

— AUTUMN 2021 / SPRING 2022

Annual Organic Brochure



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Dear Grower

Each year we try to make steps forward as a business and this year is no exception. As of April 2021, I have bought the majority stake from my father and previous owner, Trevor Cope who founded the business in 2002.

Cope Seeds History

Some of you may be aware of the story, but for those who do not, in 2002, Trevor was made redundant on a Friday afternoon, less than a year into doubling his mortgage and a month before I started university. He sat down with my Mum and friends Dennis and Carol Pell. Dennis, who runs his own seed cleaning business, NB Seeds, suggested to Trevor he considered working for himself. Monday morning came and Trevor Cope Seeds Ltd was created. 19 years on and we are proud to be the Largest Organic Seed Producer in the UK offering the widest choice of species and varieties with a growing organic grass and grain business.

I would like to take this opportunity to thank Trevor, (Trevor at work and Dad at home!) for bringing me into the business, teaching me important values within business and the importance of sharing success. I have thoroughly enjoyed working with Trevor and learnt a lot along the way. Trevor will continue being the Chairman and act as a wise owl to the company, continuing to bring his many years of invaluable experience to the business.

Aims

Moving forward, these are my aims for Cope Seeds & Grain to:

- Remain committed and passionate to agriculture with a strong customer-focus and personal approach.
- Remain pioneering in our offering and to continue being the go-to business for all things organic and regenerative.
- Continue investing in national and private trials, to ensure we find new lines which benefit organic growers and end-users.
- Listen, empathise and adapt to grower and end-user feedback.
- Strive to do our best in advising and offering you competitive prices for your seed and grain.

The Team

Duncan and Tom have been working at Cope Seeds for over a year now and we are so pleased with how they have settled in and become part of the team.

Duncan's work ethic is incredible, but his knowledge and customer care are exemplary. If you would like a visit or just a

phone call to discuss grass and small seeds, Duncan is ready and willing to oblige.

Tom has been a blessing. He has taken on most of the grain trading from myself which has opened more doors for the business. In the light of Brexit, Tom and I are working hard to create new markets; whilst doing what we can to show the EU that the UK should still be considered for its quality and provenance of organic grains. Tom is extremely innovative and passionate about the organic market. Through his innovation we are offering new and revolutionary contracts such as our soft wheat blends buy-back and our bi-crop bean and wheat buy-back. If you have grain to trade this harvest or are interested in any of our buy back contracts, Tom will be happy to discuss these through with you either by phone or a visit.

Crop Updates

Looking forward to the coming season, we have some interesting new varieties we can offer you. Our soft winter wheat blend, Summit and dual-purpose winter wheat blend, Apex, are new this season, both available with premium potential buy back contracts. We have several winter spelt varieties plus a spring spelt, which has sparked interest from millers. We are also extremely excited, after six years of private and official trials, to be launching our new spring oat variety Merlin which we believe is the perfect variety for organic growers. