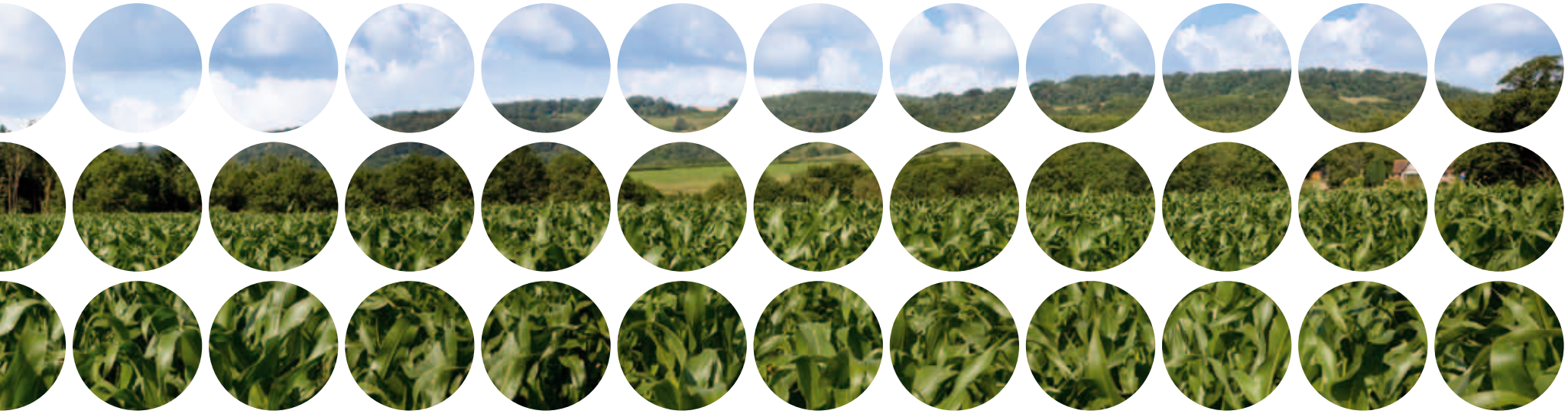
Maize Hybrids

2008/9



Huntseeds LTD

KWS

Working together for British farmers

Our Company

Huntseeds Ltd is the principal specialist maize seed supplier to the UK Agricultural Trade. In partnership with KWS we operate a comprehensive selection and development programme throughout the UK, ensuring that we provide the best quality hybrids to suit the British farmer.

By focusing on the single crop and with our long association with a world renowned plant breeder, Huntseeds Ltd is able to offer first class products and specialist support to merchants and growers, with advice specific to the requirements of the maize growing areas of the UK.

Who We Are

Founded in 1986 by Managing Director Jim Hunt, Huntseeds Ltd is dedicated to developing the best quality maize seed from the best maize hybrids. We have the largest Research and Development programme in the UK committed to the introduction of new and improved maize hybrids, which once selected are evaluated against the top competitors.

We are constantly looking for ways to maximise the potential of our hybrids to suit the farmer's needs over the wide diversity of British growing conditions.

'World renowned breeder.'

Huntseeds & KWS

The core of Huntseeds' success lies in the extensive trials carried out throughout the UK. We first began testing for the European plant breeding giant KWS in 1991.

Established for over 150 years they operate in more than 65 countries with an annual turnover in excess of ½ billion Euros. Worldwide KWS sell 5.5 million packs of maize and 15% of their annual turnover is ploughed back into R&D, particularly into the breeding of maize hybrids.

Huntseeds are involved in extensive trials work with KWS. Our UK trials are essential to the breeder as the boundaries for maize growing have moved further north, so it has become increasingly important to develop early hybrids to cope with the more extreme conditions.

Consequently the screening aspect of our trials is ever-expanding and we now conduct fully replicated trials on 9 locations throughout the UK from the North to the South West.

In addition to carrying out all of the trial work for KWS we also manage trials for BSPB and NIAB in Cheshire and Gloucestershire and a number of other breeders without their own resources.

Huntseeds' relationship with KWS is a unique partnership that we value as positive and ongoing, guaranteeing that our maize varieties are reliable, innovative and have been tailored to and tested for the conditions and region that you farm.

'Working together for British farmers.'

