending on total harvest area and site suitability
- Different maturities allows wider drilling and harvest windows

Crop and digester performance

- Exceptional sites can exceed yields of 24t DM/ha or over 70t/ha fresh
- Stay green characteristics provide the widest harvest window
- Prolonged biogas plant retention times, due to maximised cellulose and hemicellulose properties, maximise gas yields

How do these varieties compare?

The indicative graph below shows the importance of balancing DM Yield with available growing days to reach maturity. this will vary according to drilling and harvest dates, soils, altitude and latitude of the site.

A high DM yield is directly linked to methane yield. A key target for farmers looking to optimise their feedstock cost and achieve an adequate DM content suitable for anaerobic digestion.

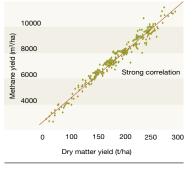
Yield Potential and Maturity by FAO Number



Ultra Early (FAO 150-160) Early/Maincrop (FAO 170-190) Energy/Biogas (FAO 200-260)



Dry Matter Yield and Methane Yield



Data source: University of Hohenheim. Maize Variety Portfolio 15

EnergyBoost NEW KWS TEMPRANO[†] FAO 150 (KXC1005)

Ultra Early

CITO KWS FAO 150

Ultra Early

In Your Field...

KWS TEMPRANO

(KXC1005) delivers extreme earliness, whilst providing class leading dry matter and starch yields in the Ultra Early segment. Highly suited to short growing windows, especially on less favourable maize growing sites.

Always finishes on time!

Characteristics / Quality

- Outstanding, and class leading yield for an Ultra Early – (19.4 t/ha DM)*
- Improved genetics deliver an extra 6% yield, and super early**
- Similar earliness to Cito KWS
- Exceptional starch content (38.9%)***
- Highly suited for diets with 50% or lower maize inclusion
- Superb early vigour (7.4)*** suitable for early or late drilling
- Rapid dry down ensures early harvest

Data source

KWS LP250 2021, average of all sites*. KWS LP250 2022, average of all sites** NIAB NL 2022 *** † Hybrid subject to a Pre NL Marketing Agreement. Initial seed availability is limited.

In Your Field...

GITO KWS gives you options for early feedout, or later sowing after spring forage crops. As an added bonus, maximum starch content is achievable in more challenging maize growing areas.

Step up your forage performance!

Characteristics / Quality

- Earliest maturing hybrid available fewest days to harvest
- Great yield performance in the ultra-early segment (93%)
- Rapid early vigour (6.8) ideal for early or late drilling
- Leading starch (39.9%) and exceptional energy value (12.12 MJ/kg DM) to boost ration energy density, and quality
- KWS top selling ultra-early hybrid
- Early option for CCM

Data source: NIAB Forage Maize Descriptive List. First choice for less favourable sites (2024).

Scan this code to watch our video review of KWS TEMPRANO[†] (KXC1005) Scan this code to watch our video review of CITO KWS

AUGUSTUS KWS FAO 160

Ultra Early

SERGIO KWS FAO 160 Ultra Early

In Your Field...

delivers you high starch content silage ideal for all TMR systems, for both dairy and beef finishing, where short season maturity is essential.

A born leader!

Characteristics / Quality

- Leading DM yield in its segment (94%) across all marginal sites
- Rapid early vigour (6.9) gets crop established quickly on more challenging sites
- Excellent starch (38.0%)
- Great ME content (11.91 MJ/kg DM) to boost animal performance
- Rapid dry down at harvest

Data source NIAB Forage Maize Descriptive List. First choice for less favourable sites (2024).

In Your Field...

SERGIO KWS provides rapid early vigour, early maturity and proven ripening stability.

Exceptional ME and early vigour!

Characteristics / Quality

- Above average DM yield for its maturity (95%) across all sites
- High early vigour (7.5) gives rapid establishment for early and late drilling
- Ideal for heavier soils due to early vigour performance
- Above average starch (36.7%)
- Exceptional ME (11.79 MJ/kg DM) to boost ration density and animal performance
- Delivers great consistency year after year

Data source:

NIAB Forage Maize descriptive list. Second choice varieties for less favourable sites (2020).

