



# Welcome

# to the Agrovista 2024 maize brochure

With the majority of maize silage clamps full to the brim we can look back on the 2023 maize growing season with some relief.

A cold wet March was followed by a not dissimilar April and for most growers maize drilling commenced slightly later than normal. However May was much more promising and maize drilling continued apace throughout the month and even into June which is always a bit of a risk for the maize crop. A hot dry June tested the drought tolerance of many crops but July came to the rescue with above average rainfall. Nutrient uptake in July was quite dramatic resulting in some very tall crops with some varieties showing stem brackling during late July and early August.

Come harvest time the majority of crops were coming off the field extremely well with growers well satisfied with both yield and quality. It is worth noting that the 1200 heat units required to grow an average maize crop in the UK has been achieved in 10 out of the past 11 years. In 2022 and 2023 we have exceeded 1400 heat units which has only ever been recorded once prior to this. A sure sign of global warming or mere coincidence?

With regards to seed treatment options the emergency authorisation for the use of Redigo M, Korit and Force for 2024 plantings has just been granted which is great news.

At the point of writing, we are still waiting for final approval of the primary legislation that will see existing seed treatment products approved for use until 1st July 2027. Final approval is due in December, so fingers crossed all goes to plan.

The focus on more sustainable maize production is ever present and Agrovista have practical solutions to help growers comply with current legislation and benefit from the latest SFI schemes. The undersowing of maize crops with the correct species of grass seed to minimise soil erosion but maximise nutrient retention is a great starting point to growing a more sustainable maize crop.

I hope you enjoy our maize brochure and please contact your local Agrovista agronomist if you require further information.



National Seed Manager NIGEL WALLEY



Within this brochure you will find our selection of the best maize seed varieties on the market. We can advise on all aspects of maize production including;

### **Nutrient planning**

Comprehensive nutrient plans can be created to maximise the potential of your maize crop.

### Soil health analysis

We offer a range of options providing full nutritional, physical and biological soil analysis with detailed reports to give you practical solutions to unlock your soils full potential. For soil health information visit www.agrovista.co.uk/soil-health

#### Seed selection

Our variety trials and experience in your local area means variety choices are suited to the local conditions.

# Maize and cover crop establishment

Seed rate and cultivation advice to obtain optimum establishment and maturity. Agrovista are also market leaders in the advice and supply of undersown cover crops for maize.

#### Weed and disease control

It is crucial to gain good weed control in maize. Early weed competition has a considerable impact on final yields. Our team of agronomists can advise on herbicide choice and timing.

#### Pests and disease

Advice on effective IPM strategies to reduce pest damage and preventative fungicide programmes to minimise disease in high risk situations.

### Harvest and ensiling

Tailored advice on harvest dates to help maximise dry matter and starch yield. Best practice for ensiling crops to minimise in clamp losses and advice on the correct silage inoculant depending on end use and harvest quality parameters.



Getting the best return from any maize crop is based on two things – choosing the right variety for your circumstances and providing your crop with adequate nutrition.

Nitrogen is core to fulfilling a maize crop's yield potential, but it's a balancing act – too little and the crop's yield will be limited; too much is not only uneconomical, but it has consequences for the environment.

Nitrogen stabilisers, such as Instinct<sup>™</sup>, slow down the conversion of ammonium to nitrate and keep nitrogen available to crops for longer to optimise yield and quality. Instinct will do three things:

- Keep more nitrogen in the soil for longer
- Maximise the yield potential of the crop
- Reduce nitrogen escape into the environment

# Maximise the yield potential of your crop

By keeping more nitrogen in the soil for longer, the chances of a crop fulfilling its potential are increased. There have been many trials across the UK and Europe that look at the impact Instinct has on maize yield; the results of which are shown in the chart on the right.

In the UK, yield increases of more than 10% have been seen, especially if the crop is grown on light soils in high rainfall areas and where total nitrogen rates were moderate.



## Instinct®

Optinyte Technology

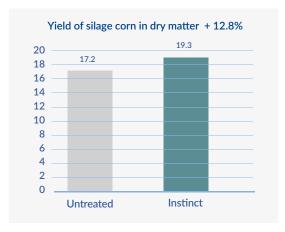
#### **NITROGEN STABILIZER**

These trials were conducted using a variety of fertiliser types – urea, UAN, AN, slurry and digestate. If the fertiliser contains ammonium, Instinct stabilises the ammonium, keeping more in the soil for longer, just when the crop needs it.