Our Pledge

Huntseeds strives to be the leading resource in the UK for maize crop production, ensuring outstanding yield potential and productivity. We are committed to developing innovative products with value-added traits. We do this by supplying the finest quality seed and providing technical and growing advice direct from our own experts and research. For all our products we provide an after-sales service with practical advice and help second-to-none.

Huntseeds Trials Programme manages in excess of 3500 properly replicated plots across the UK. Every year we screen around 300 new maize hybrids in a wide range of conditions, from over 700ft above sea level to coastal sites.

Every variety reaching commercialisation has been thoroughly tested, so that we are confident of their suitability before recommending them to growers.

Huntseeds KWS

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Our Team

Jim Hunt — Managing Director

Jim founded Huntseeds in 1986. In managing the company he has direct involvement in both business and product development. Additionally, Jim runs commercial dairy and beef enterprises and thus has an in-depth knowledge of maize cultivation and production of maize forage diets.

Dave Blowers — Sales Manager

Dave manages the commercialisation of new maize hybrids as they emerge from the breeding programme, working closely with distributors and merchants. Dave has vast experience of the maize crop having been Maize Product Manager for Johnsons Seeds prior to joining Huntseeds in 1998 and in constantly monitoring crops with customers from Scotland to Southern England ensures the hybrids best suited to local conditions are made available.

Rob Hunt — Commercial Manager
Telephone - 01594 528 234

Richard Franklin — Area Manager
Telephone - 01594 528 234

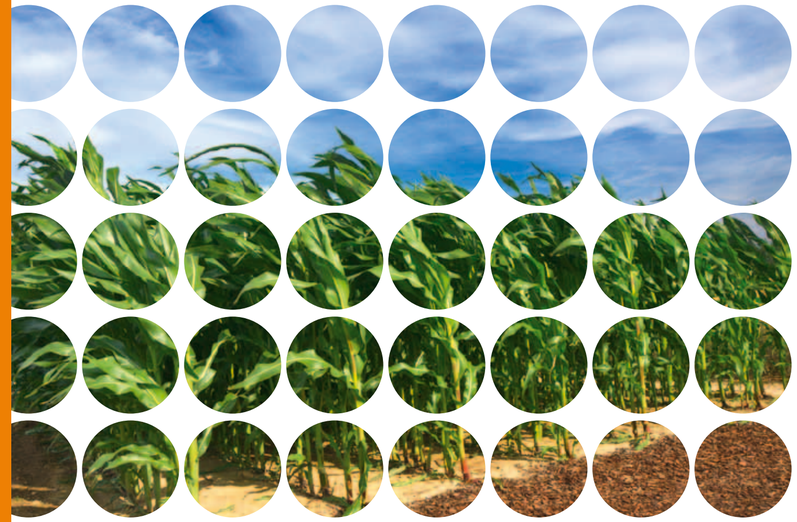
Chris Fullerton — Trials Manager
Telephone - 01594 528 234

John Morgan — Sales Manager Designate
Telephone - 01594 528 234

Pauline Harris — Company Accountant
Telephone - 01594 528 234

John Evans — Office Administrator
Telephone - 01594 528 234

‘The team at Huntseeds is always available to offer its comprehensive expertise and advice in all areas of maize cultivation.’



Evaluation of hybrids for adaptation to UK growing conditions is paramount to the successful introduction of quality products to the market. In order to achieve this Huntseeds and KWS have established an extensive UK specific testing programme and breeding schedule to produce high quality, consistent and stable hybrids.

The replicated trial plot system employs commercial husbandry and machinery incorporating methodology and modification to enable accurate uniformity of comparative studies. Trials are repeated across regions of contrasting potential and hybrids are initially selected for good consistent performance under favourable and marginal conditions.

Selected hybrids enter more extensive evaluation, with detailed analysis of field and quality parameters at more sites, and are compared against standard controls and prominent commercial varieties. Those hybrids that this scheme identifies as having improved attributes will be entered in National Trials, providing an independent data source, whilst continuing in the Huntseeds/KWS Programme.

Taking 4 to 5 years to progress through this rigorous evaluation programme, new hybrids reach commercialisation supported by sound technical data and hundreds of varieties are rejected in the process.

Benefits of Feeding Maize

The increasing popularity of the maize crop in the UK can be attributed to its consistently stable yield and quality, its relatively simple cropping technique and its tolerance to high cropping frequency, combined also with its ability to utilise slurry and FYM as its main source of nutrients.

