

NEW

KWS Zyatt

- ✓ **2nd Highest Untreated Yields on AHDB Recommended List**
- ✓ **Dual Purpose Variety**
- ✓ **Performs well as a 2nd Wheat**
- ✓ **Early maturity**

KWS Zyatt is an exciting, new Group 1 winter wheat with full milling approval with features suited to the organic sector.

KWS ZYATT has the 2nd highest untreated yield of any variety across group 1, 2, 3 and 4s on the AHDB recommended list whilst offering growers the potential to earn a milling premium should it meet the specification required by the mills.

KWS Zyatts untreated yields of 91% are only 1% behind new feed variety Dunston, but significantly ahead of Skyfalls 82%. It is a variety which has been given full NABIM approval based on its high grain quality,

including high protein levels of 11.9% without fertilizer, a high specific weight of 77.7kg/hl and an acceptable hagberg falling number of 273.

However, if you are not looking to grow for the milling market, with its high untreated yields KWS Zyatt should still be considered for feed. KWS Zyatt is short and stiff with excellent standing but due to its height we would recommend using only on your cleaner fields.

It is a variety that is suited to all soil types and performs consistently across all areas of the UK. The fact KWS Zyatt prefers the later drilling slot is also of benefit to the organic grower, allowing you to create a stale seed bed and flush out any potential competition before drilling.



Picture taken at our organic trials in Lincolnshire

With no new group 1 milling varieties in the pipeline for next year, KWS Zyatt is likely to become an established variety like Skyfall and Crusoe in the conventional sector and with its high untreated yields and dual purpose nature, it is likely to become a variety which will stick around in the organic sector also.

Variety	Untreated Yield	Height	Potential Protein Content (with no treatment)	Specific Weight	Hagberg Falling Number
KWS ZYATT	91	84	11.9%	77.7	273
Skyfall	82	82	11.9%	77.9	291
Crusoe	77	81	12.5%	77.3	262

Data from AHDB 2017/2018 Recommended list

Time for a New Approach to Varieties?

Due to our work with organic plant breeders from the continent, I was recently asked to speak at the Annual ORC Producers Conference in Bristol and discuss if organically bred varieties have a place in the UK organic market. Each year, many flour mills are seeing a decline in the quality of organic wheat with growers struggling to meet the milling requirements, mainly based around protein. There is also concern from a leading organic retailer regarding the amount of imports within the organic supply chain and how can we all as an industry change this. There is a clear need for change in the organic market to ensure we meet the demand whilst improving the current quality of our grains.

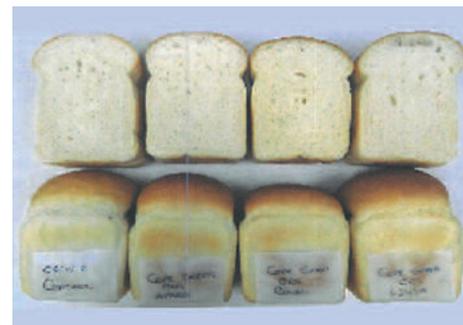
Through attending Germany's Biofach exhibition we met a number of esteemed organic plant breeders from Germany, France, Austria and Switzerland, all producing varieties suited to organic growing. Due to a lack of organic trials within the UK we decided to put these into AGRILS National Trials programme and look at the untreated results. As we first expected the yields were down by 10-25% compared to conventional bred varieties in the UK. However, the quality from these varieties was outstanding. The trials were only untreated and we therefore felt it was important to put these varieties into a true organic trial. After asking a few growers to conduct the trials and having little luck, we decided to rent our own 13acre field, convert this to organic and place the trials here including winter wheats, barley, oats, spelt with varieties coming from UK conventional breeders and organic plant breeders.