### Instinct optimises nitrogen

Maize is an ideal crop for Instinct as it typically requires more fertiliser than it receives, which means it's extremely important to keep as much nitrogen in the soil as possible, for as long possible, and it needs more nitrogen later in it's life than other crops. Instinct does both – preventing loss of nitrogen, and extending it's availability.

#### Results of 43 trials



USE PLANT PROTECTION PRODUCTS SAFELY. Always read the label and product information before use. For further information including warning phrases and symbols refer to label. Corteva Agriscience UK Limited, CPC2 Capital Park, Fulbourn, Cambridge CB21 5XE. Tel: 01462 457272. <sup>®</sup>, ™ Trademarks of Corteva Agriscience and its affiliated companies. All other brand names are trademarks of other manufacturers for which proprietary rights may exist. All manufacturers tradenames and trademarks are duly acknowledged. <sup>®</sup> 2021 Corteva. Instinct™ contains nitrapyrin (Optinyte™).



A foliar applied controlled release nitrogen fertiliser to use on various crops including maize, cereals and oilseed rape

MZ28 contains nitrogen polymers of variable chain lengths. Because these polymers degrade at different rates, this provides a sustained source of nitrogen to the crop, especially beneficial during the rapid growth phase.

This, combined with an optimised formulation, ensures excellent crop safety.

Formulation: Total nitrogen (N) 28% w/w (300g/l) of which 11.5% ureic nitrogen and 16.5% urea formaldehyde.

#### **Benefits**

MZ28 offers the following benefits:

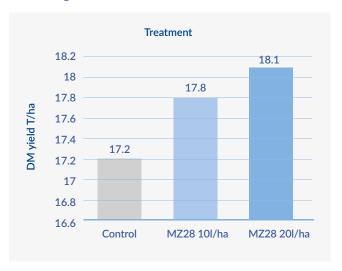
- Controlled release for sustained nutrient provision
- Boosts chlorophyll content and dry matter yield
- Excellent crop safety low salt and biuret content
- Enhanced formulation to minimise risk of volatilisation





"The result was a healthy crop with a strong green colour until harvest that showed no signs of drought or stress. Yield and silage analysis has been extremely good which has helped sell stock out of the clamp."

# Effect of MZ28 on dry matter yield in forage maize



# TAKE CONTROL

Reduce the carbon footprint on your farm





Concern around the environmental impact of growing maize continues to cause debate. Agrovista can now offer undersowing mixtures which under current legislation comply with the SFI SAM 2 Multi Species Winter Cover Crops option.

The deep rooting species used in SoilMax and EnviroMax have been shown to benefit soil structure, prevent nutrient leaching and protect the soil surface from mechanical damage and soil erosion. Under current legislation this makes both mixtures eligible for use under the SFI SAM 2 Multi Species Winter Cover Crops option. To qualify the cover crop must remain in place throughout the winter months of December, January and February. Grazing of the crop is permitted as long as sufficient cover is maintained to protect the soil surface.

Undersowing the maize crop with a grass seed mixture designed specifically for that purpose has proved to be successful when done correctly. It is imperative to sow at the right time with the right species so the growing crop isn't affected.

#### TechniSward Soilmax



Tall fescue

Tall fescue plus

Cocksfoot

At sowing

- Specifically designed to being drilled at the same time as the maize crop (inter-row)
- The slow growing tall fescue and tall fescue plus helps to suppress weed emergence without competing with the maize
- As the grasses mature the root mass develops, helping retention of any residual nutrients which are left in the soil post-harvest
- The deep rooting grass species help to improve soil structure
- Sow at 3 to 5kg/acre (7.5-12.5kg/ha)

### TechniSward Enviromax





Tetraploid late perennial ryegrass

Tall fescue plus

Cocksfoot

- An under-sown mix which is more suited to be sown inter-row once the maize has established and is at the 4-6 leaf stage
- The inclusion of perennial ryegrass helps to ensure the quicker and more reliable establishment needed to survive in the growing maize crop
- It is important that the grass has established before the maize canopy fully develops
- Excellent ground cover post-harvest with a fibrous root system for soil stabilisation
- Capable of providing high quality winter grazing
- Sow at 3 to 5kg/acre (7.5–12.5kg/ha)











# Use this to help you to select the correct silage inoculant for your farm.

Or for further guidance, contact your local Agrovista agronomist.