Maize silage provides a high energy forage so necessary for profitable meat and milk production today and extensive research has shown it to be capable of increasing an animal's daily dry matter intake, thereby increasing production of milking cows in terms of yield and quality and maximising LWG in beef animals thereby reducing the time taken to achieve optimum weight.

Grass silage can sometimes be an unpredictable commodity, often resulting in poor intake characteristics, so the inclusion of at least 50% maize silage into the forage ration helps to counteract this and many farmers have increased the proportion up to 75%+ and are feeding right through the summer, to achieve much better results than with grass alone.

'For higher milk yields.'

The UK Maize Acreage Trend

Increases in the forage maize acreage throughout the UK reflect the growing awareness of the positive impact that maize silage can have towards profitable production and it also reflects the progress made by the maize breeders in developing hybrids that can cope with our more marginal climatic conditions.

- **1985 - 14,150 hectares**
- **1990 - 40,450 hectares**
- **2007 - 121,400 hectares**
- **2008 - 130,000 hectares**

Close to a tenfold increase in 20 years.

'Outstanding product range, offering farmers more varietal choice across the whole of the UK.'

Cost Comparisons

Several years ago it was relatively cheap to produce milk and beef from low priced concentrates and grass silage to get cost effective output, but all that has now changed with spiralling input costs having all but negated the milk price increases we've had since last Autumn.

The main cause of these rises has been a world cereals shortage creating much higher feeding stuffs costs and while the arable sector has generally gained, it has dramatically reduced the profitability of livestock units.

This has again focussed dairy farmers as well as more beef producers on the importance of growing more home grown forage to remain in profit and they are looking particularly towards the maize crop rather than grass to achieve that.

With the enormous increases over the last year of the cost of fertilisers and fuel the differential in costs of producing maize silage compared to grass are continuing to favour maize, with its single cut and utilisation of animal waste for nutrients.

An average maize crop will cost about £60 per tonne of dry matter to produce, whereas grass silage is nearer £75 and in the more favourable maize growing areas, with higher yields, the difference is even greater.

That is just the physical difference in the cost of production between the two crops. The main gains to be had are in the extra milk production and quality and reduced number of days to slaughter for beef from feeding the resulting maize silage and for some farmers that is the difference between making a profit or a loss in their livestock enterprises.

In the Northern European countries of Germany, Denmark, Holland and Belgium, about 70% of the maize grown is for forage and the remaining 30% is harvested for grain. In the UK less than 5% is grown for grain which is mostly crimped and ensiled producing more of a concentrate feed with an ME of 14 to 15.

The trend for grain maize is starting to increase however and with spiralling bought-in feed costs it is a viable alternative for many dairy farmers and it can also be grown as a cash crop by arable farmers.

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‘Developing innovative higher-yielding products.’

Our Top 10 Tips for a Succesful Maize Crop

Field Choice

Choose well-sheltered fields that have light to medium soils for best results. Maize is very temperature sensitive, so the aspect and altitude of the fields chosen have a large bearing on the crop’s success, particularly the further north and west it is grown.

South-facing fields warm up more quickly in spring and the extra heat units during the growing season help the crop to get to harvest quicker, important if it is to be followed by wheat or grass.

2 Site Preparation

Early ploughing will benefit heavier soils to get the all important fine seedbed required for maize. Poor seedbeds result in uneven germination of the crop particularly in dry seasons. Subsoil if necessary to relieve compaction otherwise be prepared for big yield losses.

Have the soil tested to determine pH and nutrient levels. The pH needs to be a minimum of 6.5 up to 6.8, as acidic soils reduce the uptake of Phosphate in the soil which is vital for early plant development. Rolling is not advised after planting as it can cause compaction and capping on some soils.

3 Drilling

From mid April onwards once the soil has reached 8°C for conventionally drilled maize. If it is under plastic then late March onwards.

Drill down to the moisture, no more, as if it is drilled too deeply it takes longer to emerge due to the soil being colder. Row widths vary from conventional 75cm down to 40cm with combination drills. Drilling too fast will result in poor seed spacing with resulting bunching of plants in the rows.

4 Seed Rates

This will depend on several factors: time of drilling, location and grower’s preference and can be anything between 40 and 50,000 seeds per acre.

Our recommendations for our hybrids is around 42/45K per acre in optimum conditions, but for late drilling (mid to end May) reduce down to 40K or less, or the crop will be too late to mature resulting in a lower Dry Matter and Starch content and reduced energy concentration.