At the time of writing we are still waiting for the combine to roll before we see the yield and sample data. However what is clear is the difference between breeding. Those varieties which have been bred for the organic market are much taller, seem to smother out the competition well and have an extremely long neck between the ear and flag leaf. Of course if yields are much lower than conventional types, a premium needs to be paid to cover the lesser yield, but could an increase in the quality the mills receive encourage the millers to pay this premium? Another thing the mills need to consider is protein the be all and end all? We are informed by all of the organic breeders that their varieties do not need to be high in protein to bake high quality bread, that they are designed to mill even at lower levels of protein. Only time will tell, but we need to be doing something to address the supply and quality issue and we hope you can see Cope Seeds & Grain are truly committed to the organic movement and reinvesting back into the sector we are so passionate about.

End User Analysis

- The Organic Wheats had high bushel weights which may explain why the dough was so bright and white.
- Overall the best result was the Organic Wiwa, although lower protein out of the samples this had the most oven spring.
- The samples of Ataro and Wiwa performed better than our English types.

Leading organic Miller



Entry No.	Entry Name	Seeding Rate	Specific Weight (kg/hl)	Protein %	Hagberg HFN
			24/08/2016	%	HFN
1	Crusoe	325	78.8	14.36	321
2	Skyfall	325	77.4	13.80	391
6	Wiwa	325	80.5	16.41	426
7	Ataro	325	79.5	15.90	408
8	Roderik	325	82.3	16.52	395
9	Govelino	325	80.4	17.40	399
10	SG-S1684-13	325	79.3	13.58	138
11	SG-S1825,14	325	76.8	14.18	400
12	SG-S1228-14	325	78.5	14.33	392
13	Hendrix	325	80.3	14.32	384
14	Skerzzo	325	80.7	15.94	251
16	Soisson	325	80.4	14.48	350
17	Cordiale	325	77.3	14.48	382

Ehogold Winter Wheat

After visiting plant breeders Edelhoff in Austria last year, we were so impressed with their breeding facilities and their desire to breed both for the organic and conventional sector, which was unique, with breeders choosing to go one way or the other. With this in mind, we hope we

have found a breeder who may help bridge that yield gap, which we noted from our AGRILS trials, between organically bred and conventionally bred material. The variety which stood out to us was Ehogold, it was tall but stiff, clean, early to mature and produced excellent quality milling wheat.

So impressed with what we saw, we took samples and asked the UK mills for their opinion. Every single mill came back with glowing comments and wanted to know how quickly we could get them some! But of course this process takes time and we have our first seed crop in the ground for this harvest with Pollybell Organic Farm, Epworth. Seed will be limited this year so we advise speaking to us early. Further trials results will be available from our trials at harvest should you want to know how it performed in the UK.



Organic Trials in Lincolnshire showing Ehogold on the right and Costello on the left



Seed crop of Ehogold being grown at Pollybell Farms, Doncaster

Bactoboost Seed Treatment

It was at our visit to Biofach in 2016 where we met the team from Yeditepe University in Turkey who were promoting their Bactogen range of organic crop production products. As seed producers, the product that caught our eye was Bactoboost, an organic seed treatment, something we had been looking many years for.

We have included bactoboost in our trials as well as letting some go out onto farm last Autumn for evaluation. What we noticed from our own trials was the improvement in the root structure. The roots of the seeds which were treated with Bactoboost appear to be longer and denser. The treated seed also established quicker and was a darker green in colour. We will see if the treatment has any affect on yield and quality of sample and report our findings as soon as they are available.

Bactoboost is a microbial fertilizer containing natural forms of *Bacillus subtilis*, *Bacillus megaterium* and *Lactococcus spp.* isolates.

It promotes nutrient-intake and enables plants to fix free nitrogen in the atmosphere. It enhances tillering and root formation and development by promoting natural organic acids, amino acids, auxins and cytokines. It improves seed germination, rooting, early plant growth as well as promoting leaf and stem development in following stages which in turn increases product yield.

Plants remain strong against environmental stress conditions as well as increasing crop quality and yield. BACTOBOOST breaks down and removes secondary metabolites and harmful compounds impacting on the plants by helping to destroy diseases and pathogens forming in the root zone.