Forage maize 30-35% DM

# Crimped maize grain

# Improved animal performance

For high performing dairy and beef enterprises where farmers are seeking to optimise production from forage

### 11B91

Specifically designed for preserving crimped maize grain

Improved aerobic stability and reduced fermentation losses

# 11C33 RR

Improved aerobic stability

Improved animal performance through more efficient fermentation

### 11CFT

Improved aerobic stability

Enzymes help lift lignin from cell walls increasing digestibility

Increase in milk yields of up to 40 litres per tonne

# Extreme heating challenge

For use where forage maize is prone to heating, such as slow feed-out, lack of compaction, long chop length, summer feed-out and higher DM contents

### 11A44

Improved aerobic stability Reduction in yeasts and moulds

# Anaerobic digestion

For treating forage maize for use in anaerobic digesters

### **11CH4**

Faster and more efficient fibre digestibility

8% increase in methane yield

Improved aerobic stability



# varieties

The icons that appear alongside the variety description indicate potential use.



Forage maize



Maize grown under plastic film using the SAMCO System



**Energy maize** 



Grain maize

## **Ultra-early maturity**

### **KWS Cito**





KWS Cito is the earliest variety in the KWS portfolio and is a first choice variety on both the NIAB BSPB favourable and less favourable descriptive lists

- Cito boasts the highest levels of starch, ME and cell wall digestibility of any of the ultra early competitors and remains the best option for those looking for early harvest and maximum feed value
- Cito consistently produces very large mature cobs and is well proven over a range of soil types and geographical areas
- With more focus being given to the environmental aspects of growing maize, Cito offers the opportunity to grow an extremely energy dense crop and be able to harvest early minimising soil damage and road contamination

#### **KWS Portobello**





KWS Portobello is a new FAO 160 variety from the leading maize breeder in the UK

- Capable of exceptional yields for such an early variety achieving 105% of control and up to 19 tonnes of dry matter per hectare
- Starch levels of up to 40% make Portobello a truly outstanding high feed value variety and with a class leading early vigour score of 8.0 Portobello ticks all the boxes for an ultra early maize variety
- As well as being suitable for high performance livestock regimes Portobello also has a place as the early variety in a balanced energy maize portfolio due to its dry matter yield exceeding that of far later maturing varieties traditionally used in that sector

## **Early maturity**

#### P7179





P7179 is a new variety from Pioneer which looks to be slightly earlier than P7326 with no discernible impact on dry matter yield

- Good disease tolerance of both eyespot and fusarium help maintain quality levels and robust standing power ensures an early and reliable harvest
- In addition to excellent results growing P7179 in a conventional system, trials growing the variety under Samco plastic film have been very positive

### **Early maturity**

### P7326







P7326 is now firmly established as a consistent performer over a range of soil types and geographical locations

- P7326 has been the biggest selling variety in the UK for the past three years and benefits from early maturity and robust eyespot and fusarium tolerance
- For those looking for consistent yield and feed quality allied with good standing ability and early maturity, P7326 is the perfect compromise

### LiRoyal







LiRoyal remains a leading variety in the early to mid maturity sector and is a truly versatile hybrid being suitable for forage, energy and grain production

- Maturity is within the FAO 180 range and therefore suitable for growing across the vast majority of the UK maize growing area
- LiRoyal offers the perfect balance of yield, quality and maturity to suit a wide range of applications
- Capable of producing over 18 tonnes of dry matter and well in excess of 6 tonnes of starch per hectare, LiRoyal is the ideal choice for high performing livestock systems or as the early variety in a balanced energy maize portfolio

### **Foxtrot**





Introduced in 2023
Foxtrot offers an outstanding combination of yield and quality making it the perfect variety for use in high yielding livestock systems

- Class leading figures for starch yield, ME, and cell wall digestibility make Foxtrot the variety of choice for those looking to maximise returns from feeding maize based forage rations
- Foxtrot has been well received by growers in 2023 and as such will remain a leading hybrid in the early to mid maturity sector in 2024

RGT Bluefoxx was certainly a very impressive crop with large fully mature cobs and fresh weight yield above expectations. I will certainly be growing RGT Bluefoxx again in 2024.