Scan this code to watch our video review of AUGUSTUS KWS

PEREZ KWS FAO 160

Ultra Early

EnergyBoost NEW KWS LETOT FAO 160 (KXC1002) Ultra Early

In Your Field...

PEREZ KWS rewards you with an early harvest - with dual use for forage or biogas production.

Gain higher yields faster!

Characteristics / Quality

- Strong DM yield for an ultra early (98%)
- High early vigour (7.2)
- Suited to both heavy and light land
- Ideal for late drilling on favourable sites, providing a great early feed out option
- Our earliest variety recommended for biogas production - increases harvest date flexibility
- Elevated starch content (35.5%)
- High ME (11.58 MJ/kg DM) boosts ration performance

Data source

NIAB Forage Maize Descriptive List. First choice varieties for less favourable sites (2022).

In Your Field...

delivers excellent early season DM yield, suitable for shorter growing seasons.

A high energy hybrid to enhance animal performance.

The short season champion!

Characteristics / Quality

- Impressive yield in the Ultra Early segment - 17.8 t/ha DM* (97%)
- Tremendous starch content (39.2%)* to boost ration performance
- Super early vigour (7.3)
- Highly suited to diets below 50% maize inclusion
- Suitable for late sowing and/or early harvest

Data source: NIAB NL 2022 † Hybrid subject to a Pre NL Marketing Agreement. Initial seed availability is limited.

Scan this code to watch our video review of PEREZ KWS



AVITUS KWS FAO 160/170 Early

NEW KWS PORTABELLO⁺ FAO 160/170 (KXC2002)

Early

In Your Field...

AVITUS KWS delivers high DM and starch output, plus rapid early vigour. Seed rate management is advised on exposed sites to maximise harvest security.

Forage performance to reign supreme!

Characteristics / Quality

- High DM yield in the early segment (18.1 t/ha DM) on the NIAB 2024 list
- Top early vigour (7.0)
- Very high starch (36.0%) and leading starch yields/ha
- Fantastic energy content (11.88 MJ/Kg DM) driving animal performance
- Dual use forage and AD for harvest spread
- Also suitable for CCM
- Moderate stay green for faster ripening
- Recommended seed rate should not exceed 100.000 seeds/ha on exposed sites

Data source

NIAB Forage Maize Descriptive List. First Choice varieties for favourable sites (2024)

In Your Field...

KWS PORTABELLO[†]

(KXC2002) is out in front

for early yield, and combines excellent starch to drive ruminant production. Very high early vigour encourages rapid establishment.

The front runner for short season yield!

Characteristics / Quality

- High yield of 105%* (19.18 t/ha DM) excellent for maturity
- Exceptional starch content (40.2%)* ensures very high starch vield
- Highly suitable for diets with less than 50% maize inclusion
- Outstanding early vigour (8.0)* promotes rapid establishment
- Superb option for early sowing

Data source: MIAR NI 2022* † Hybrid subject to a Pre NL Marketing Agreement. Initial seed availability is limited.

Scan this code to watch our video review of KWS PORTABELLO[†] (KXC2002)

AVITUS KWS

Scan this code to watch

our video review of

KWS CALVINI FAO 170 Early

DEBALTO FAO 170

In Your Field...

KWS CALVINI is suitable for all maize growing areas, Drive your ration performance – maturity, yield and starch in one.

Drive your ration performance – maturity, yield and starch in one!

Characteristics / Quality

- Top DM yield in its class (17.7 t/ha DM) across NIAB less favourable sites
- Excellent early vigour (7.1)
- Very high starch content (36.3%)
- High starch yield potential of over 7t/ha underlines yield performance (2023)
- Great energy values (11.84 MJ/kg DM)
- High kernel content and ripening stability

Data source:

NIAB Forage Maize Descriptive List. First choice varieties for less favourable sites (2024).