5 Organic Fertiliser

Before growing any maize crop, have the soil tested so that the exact nutrient requirements of the crop can be determined before applying slurry or FYM.

A 50t/ha (20 tonne/acre) maize crop uses:

- 175kg/ha Nitrogen
- 90kg/ha Phosphate
- 175kg/ha Potash

Many growers apply manure at a rate that well exceeds crop demand and rather than improve yields it delays maturity and produces low dry matter and starch levels, giving lower energy concentration forage.

Spring applications are best to avoid compaction and need to be incorporated into the soil quickly to avoid evaporation, run-off and leaching.

‘Maximising yield.’

6 Mineral Fertiliser

The young maize seedlings are slow to extract nutrients from the soil, particularly in cold dry weather and the use of a placement starter fertiliser will help to give them a boost.

Maize needs all its nutrients during the first few months of growth and split applications of Nitrogen can result in poor utilisation by the crop. It needs everything ‘upfront’.

Potash is very important to the maize crop and helps grain formation and maturity as well as helping drought tolerance in a dry season.

Calculate what is needed from soil analysis, don’t guess!

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7 Weed Control

'Prevention is better than cure'. Maize will not stand any competition from weeds, which are the biggest single factor likely to give a poor result with the crop, so get it right!

Since the banning of Atrazine we've seen a wide range of excellent herbicides become available for maize both pre and post emergent use: discuss with your agronomist which is likely to be the best treatment for your situation with your crop.

8 Varietal Choice

Selecting the right hybrids to get maximum yields and quality can be a minefield for most farmers with all the material currently available and often growers can end up using unsuitable varieties for their situation.

As a farmer-owned company with many years' experience, supplying an increasing volume of maize seed each year, we are well placed to help you select the right varieties for your farm and give the right agronomic advice.

Our top rated hybrids go through many years of Official UK Trials as well as being in our own properly replicated series from the north down to the south of the country before being considered for commercialisation.

'Earlier maturing hybrids.'

9 Harvesting Time

Your maize in an average season should come to maturity in late September/early October, and when the sheath leaves around the cobs start to go paler in colour, start checking the the cobs for maturity.

Wait until the grains are doughy. Do not be rushed into harvesting too early as you will harvest a lower energy crop that your livestock will not perform so well on.

Maize has a wide harvest window compared to grass but do not let the Dry Matter get over 35% as this will affect livestock intake and the clamp is more likely to heat up. 32% - 34% is about right and should give a little over 30% Starch.

Chop at about 12mm, and get the contractor to set the corn cracker properly to smash the grain.

10 Manage The Clamp Properly

The same principles apply to maize as for grass silage. Roll it well, fill it and seal it quickly.

Maize is high in sugars and ferments quickly. If the silage is very dry and going to be fed into the Summer, there may be the need for an additive to stop the clamp heating up and losing Dry Matter.

Add salt to the shoulders to stop waste and double sheet and weigh down to keep the air out.

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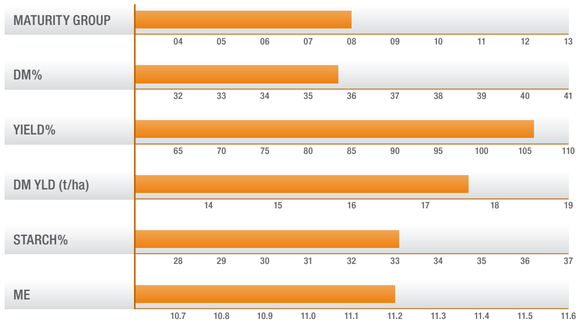
Konsort

‘Bullet-proof variety for all areas.’

- Very early maturing hybrid - NIAB Rating 8
- High DM yields - 106% NIAB controls
- High starch content variety with high ME - 11.2
- NIAB First Choice variety for marginal and favourable sites
- Good early vigour and standing power
- Bullet-proof variety for all areas
- Featured data source - NIAB List 2009 Less Favourable Sites



For the latest trials data visit our website, www.huntseeds.co.uk.