We look forward to seeing the results and if this product does what it says on the tin!

Organic Trials - Bactoboost Wednesday 21st December 2016

Revelation

Nelson

Costello

Bennington

Graham



Winter Beans

BUMBLE Organic Winter Beans:

Bumble has the same yield as Tundra. It is an early maturing variety, with a slightly larger seed size than Wizard and Tundra. Bumble is slightly taller and has moderate standing ability.



TUNDRA Organic Winter Beans:

Tundra has already taken a reasonable share of the market and, with a yield improvement of around 7% over Wizard, it represents a decent step forward. It has identical straw characteristics to Wizard i.e. short, stiff and early.



Variety / type	Pale hilum	
	Bumble P2	Tundra R
UK Agent see appendix	Sen	LUK
Yield as % Control (4.89/ha) 5 year mean	104	104
Agronomic Characters		
Flower colour (C=coloured)	C	C
Earliness of ripening	8	8
Shortness of straw	7	8
Standing ability at harvest	6	7
Seed characters		
Thousand seed weight (g)(@15%mc)	697	646
Protein content (%dry)	29.7	26.5
Year first listed	2016	2014

Winter Oats

EAGLE Organic Winter Oats:

NEW VARIETY*

The new HIGHER yielding winter oat variety that DOESN'T compromise the QUALITY. EAGLE is a candidate for the new 2018 - 2019 AHDB Recommended List following 4 years of UK Official Trials. Bred by Plant Breeder Edelhof in Austria, a company with an excellent pedigree of producing early maturing, disease resistant, high yielding cereal varieties, particularly suitable for the organic sector.



EAGLE produces grain quality with excellent Kernel Content and Specific Weight and comes to harvest EARLIER than any other winter oat available. For growers who have a requirement for oat straw EAGLE is also taller than other varieties.

MASCANI Organic Winter oats:

Mascani is currently the most widely grown variety in the UK, mainly due to wide end market acceptance and consistent performance on-farm. Will remain a popular variety in 2017 but having been first Listed in the UK in 2004 it is expected that its market share will be challenged by new, higher yielding varieties with similar grain quality, such as Eagle.



We Aim To Offer The Broadest Choice of Winter Wheat Varieties

COSTELLO Organic Winter Wheat:



Costello has stiff straw and a robust all-round disease package. The main attribute that sets Costello apart is that it has the highest specific weight of any wheat on the List - including all the breadmaking types. Costello also has the highest Hagberg of all the feed varieties, which suggests it should maintain its quality, even in a wet harvest year.

COUGAR Organic Winter Wheat:



Although no longer on the AHDB Recommended List, Cougar continues to be a popular choice amongst organic growers. It has an extremely high untreated yield, which is down to its high resistance to disease (it held the highest score on the recommended list for Septoria before it was removed), but it can be susceptible to eyespot. Orange Blossom Midge resistant.

EVOLUTION Organic Winter Wheat:



This variety was first available for 2014, when it offered much improved disease ratings over the established top yielders. It still has a decent yield potential and is relatively safe to grow with an 8 for yellow rust, an 8 for brown rust and a 5.5 for septoria.

GRAHAM Organic Winter Wheat: NEW VARIETY*



Graham has one of the best resistance ratings to septoria tritici on the List (rated 6.7) - a point that will be popular throughout the UK but particularly so in the western region. It also performs well in the east, though does not suit the northern region. It has good grain quality, stiff straw and, with relatively slow development, it could be a very useful option for relatively early drilling. It is also one of the earliest maturing feed varieties, which also adds to the appeal.



NELSON Organic Winter Wheat:



- Dual purpose – suitable for bread making and feed
- Tall, Stiff & Extremely Winter Hardy
- Superb grain quality with extremely high bushel weights

Nelson Winter Wheat is a German E-Quality Milling variety (Best rating available).