In Your Field...

DEBALTO offers leading starch yields, high grain density & lower ear insertion height.

Push your starch yield, keep your harvest on track

Characteristics / Quality

Strong yield performance (18.5 t/ha DM) across all sites

ELAA5

- High grain:stover ratio provides an energy dense silage
- Starch content (34.3%)
- Energy content (11.63 MJ/kg DM)
- Ideally suited for moderate to high (50-70%) TMR dairy or beef finishing rations
- Excellent vigour across all soil types (7.2)
- Multi-use variety for forage, CCM and biogas spreads harvest window

Data source

NIAB Forage Maize Descriptive list. Second choice varieties for favourable sites (2024).

Scan this code to watch our video review of KWS CALVINI





In Your Field...

KWS REO[†] (KXC2006)

fires on all cylinders. Highly consistent across all sites. helping you get to the chequered flag - first! A winner for forage and biogas production on mainstream sites.

Turbo charge your performance!

Characteristics / Quality

- Extreme yield for its maturity 106% in KWS LP250*. 20.1 t/ha DM or 110% in NL2022**
- Impressive starch content 37.9%** provides class leading starch vield
- Consistent stand out performance across all sites
- Impressive early vigour (7.8)**
- Multi use forage and biogas

Data source: KWS LP250 2022. Average of all sites.* NIAB NL 2022** † Hybrid subject to a Pre NL Marketing Agreement. Initial seed availability is limited.

In Your Field...

AUTENS KWS offers stable yield performance & high kernel content, for proven starch yield in favourable areas.

Outstanding yield performance!

Characteristics / Quality

- Stable yield performance (18.1 t/ha DM)
- Faster dry down with great standing power
- Outstanding early vigour (7.5) on all soil types
- High starch content (34.3%)
- Excellent energy content (11.74 MJ/kg DM)
- Provides an excellent early harvest option on lighter land
- Multi-use forage, grain, & biogas

Data source:

NIAB Forage Maize descriptive list. Second choice varieties for favourable sites (2022).

Scan this code to watch our video review of KWS REO[†] (KXC2006)

KWS RESOLVO FAO 170 Early

EDGARD KWS FAO 170

Early

In Your Field...

KWS RESOLVO is an exciting hybrid with allround agronomic stability. It delivers high starch output, early ripening and high dry matter yields for your benefit.

The key to unlocking higher starch yields!

Characteristics / Quality

- Great DM yield (18.0 t/ha DM)
- High grain:stover ratio provides an energy dense silage
- Balanced starch content (31.6%) ideal for moderate to high (50-70%) ration inclusion for both dairy and beef finishing
- Excellent vigour (7.0) for all soil types allows an excellent start to the growing season

Data source: NIAB Forage Maize Despriptive list. Second choice varieties for favourable sites (2024)

In Your Field...

EDGARD KWS has given stable yield performance in KWS and NL screening trials in both the UK and Denmark since its introduction and continues to deliver on farm.

Good early vigour, DM yields and feed value...

Characteristics / Quality

- High DM yield in its class across NIAB trials (2014: 106% relative DM yield)
- Good early vigour on all soils types (2014: 7.6)
- Very high starch (2014: 34.3%)
- Great ME content (2014: 11.36 MJ/kg DM)
- Provides early silage production across the UK

Data source(s): FERA NL Trials for Forage Maize – All sites (2014).

Scan this code to watch our video review of KWS RESOLVO



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KWS EXELON FAO 170 Early

RODRIGUEZ KWS FAO 170 Early

In Your Field...

KWS EXELON has a lower ear insertion height resulting in greater stability. The potential to carry 20 grains per ring provides you with superb grain quality, leading to high starch yields. This is combined with excellent DM yield and maturity providing a complete variety.

Drive your silage output!