Huntseeds LTD

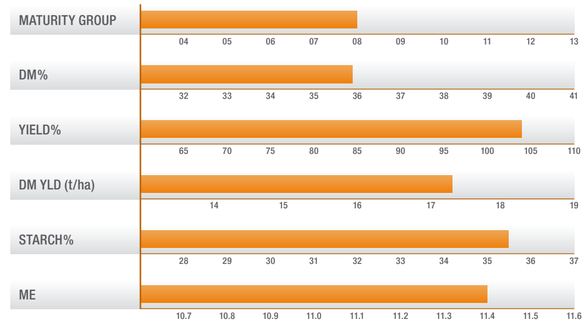
LISTED NIAB FIRST CHOICE

KWS

Karimbo

‘New early, extra high ME hybrid.’

- Very early maturing hybrid - NIAB Rating 8
- High DM yields - 104% NIAB controls
- High starch content variety with high ME - 11.4
- NIAB First Choice variety for marginal and favourable sites
- Excellent performer in all maize growing areas
- Featured data source - NIAB List 2009 Less Favourable Sites



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LISTED NIAB FIRST CHOICE

KWS

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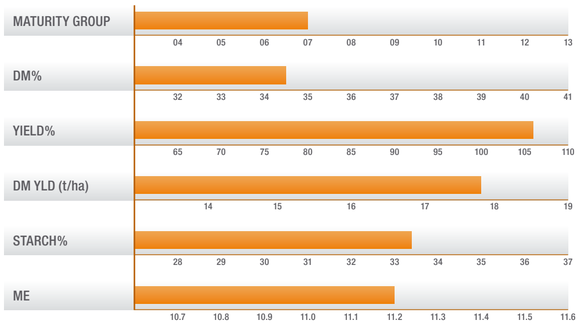
Katy

‘High yielding new early.’

- Very early maturing hybrid - NIAB Rating 7
- High DM yields - 106% NIAB controls
- High starch content variety with high ME - 11.2
- NIAB First Choice variety for marginal and favourable sites
- Good early vigour and standing power
- Featured data source - NIAB List 2009 Favourable Sites



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Huntseeds LTD

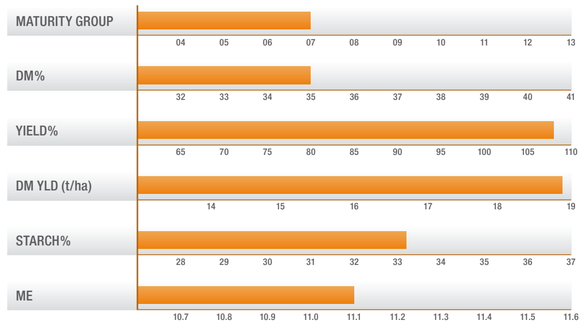
LISTED NIAB FIRST CHOICE

KWS

Kroesus

‘Exceptionally high yields of forage and starch.’

- Exceptionally high DM yields - 108% NIAB controls!
- Very high Starch yields
- Superb early vigour
- Early maturing hybrid
- Extremely reliable hybrid
- Featured data source - NIAB List 2009 Favourable Sites



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LISTED NIAB FIRST CHOICE

KWS

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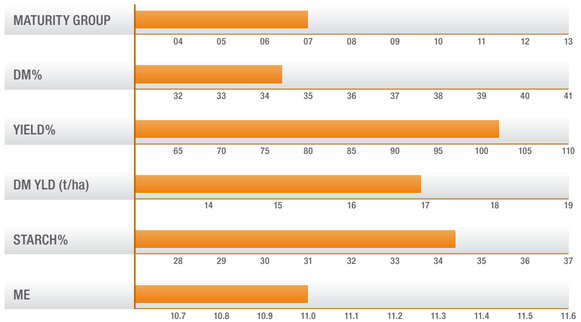
Konstant

‘Good all-round hybrid.’

- Very early maturing hybrid - NIAB Rating 7
- High DM yields - 102% NIAB controls
- Exceptionally high starch content variety with good ME - 11.0
- NIAB First Choice variety for marginal sites
- Good early vigour and standing power
- Featured data source - NIAB List 2009 Less Favourable Sites



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Huntseeds LTD

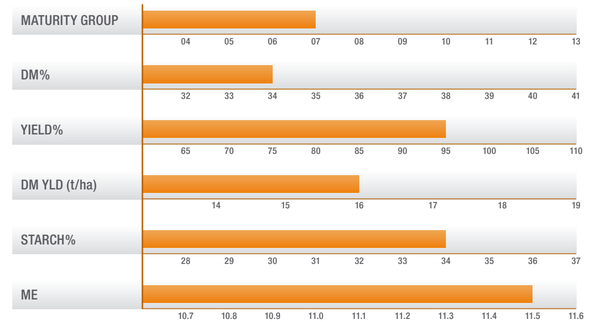
LISTED NIAB FIRST CHOICE

KWS

Husar

‘Economical and reliable.’