Nelson's parentage is Solitar x Cubus x Turkis. Nelson produces excellent yields and grain quality. It has proven in National Trials covering the length and breadth of the UK to have the best Septoria resistance available. Nelson has a large flag leaf that keeps its green retention well. Nelson has tall stiff straw, making it an excellent option for organic farmers. The specific weight is usually at the highest end with many samples over the 80.0 kg/hl with minimal screenings. A very safe, secure and potential premium earning variety. Well proven as an adaptable organic winter wheat.

REVELATION Organic Winter Wheat:



REVELATION is now one of the favourite varieties of the organic farmer. It has stiff straw, excellent eyespot resistance and is relatively slow to develop - making it useful for the early drilling situation. It has excellent rust disease resistance (9 and 8) and is not susceptible to any of the major diseases. Yields have consistently been at the highest levels and reflect its outstanding disease profile. Seed grower Matt Radford is extremely happy with his Revelation stating *'Revelation over 4 years of varying growing conditions is always 1st or 2nd in yield on our farm. It is an extremely reliable variety.'*

ESTORIA Organic Winter Barley: NEW VARIETY*

For those farmers looking to try an improved Cassia type, with higher yields, excellent grain quality and plenty of straw, they may want to consider Estoria Winter Barley, pictured here in Cambridge.

ESTORIA is an early maturing variety and extremely disease tolerant which comes as no surprise as it is from the same breeding programme in Austria as newly introduced and extremely popular spring barley, Evelina.



The grain quality of ESTORIA is outstanding with Specific Weights similar to or above Cassia which produces the highest specific weights of any winter barley on the AHDB List. ESTORIA produces samples with very low crude fibre content, very low screenings and high nutritional value. ESTORIA has outyielded Cassia in Official Trials in Austria by 5%.

SECURO Organic Winter Triticale:



A welcome addition to the winter triticale market and added to the latest 2017 / 2018 ADHB List. As the name would suggest SECURO is a very safe, reliable and consistent performer. It has excellent standing power, medium maturity and produces grain samples with high specific weight and the HIGHEST Protein levels of the varieties on the AHDB Winter Triticale List. It is also the tallest of the varieties available but with its excellent standing is probably the most competitive variety available to compete with weeds, especially blackgrass and even charlock as you can see from the picture within our organic trials. The triticale outperformed every other species in terms of weed suppression.



GRAIN MARKET

I think for most, it's been a good year with most growers appearing to be pleased with prices, especially in comparison to their conventional neighbours, with many saying 'shhh we don't want them to know'.

The 'normal' premiums for organic over conventional grain went out of the window for 2016 harvest and we predict these historical premiums to remain there, with organic prices remaining fairly strong for harvest 2017. At the time of writing new crop feed wheat is worth circa £240 per tonne ex farm and feed barley similar. Feed beans fetched a heavy premium this year due to the lack of supply, with prices reaching £375 per tonne ex farm. However feed mills did end up switching into alternatives to guarantee supply and as a result beans became more difficult to sell at the end of the season. We predict bean prices will still remain strong in comparison to previous years, but whether they will reach the heights achieved this year will remain to be seen. Milling wheat and milling oats will also be in demand, with healthy premiums on offer.

Spelt has been a difficult market this year with many end users at home and overseas 'stuffed'. As usual Spelt is a cyclical commodity and we are currently experiencing the lows and depending on this harvest it could take a couple of seasons for the balance to rectify itself.

With uncertainties surrounding Brexit and the current weakness in sterling, domestic organic grain is likely to benefit with imports appearing expensive. This paired with increased global demand and competition from America for organics from Eastern Europe, will keep import prices high.

As long as Mrs May can remain from running through fields of wheat and keep our economy on track, it should be another positive year for UK organic prices.