Characteristics / Quality

- Leading DM Yield (18.5 t/ha DM)
- Excellent starch content (34.6%)
- Fantastic energy values produces superb silage (11.81MJ/kg DM)
- Highly suited to moderate to high (50-70%) inclusion in dairy and finishing rations
- Excellent vigour (7.1) on all soils allows your crop to get up and away – fast
- Multi-use variety forage, grain and biogas
- Stand out performance and consistency across all sites
 Data source:

NIAB Forage Maize Descriptive List. First Choice varieties for favourable sites (2024).

In Your Field...

RODRIGUEZ KWS is a

true dual purpose variety for either silage or grain production. A stable, repeatable crop which grows consistently well, even at higher altitudes or on heavier soils.

Versatile for silage or grain!

Characteristics / Quality

- Produces high DM yields in the field (17.9 t/ha DM)
- Balanced starch content (36.0%) makes an ideal variety for high maize inclusion diets
- High energy content (11.85 MJ/kg DM) increases ration energy density
- Performs very well for CCM to produce a higher energy feed suitable for dairy or enhanced finishing
- Great early vigour (6.6) on all soils provides a solid start

Data source: NIAB Forage Maize Descriptive List. First Choice varieties for favourable sites (2024).

Scan this code to watch our video review of KWS EXELON



KWS PASCO FAO 170/180

AURELIUS KWS FAO 180

Early/Maincrop

In Your Field...

Early

KWS PASCO is a

flexible variety for forage and CCM. This is an allround variety that will not disappoint, and is suited to high maize inclusion diets – boosting your animal performance. Hugely consistent performance across favourable and less favourable sites.

Excellent yield performance for silage or CCM!

Characteristics / Quality

- Produces high DM yields in the field (18.7 t/ha DM 103%)
- Balanced starch content (34.4%) makes an ideal variety for high maize inclusion diets
- High energy content (11.82 MJ/kg DM) increases ration energy density
- Performs very well for CCM to produce a higher energy feed suitable for dairy or enhanced finishing
- Great early vigour (7.1) on all soils provides a solid start

Data source

NIAB Forage Maize Descriptive List. First Choice varieties for favourable sites (2024).

In Your Field...

AURELIUS KWS is a

consistent yield performer. Particularly suited to high maize inclusion in modern TMR rations. A highly flexible variety to meet the needs of all growers.

A class act!

Characteristics / Quality

- Consistent DM yield (101% DM yield)
- Rapid early vigour (7.5) for a flying start
- Suitable for high maize inclusion in diets (60%+) due to balanced starch content (32.7%)

FELDMANN COMME

- High energy content (11.67 MJ/kg DM) drives ration performance
- Can help stagger harvest window for biogas growers
- Multi-use variety suitable for forage, grain, & biogas

Data source:

NIAB Forage Maize Descriptive List. Second Choice Varieties for favourable sites (2022).

Scan this code to watch our video review of KWS PASCO





KWS ANASTASIO FAO 180/190

Early/Maincrop

In Your Field...

KWS ANASTASIO

provides you with a high level of harvest flexibility, and is suited to all your needs, be it forage, biogas, CCM, crimped or dried grain.

Maincrop silage and grain hybrid for every season!

Characteristics / Quality

- High DM yields (19.0 t/ha DM 104%) to fill your clamps, forage or biogas
- Great starch content (32.2%) for high maize diets
- High energy content (11.63 MJ/kg DM) to deliver ration performance
- Highly suitable for CCM and grain cropping
- Leading early vigour (7.3) on all soil types provides a rapid establishment
- Suitable for forage, grain and biogas systems

Data source:

NIAB Forage Maize Descriptive List. First Choice varieties for favourable sites (2024).

In Your Field...

KWS ZIMO[†] (KXC2010)

NEW KWS ZIM

Early/Maincrop

KXC20

FENDE

delivers high dry matter yields as a maincrop, to fill your clamp for both ruminant and AD performance.

Fill your silo - time after time!

