Cereals

Spring Barley Varieties

Sanette Summit x Yard

- · Very high yields treated and untreated, large grain
- Average straw length with good resistance to brackling
- Very good all round disease resistance especially to mildew and Rhynchosporium
- Later to ripen

Propino Quench x NFC Tipple

- · High yields, treated and untreated
- Similar in height to Optic and combines good lodging resistance with very good brackling resistance
- Good resistance to foliar disease, also combines good resistance to Ramularia with very good green leaf retention
- Intermediate/Late maturing variety with big, bold grain

SY Taberna Quench x Tophouse

- · Very high treated and untreated yields
- Good disease resistance
- Very high straw yields
- Early to ripen





Overture Concerto x Quench

- Very high treated and untreated yields
- Straw of medium length and quite good standing power. Quite good resistance to brackling and average resistance to necking
- Large grain with low specific weight
- Good resistance to Rhynchosporium and mildew

Kelim NFC405-91 x Quench

- · High treated yield and moderate untreated yields
- Very good resistance to mildew, average to Rhynchosporium and quite good to Ramularia
- Medium length straw with very high straw yields. Quite good standing power and average resistance to necking and brackling
- · Large grain with average specific weight

KWS Irina Conchita x Ouench

- High yields treated and average yield untreated
- Short straw with quite good standing power
- Good resistance to mildew and ramularia, poor resistance to rhynchosporium
- Intermediate to ripen with average / good resistance to brackling

RGT Planet Tamtam x Concerto

- Equal highest yielding variety in the 2016 AFBI Recommended list
- Good resistance to mildew and ramularia, average resistance to rhynchosporium and nett blotch
- Intermediate to ripen with average / good resistance to brackling
- · Large grain with good specific weight

Spring Oat Varieties

Aspen

- Highest yielding variety on N.I. list (117%)
- · Good specific weight and kernel content
- Early to ripen
- Good resistance to mildew and crown rust

Canyon 99/126 x Loch1177

- · High treated and very high untreated yields
- Very large grain with average specific weight
- Early to ripen
- Good resistance to mildew and quite good resistance to Crown Rust
- Very long straw with good standing power but poor resistance to brackling



Spring Wheat

Ashby

- · Highest yielding autumn sown alternative wheat
- · Can be sown from November right through to mid-April
- Stiff variety with average mildew resistance
- Good resistance to both Yellow and Brown Rust



Granary

- Around 8% higher yielding than Ashby with higher specific weight
- Generally good disease resistance to mildew, Yellow Rust, Brown Rust and Septoria Tritici



KWS Alderon

- Very high yields treated and good yields untreated
- Short straw with good standing power
- Good resistance to Septoria and average resistance to mildew
- Early to ripen



Winter Wheat

JB Diego

- · High yielding, Group 4 winter wheat
- Consistent performance with a stiff straw
- Excellent Yellow Rust resistance and outstanding specific weight

Grafton

- All the characteristics needed for early wheat drilling
- Very slow to develop, short and stiff with excellent Eyespot resistance
- Early to ripen with good disease resistance except to Brown Rust

Reflection

- Highest yielding variety on N.I. list
- · Short and very stiff strawed
- Early to mature with good grain quality
- Good all round disease



Costello

- High treated yields and best untreated yields on list
- Very stiff straw, shorter than JB Diego
- Excellent grain quality with very high specific weight
- Intermediate to ripen

Winter Oats

Mascani

- A winter hardy oat with short stiff straw
- Average resistance to both mildew and Crown Rust
- Suitable for most end uses



Winter Barley

KWS Cassia

- One of the highest yielding 2 row feed varieties
- Excellent specific weight
- Stiff straw, similar length to Saffron
- Average disease resistance to mildew and Rhynchosporium

Glacier

- A yield to challenge six row varieties
- Large grain with average specific weight
- Quite good resistance to Rhynchosporium, extra cover required for mildew
- Straw average length, quite good standing power

KWS Tower

- · Average disease and stiff straw, very high treated yield
- Grain is bold and bright with average specific weight and low screenings
- Produces an abundance of good ears which help ensure good grain
- Ability to recover from thin or gappy stands, later drilling or poor establishment

KWS Infinity

- High treated yields with average untreated yields
- Medium length straw with good standing ability
- Intermediate to mature with large grain
- Quite good resistance to Rhyncosporium, average to mildew

Bazooka (6 Row)

- · Highest treated yields of any variety in trial
- Stiff straw, taller than volume
- Very good resistance to rhyncosporium and yellow rust
- Early to ripen

Volume (6 Row)

- Very high yielding 6 row hybrid feed barley
- Excellent treated and untreated yields
- Good agronomic profile, good straw length and early maturity
- Good resistance to Rhynchosporium and average resistance to mildew





23

22

Cereals

Why Triticale?