- Good yield of Dry Matter. Similar to Hudson/Crescendo
- Well above average ME
- Very early grain maturity
- Proven performance nationally
- Economically priced



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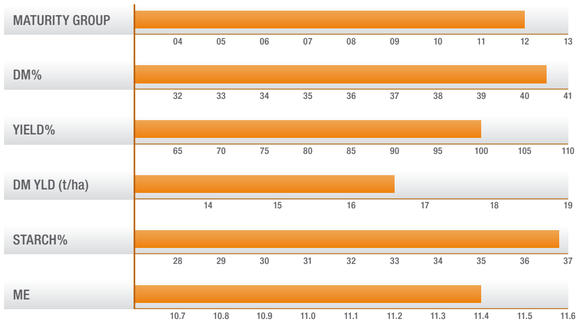
KXA 6005 (proposed name Kaspian)

‘Earliest hybrid available.’

- Earliest hybrid available; Predicted NIAB maturity 12!
- High Dry Matter yields; 100% NIAB controls on marginal sites
- Extremely early large cobs on a semi-compact plant
- High cob to plant ratio
- Well above average starch content
- High feed value
- Featured data source - NIAB BSPB 2 Year Average



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Huntseeds LTD

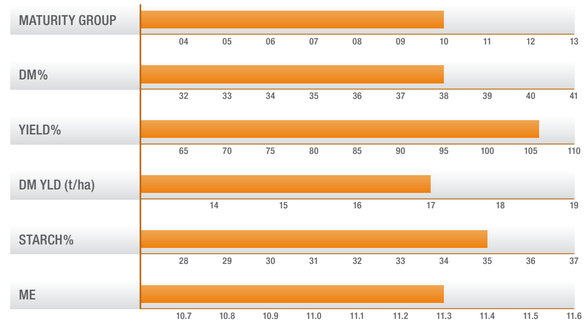
TRIALLED NIAB

KWS

KXA 7008

‘Very early, high yielding hybrid.’

- Very early maturity: Likely to be 10/11 maturity
- Above average yields of Dry Matter 107% controls in 2007 KWS/Huntseeds Trials
- Very early well filled cobs
- High starch content
- Good feed value
- Good early vigour and standing power
- Featured data source - Huntseeds/KWS Trial Data



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TRIALLED NIAB

KWS

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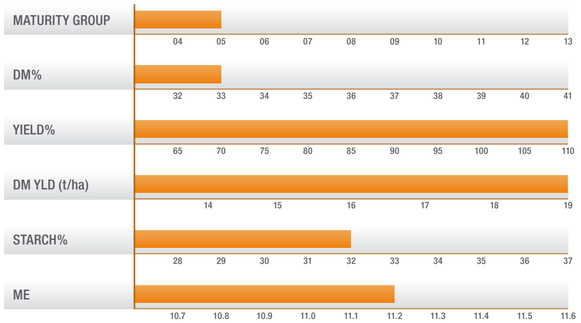
Amadeo

‘For high yields in favourable areas.’

- Very high DM yields
- Consistently large well filled cobs
- Good standing power & early vigour
- Featured data source - Huntseeds/KWS Trial Data



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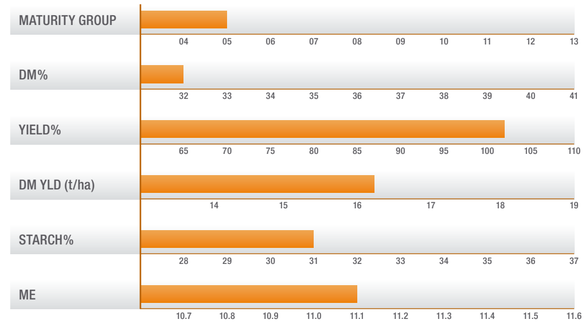
Huntseeds LTD

KWS

Ecrin

‘Dual purpose variety.’

- Above average Dry Matter yields
- Dual purpose forage or grain use
- Similar maturity to Kroesus
- Excellent standing power
- Featured data source - Huntseeds/KWS Trial Data



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Huntseeds LTD

KWS

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Super Game Maize

"The variety has constantly stood right through the whole of January allowing me to use drives through the whole season whereas before some crops have been flat by Christmas."
Josh Theobold, Gloucestershire.