Characteristics / Quality

- High yields on favourable sites (19.1 t/ha DM)* to reduce your cost of production
- Balanced starch content (35%)* is ideal for 50-70% maize diets
- High ME content (11.92 MJ/kg DM)* fuels animal and digester performance
- Excellent early vigour (7.5)* provides a rapid establishment and promotes a longer growing season
- A highly flexible dual use variety for both forage and biogas systems

Data source: NIAB NL 2022* † Hybrid subject to a Pre NL Marketing Agreement. Initial seed is limited.

Scan this code to watch our video review of KWS ANASTASIO



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The **boost** for your silos

In Your Field...

PAPAGENO increases options for AD, silage or grain growers looking for a wider drilling window, and high yield performance.

Your solution for silage, grain or biogas - all in one!

Characteristics / Quality

- Excellent dry matter yields (19.1 t/ha DM 105%) in 2021 DL
- Starch (32.0%) exceptionally well balanced for the highest maize ration inclusion rates
- Great energy (11.72 MJ/kg DM) content to drive animal performance
- High early vigour
- Multi use silage, grain and biogas
- Ideal variety to aid the spread of drilling and harvest

Data source:

NIAB national list trials. 5 year DL and Year 2 varieties favourable sites 2024

SiloBoost

Papageno

Excellent dry matter yields, filling your clamp



www.kws.com

Scan this code to watch





_ate/Biogas

ate/Biogas

AGROLINO[†] (KXC2012)

A heavy hitter delivering a knockout punch!

Characteristics / Quality

- High yields (19.5 t/ha DM)* ensures clamps are full
- Balanced starch content ideal for high maize inclusion ruminant diets
- Very suited to favourable sites with a longer growing window
- High early vigour (7.0)* widens the drilling options
- Provides harvest security with a wide harvest period, particularly in the AD segment

Data source: NIAB NL 2022* † Hybrid subject to a Pre NL Marketing Agreement.

KWS KAMPINOS adds

Continental yields with cold tolerance...silage or AD use!

Characteristics / Quality

- Heavy yield potential on favourable sites (21.5t/ha DM)
- Ideal hybrid for spreading drilling window
- High grain:stover ratio for stable ripening
- Excellent starch content for maturity (34.1%)
- Significant energy density (11.63 MJ/Kg DM) for animal or AD performance
- Seed at 42,000 seeds/acre (103,000 seeds/ha) in most areas
- In low rainfall areas reduce to 38,000 seeds/acre (94,000 seeds/ha) to protect yield

Data source: KWS LP251 2019. Average of all sites.

Scan this code to watch our video review of AGROLINO[†] (KXC2012)

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FAO 210/220 XID

FAO 240 AROC

ate/Biogas

KEOPS combines

Multi-use silage or biogas

Characteristics / Quality

- Significant yield potential on favourable sites (23.3 t/ha DM)
- Can be used to spread drilling window
- Wide harvest window due to stay green nature
- Strong early vigour gets early sowing up and away
- Seed at 42,000 seeds/acre (103,000 seeds/ha) in most areas
- In low rainfall areas reduce to 38,000 seeds/acre to (94,000 seeds/ha) to protect yield

Data source: KWS LP251 2019. Average of all sites.

AMAROC offers excellent

Heavy yield potential

Characteristics / Quality

- Heavy yield potential on favourable sites
- Ideal for spreading harvest and drilling windows on lighter land
- Rapid early vigour
- Reduce chop length to 7-9mm to ensure optimal AD performance
- Sow at 42,000 seeds/acre (103,000 seeds/ha) in most areas
- In low rainfall areas reduce to 38,000 seeds/acre (94,000/ha) to protect yield

Data source: KWS Agroservice 2015-2016.

Scan this code to watch our video review of **KEOPS**



KILOMERIS FAO 260/270 Late/Biogas

In Your Field...

KILOMERIS is suited to only the very best sites, where it can provide exceptional performance for your AD feedstock production, with huge DM vield potential.

The ultimate in feedstock yield – ideal for light soils!