Triticale is a cross between wheat and rye and offers a number of advantages over conventional cereals. It has been bred to combine the higher yield of wheat with the improved disease resistance of rye.

- Lower inputs
- Excellent wholecrop results
- Use as a replacement for wheat in marginal fields
- Some resistance to rabbit attack
- · Can be used in mixtures with white lupins
- High grain quality
- · Improved disease resistance
- Suitable for pig rations
- Drought tolerance
- Cover/feed ingredient in game mixtures

Triticale For Wholecrop

Many farmers are now recognising the benefits of Triticale for wholecrop. Wholecrop Triticale can be fed to both dairy and beef cattle with excellent results. A recent trial in Holland showed that wholecrop Triticale fed equal to wholecrop maize silage with no difference in either intake or lactational performance.

	Triticale	Maize
Forage Intake	10.7	10.4
Total DM (KG)	20.3	20.0
MJ	126	133
Milk Yields KGS	31.2	30.8
Fat G/KG	46.4	46.8
Protein G/KG	33.1	33.7

Spring Triticale

Nagano

A new high yielding variety from Danko of Poland. Early to ripen with good disease resistance especially to mildew and stem base diseases. Good lodging and sprouting resistance. Nagano is a semi dwarf variety making it ideal for local conditions.

Forage Rye

Humbolt

Humbolt was purpose bred to produce an early bite, with growth that can be up to three weeks before Italian ryegrass. Humbolt's excellent tillering capacity and early vegetative growth ensures maximum intakes and palatability.



Winter Triticale

Amarillo

This stiff strawed variety has very high yields with the flexiblity of a wide sowing window. Early to ripen with better resistance to mildew. Has performed well over a range of conditions in Northern Ireland.

Forage Crops

Formula One - Wholecrop Mixtures

- Combine the high starch energy of cereals with the high protein of a legume crop
- Reduce concentrate requirement to minimum for beef finishing
- Reduced Nitrogen application

- Enable direct cutting (remove the need to wilt protein crops)
- Increase total DM yields (from a spring crop)
- Increase overall protein of forage

Monaco

- A mixture of Logo Spring Triticale and Spring Lupins
- Yields in excess of 30% more than traditional barley and pea mixtures
- Expect protein contents between 11 and 15% approximately 50% more than a straight cereal wholecrop

Silverstone

- The standard mixture for many years but now with a higher level of peas to increase protein content
- The barley variety used has been chosen because of its high grain and straw yield
- Suitable for a wide range of soil types

Shanghai

- Spring Triticale in blend with peas gives a forage crop with high DM yields and higher protein levels that a straight wholecrop cereal does not
- Triticale, whilst not a complete break, does show a greater tolerance to take-all than wheat

Suzuka

- Spring Wheat in a blend with combining peas will enable the crop to be cut earlier and at a higher DM than San Marino
- Peas will also fix N from the air and leave residual N for the following crop

Catalunya

- A new mixture to take advantage of the high yielding vetch Berninova in combination with Spring Oats
- This gives a very dense mixture with a final protein similar to a pea mixture

San Marino

- · A mix of Spring Wheat and Spring Lupins
- Similar in design to Monaco mix but with a lower yield potential
- Must be placed in the rotation where there is no risk of take-all
- Lupins have a higher protein than peas which will lead to a higher quality feed

Hockenheim

- Oats and peas combined to give a forage which will have similar performance to our Silverstone mixture
- This mixture is often used where a breakcrop is required in a cereal rotation
- Oats, often considered the Cinderella of wholecrops, have given equal performance on farm

Sao Paulo

- Combines Spring Triticale and Berninova spring vetch as an alternative to lupins and peas
- Particularly suitable for heavy land where other legumes might struggle

Forage Crops

Cereals

Cereals for wholecrop are now an established method of producing winter feed for livestock that is both productive, gives many animal benefits and is cost effective to produce. A wide range of crops are suitable and choice will depend on individual farm plans.