'Excellent early vigour.'

- Stable weather-proof variety: Good establishment
- Compact growth for full season standing
- Well formed high grain content cobs
- 40,000 seeds per acre packs
- Excellent early vigour
- Proven UK variety

For the latest trials data visit our website, www.huntseeds.co.uk.

Huntseeds LTD

KWS

'Over the past six years we have achieved excellent results using the Huntseeds maize portfolio exclusively.'

Testimonials

"We are in a very marginal area for growing maize and this is the third year we've grown the Huntseeds variety Konsort which has consistently produced well filled cobs with high grain maturity even in poorer growing seasons. Last year we harvested over 20 tonnes of silage per acre and our beef animals have never looked better or finished more quickly than they do on maize silage."
Richard Jones, R & CM Jones, Llanbedrog, Gwynedd, North Wales.

"We've grown Kroesus for the last 4 years and even this far north have been favourably impressed by its huge yields of Dry Matter, and its very high Starch values. We generally get over 30% DM and 30% starch content silage, with yields well in excess of 20 tonnes per acre and it's this combination which helps us to maintain our profitability with high milk yields and quality."
Tom Walley, Knutsford.

"We run a 1300 acre mixed Arable, Dairy and Sheep farm on the Gloucester/ Wiltshire borders. Our Dairy consists of 220 Friesian Holsteins of which we feed 50% of Maize in their ration. Over the past six years we have achieved excellent results using the Huntseeds maize portfolio exclusively. Initially we focused on growing high yielding varieties such as Diplomat. We have progressed using the latest varieties from the Huntseeds range that now allow us to combine yield and quality with an earlier maturing plant. Currently we are achieving this with the varieties Konsort and Katy."
Robert Godwin, KC & AM Godwin & Sons, Chippenham, Wiltshire.

Mr Bob Arnott who farms at Kings Langley, Bucks has grown several Huntseeds varieties over the last few years and for the last 2 has had extremely good yields with Kroesus. *"We only get 22 inches of rain here so it is important to get the maize off to a good start and Kroesus always does this. This year we have the new early hybrid Katy alongside Kroesus and that is also looking extremely good."*

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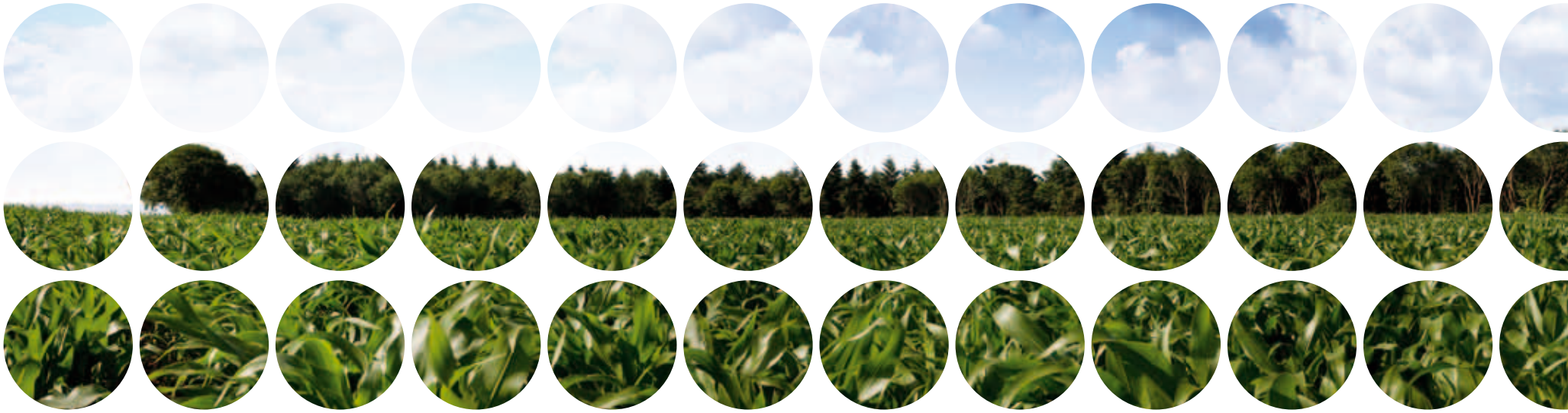

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