Characteristics / Quality

- Enormous yield potential on the most favourable, high heat unit sites (24 t/ha DM 2019)
- Ideal hybrid for drought-prone areas yields exceed earlier hybrids
- Reduce chop length to 7-9mm to ensure optimal clamp and AD performance
- Sow at 40,000 seeds/acre (98,000 seeds/ha) in most areas
- In low rainfall areas reduce to 38,000 seeds/acre (94,000/ha) to protect yield

Data source: KWS LP251 2019 Average of all sites

Scan this code to watch our video review of KILOMERIS



Maize 360

Maize 360 gives an online virtual experience of our KWS Maize Demonstration site at Lydney.

A virtual experienc

View the crop, walk the trial field and listen to our experts as they take you through all of our commercial hybrids and our breeding demonstration.

Visit our website or scan the QR code to experience Maize 360!







With you throughout the year...



myKWS **MAIZE** is our quarterly newsletter, keeping you up to date on topical issues during the growing season, with advice on varietal selection and other related subjects.

To sign up for a postal copy of myKWS **MAIZE** newsletter scan the QR code. For a digital copy, sign up for myKWS at www.kws-uk.com (select the maize option).

KWS



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Drilling Tips

Optimum drill timing depends on **soil conditions**, **temperature** and **seedbed moisture**. Modern hybrids have a high degree of cold tolerance but should not be drilled before soils have reached an **even temperature** for 3-4 days (8°C for light soils, 12°C for heavy soils) to give the best possible establishment.

Drilling considerations

- Soil type (heavy, medium or light soils), temperature and moisture availability
- Site and yield potential (eg warm site with light soils, cold site with heavy soils)
- Short-term weather forecast

Effects of premature drilling

- Slowed germination
- Uneven emergence, necessity to increase seed rates
- Reduced nutrient uptake (low soil temperature)

Effects of late drilling

- Delayed harvesting
- Requirement for earlier maturing varieties
- Increased risk of lodging





Recommended seed rates

Plants/ha (acre)	Units*/ha (acre)	Deposition dis at 75cm (30")	stance (cm) at 50cm (19")
85,000 (34,000)	1.8 (0.72)	14.9	22.4
90,000 (36,000)	1.9 (0.76)	14.1	21.2
95,000 (38,000)	2.0 (0.81)	13.3	20.1
100,000 (40,000)	2.1 (0.85)	12.7	19.0
105,000 (42,000)	2.2 (0.89)	12.1	18.1
110,000 (44,500)	2.3 (0.93)	11.5	17.3
115,000 (46,500)	2.4 (0.98)	11.0	16.6

*1 Unit = 50,000 seeds

Harvesting Tips

The **boost** for your yields.

The KWS UK portfolio focuses on offering farmers the flexibility of a wide harvest date range, demonstrated in two key areas:

- Avoiding rapid dry down of the leaf stover maintains a good level of stay green
- Early flowering and cob maturity

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Grain maturity	Description	Cob DM (%)	Whole plant DM (%)
Milk	Grain immature Avoid premature harvesting	10-15	< 20
Soft dough	Grains become firmer. Husks remain green	20-28	20-27
Hard dough	Silage maturity reached at 'hard dough' stage. Reduced risk of clamp effluent	30-45	28-32
Hard ripe	Grain at 'hard ripe' stage. Crop ready for late cut silage or CCM	48-50	33-35
Fully ripe	Grain fully matured Husks died back Ready for crimped maize or late cut CCM	65-70	36-45

Effects of harvesting too early

- Lower yield
- Reduced energy, starch and ME which results in lower intake potential
- Higher risk of clamp effluent requires a longer chop length
- Poor dry matter intake and palatability resulting from acidic silage

Effects of late harvesting

- Higher harvesting costs and increased field losses
- Low digestibility and palatability
- Excessive dry matter and poor clamp stability
- Difficult clamp consolidation requires a shorter chop length
- Soil damage/compaction

EnergyBoost KWS Temprano KWS Leto

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High energy hybrids for boosting animal performance



SEEDING

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THE FUTURE

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