If you are interested in grain prices and potential outlets please call Gemma on 01529 421081 or email gemma@copeseeds.co.uk



ORGANIC MOBILE GRAIN CLEANER NOW AVAILABLE

Through a joint venture, we are proud to offer an organic mobile grain cleaning facility with colour sorter. The mobile cleaner is fully certified for organic use and is able to offer solutions to a multitude of grain problems you may face on farm. By being able to offer a mobile solution we are cutting back on extra haulage to grain stores for cleaning and solving the issue on farm. Another benefit to cleaning your grain on farm is the waste can be left on farm to be utilised as animal feed.

The vehicle has a large 4 screen rotary cleaner at the back which is capable of cleaning wheat at 50-60 tonnes per hour. It is capable of doing the following tasks:

- ✔ **Debugging**
- ✔ **Removal of weed seeds**
- ✔ **Lifting specific weights**
- ✔ **Removal of dust and straw**

With the added benefit of the colour sorter, the following can also be removed:

- **Ergot**
- **Rat Droppings**
- **Opposites eg: Barley from Wheat, Oats from wheat etc**

This is the largest machine available on a mobile on the market and offers a solution to many problems we see on a regular basis.

**If you are interested please call or email Gemma with your requirements
01529 421081
gemma@copeseeds.co.uk**



Interested in Earning A Premium? Why Not Consider being a Seed Grower?

We are looking to increase our seed acreages and to do this we need more growers. We pay competitive premiums and work hard at building long lasting relationships with our growers.

If you would be interested in knowing more, please get in touch with Gemma or Trevor to discuss. Tel: **01529 421081** Email: **info@copeseeds.co.uk**

HERBAL LEYS

Herbal Leys contain a wide diversity of grass species together with clovers and herbs to produce a well balanced forage that can provide increased levels of minerals and vitamins to grazing livestock.

Due to the deep rooting growth habit of many of these herbs, they are able to make use of nutrients located deep in the soil and if grown for 3-4 years this deep rooting ability should also substantially improve the soil structure and fertility for following crops.

Herbal leys are an excellent provider of a balanced natural forage that will give good animal performance in terms of liveweight gain or milk production. Many of these herbs also contain trace elements that have been shown to have good health benefits for the stock that are grazing on these leys.



Whilst modern trends have been towards simple mixtures containing 3 or 4 varieties of ryegrass plus a couple of varieties of clover, a herbal mixture contains a greatly diverse combination of species, each one contributing in some way to the sward. Whilst these mixtures tend to be more expensive than a conventional ley this is more than offset by the improved performance and health of the animal.

Herbal Leys should ideally be sown after an application of manure, either FYM or after incorporating a green manure. The species used in these mixtures are in the main, small seeded and therefore need to be sown relatively shallow into a well worked seedbed. Once sown. The seed should be rolled immediately after sowing to ensure good seed to soil contact. Ideally, the seed should be sown from March through to September. Due to the speed of establishment of some of these species and thoughts of later sowings should really be postponed until the following spring.

Some of the species included in our herbal mixture:-

■ CHICORY

has good tolerance to drought, acid soils and major pests and has a high mineral content including Zinc, Potassium and Copper.

■ RIBWORT/PLANTAIN

is a deep rooted herb that will withstand drought and higher temperatures, it is high in protein and will tolerate frequent grazing.

■ BURNET

is a deep rooted herb that draws up minerals and trace elements from deep in the soil. Winter hardy and drought tolerant, Burnet is a herb that grows throughout most of the year.

■ SHEEPS PARSLEY

is another very palatable deep rooting herb which not only adds to the forage quality. Lifting minerals from deep into the soil but also acts as a soil improver.

■ YARROW

is a perennial herb which also has a large tap root which burrows deep into the soil to find minerals and trace elements and also acts as a soil improver.

■ SAINFOIN

is drought resistant and high in protein. It is a natural wormer and also because of the tannins in Sainfoin, it helps to reduce bloat when feeding a legume rich diet.

■ LUCERNE

is a protein rich perennial legume with good drought tolerance and full of trace elements.