Crop	Grain Yield	Straw Yield	Inputs	Energy Yield Per Hect	Break Crop
Winter Wheat	****	***	****	***	NO
Winter Barley	***	***	****	***	NO
Winter Oats	***	***	***	***	YES
Winter Triticale	***	****	***	***	NO
Spring Wheat	***	***	***	***	NO
Spring Barley	***	***	***	***	NO
Spring Oats	***	***	***	***	YES
Spring Triticale	***	***	**	***	NO

Choice of variety of cereal type can have an equally important bearing with yield, disease resistance, protein content and place in rotation all being factors which will have an effect on both the quality and yield of the final forage.

Why Feed Wholecrop Cereals

- Reduce cost
- Improve milk quality (protein and fat) and yield
- Improve rumen function
- Very flexible
- Total starch and sugars can be increased in diet
- Maintain cow condition
- To buffer autumn and spring grass
- Improved liveweight gain
- All stock
- Lower acid levels when compared to grass and maize silage

Crop	Units N Per Acre	Fresh Weight T/Acre	DM T/Acre	ME/Kg/DM	Total ME Per Acre	Total ME Per Unit of N
Grass 3 Cut	210	20	4	11.5	46000	219
Winter Wheat	130	14	5.6	11.5	62720	482
Maize	180	20	6	11.5	69000	383
Winter Triticale	80	16	5.6	11	61600	770
Monaco	60	15	3.75	11	41250	687*

^{*}Monaco is a mix of Logo Spring Triticale and Lupins and should return 34-40 units N per acre.

Hybrid Rye

KWS PROGAS

* Very high DM Yields

- * Gas yields same as maize 200 m3/t FW
- * POLLENPLUS® for maximum pollen production
- * 100% hybrid seed no contamination of conventional rye

KWS Progas is a new variety and a step forward in biomass production for NI growers. A perfect combination of thick stems, plant density and yield.

Best yields with KWS Progas are achieved through early drilling in late September and harvesting when the crop reaches 'cheesy dough' stage of 35–40% dry matter.

KWS Progas has very good straw strength and thickness with good standing ability though a prudent PGR programme is advised. With good tolerance to powdery mildew KWS Progas does have a weakness to Brown Rust so a robust fungicide programme is advisable to keep the variety disease free and retain green leaf area.

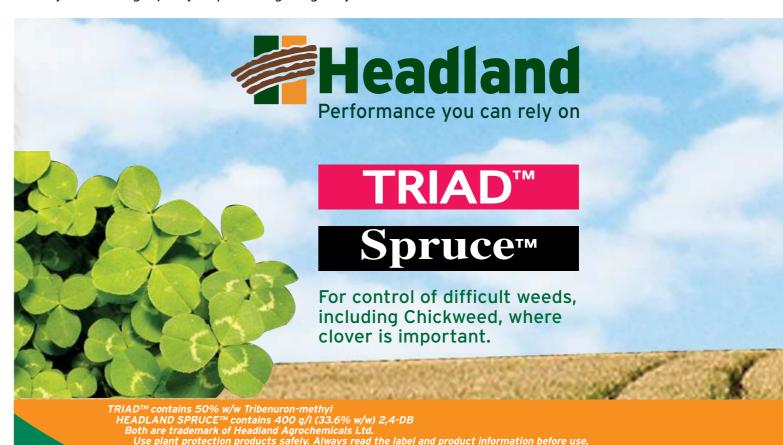


POLLENPLUS® from KWS

Unlike wheat or barley, rye is a cross pollinating species which means it can be more susceptible to poor flowering and pollinating leading to lower grain yields and in some cases high incidence of ergot. Breeders have tried to overcome this problem by using an additional variety as a pollinator with the variety purchased.

KWS has found a solution to this by introducing a gene into all their hybrids that increases the formation of pollen, ensuring good quality flowering and pollination of grain sites.

As a result, grain yields are more consistent from season to season helping ensure some of the highest total biomass yields and high quality crops with a good grain yield.



www.headland-ag.co.uk