Will Brice, Suffolk



## **Medium maturity**

### P7034









P7034 has firmly established itself as a leading mid maturity hybrid in both forage and AD situations

- Utilising high yielding "Dent" genetics in an earlier to harvest hybrid enables the variety to be grown in all but the most marginal of sites
- P7034 is a very robust plant type with exceptional eyespot and fusarium tolerance which also makes it suitable for grain maize production
- The genetic make up of P7034 makes it ideal for those growers looking to feed maize soon after ensiling without compromising starch availability

### **RGT Bluefoxx**

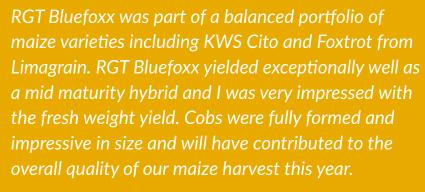




RGT Bluefoxx is a new variety from the RAGT stable featuring the perfect balance of yield and maturity

- Suitable for both forage and energy maize applications Bluefoxx has been very well received by growers in 2023 and is well placed to increase its market share in 2024
- Good disease resistance coupled with excellent standing ability make Bluefoxx a reliable performer in all sectors
- A solid performer at a competitive price point





Mike Capsey, Lyne Farm, Capel, Surrey



## **Medium maturity**

### LG31205







LG31205 is a variety from Limagrain suitable for forage, grain and energy sectors and remains the product choice for growers looking to combine high yields with a relatively early harvest date

- One of the highest dry matter yields in Limagrain and NIAB trials combined with exceptionally high starch, ME and cell wall digestibility figures
- Maturity is within the FAO 190 200 range making LG31205 suitable for growing on favourable sites with good soils
- Being a single cross hybrid ensures reliable and consistent performance and LG31205 has all the qualities to satisfy the most demanding of growers

### **Later maturity**

### ES Blackjack







Blackjack was introduced to the market last year from the same breeder as ES Palladium

- Blackjack has a similar dry matter yield to its sister variety but is slightly earlier to mature
- As well as exceptional dry matter yields Blackjack boasts high levels of starch, ME and cell wall digestibility, making it equally suitable for forage or energy applications
- Blackjack has also demonstrated exceptional yield capability when grown under plastic film with growers claiming best ever results with this variety in harvest 2023
- Robust standing power completes an impressive set of characteristics for this newcomer to the maize market



# Later maturity

### **ES Palladium**







ES Palladium has entered 2024 NIAB/BSPB descriptive list as the highest yielding maize hybrid currently available

- ES Palladium is a large impressive hybrid with the highest dry matter yield currently available and is suitable for both the forage and energy markets
- With high levels of starch, ME, cell wall digestibilty and impressive standing power, Palladium offers an unbeatable combination for those looking to maximise yield and quality
- Cob set is uniform on a very robust stem which gives exceptional standing power and plant stability especially on exposed sites
- Capable of producing over 20 tonnes per hectare of dry matter yield on favourable sites makes ES Palladium the ideal variety for those looking to maximise yield potential

### P7948









P7948 is another versatile hybrid from Pioneer which is suitable for a number of different end user markets

- P7948 is a mid to late maturity hybrid offering exceptional yield and quality
- Good standing power is a major benefit for the grain maize market where P7948 has proved itself to have one of the highest grain yields of any variety grown in the UK
- The energy maize market is also ideally suited to P7948 where the combination of consistently reliable maturity and high dry matter yield will appeal to those growing maize on more favourable sites







#### Agrovista UK Limited

Rutherford House Nottingham Science & Technology Park University Boulevard Nottingham NG7 2PZ

**T:** 0115 939 0202

E: enquiries@agrovista.co.uk



Speak to your local Agrovista agronomist about our market-leading deferred payment scheme for maize seed