COPE SEEDS ORGANIC HERBAL MIXTURE (70% ORGANIC)

1.5 kg	ORGANIC SOLID, Tetraploid Hybrid Ryegrass
3.5 kg	ORGANIC MAGICIAN, Tetraploid Intermediate Perennial Ryegrass
1.6 kg	ORGANIC DOLINA, Timothy
1.5 kg	ORGANIC LAURA, Meadow Fescue
0.9 kg	SPARTA, Cocksfoot
0.5 kg	ORGANIC KLONDIKE, White Clover
0.5 kg	MILVUS, Red Clover
0.5 kg	ORGANIC EMELIANA, Lucerne
0.3 kg	Chicory
0.2 kg	Ribwort Plantain
0.1 kg	Yarrow
0.4 kg	Sheeps Parsley
0.5 kg	Burnet
1.0 kg	Sainfoin

13.0 kilos per acre	

LOW GRASS HERBAL MIXTURE (45% ORGANIC**)

1.00 kg	SPARTA, Cocksfoot
1.00 kg	ORGANIC MAGICIAN, Tetraploid Intermediate Perennial Ryegrass
1.25 kg	ORGANIC DOLINA, Timothy
1.25 kg	ORGANIC LAURA, Meadow Fescue
0.50 kg	ORGANIC RAUNIS, Red Clover
0.50 kg	ORGANIC KLONDIKE, White Clover
0.50 kg	Alsike Clover
1.75 kg	Sainfoin
0.35 kg	Birdsfoot Trefoil
0.50 kg	Chicory
0.15 kg	Ribwort Plantain
0.75 kg	Burnet
0.10 kg	Yarrow
0.40 kg	Sheeps Parsley

10.00 kilos per acre	

** The certifying bodies have stated that they will look favourably into giving derogations for diverse mixtures where the organic content is less than 70%.

**For further information of herbal leys
or if you have a special requirement, contact
Simon Travers, our Grass and Small Seeds
Manager on 01529 421081 or
simon@copeseeds.co.uk**

Amigos Update

We are proud to still be working closely with Amigos charity and this year are sponsoring a young man called Bosco.



2017 Kira Trainee group photo

Bosco like in so many rural areas of Uganda, had a tough upbringing but through Amigos is turning his life around, improving his knowledge of farming and learning to look forward rather than in the past. We admire the work done by Amigos and hope one day we can go out to visit.



Bosco is happily working in his garden

LARGEST ORGANIC TRIALS IN THE U.K.

Our organic trials have been a real mixture of emotions. The winter plots are now looking superb and with over 36 different varieties within the trial including varieties from Limagrain, RAGT, KWS, Elsoms, Senova and organic breeders from the continent we are learning much more about each variety and its ability to be grown organically. This was only possible by the hard work of Nikki, Simon and a few others who spent nearly a week rouging out the charlock, so a big thank you to them. Unfortunately the dry spell and heavy weed burden meant our spring trials were a failure this year.

We decided to do these trials to help address the issues faced by a leading organic retailer to help identify certain varieties which will not only benefit the grower but help improve the quality of feed and milling wheats. Unfortunately, since starting the trials to address these issues, we have been left rather unimpressed by this company's willingness to help fund the trials and there is now a question mark over the future of the trials.

However, that aside, we look forward to the plot combine rolling and seeing the data flood through.

HELPING CELEBRATE SLEAFORD'S SEED HERITAGE

We are proud to be sponsoring Sleaford museum's latest exhibition based on Charles Sharpe whose family ran Sharpes Seeds for over 90 years. Sharpes was a big employer in the area and employed Trevor as seeds manager, and Simon, who went straight to Sharpes from school. Sharpes also employed many other people from the local area who still work in the seed industry.



GOOD LUCK LOUISE

We were sad to say goodbye to Louise in April who left to work for an Agricultural Consultancy company closer to her home, but we wish her the best of luck in her future and thank her for the time spent with us.

Contact Us

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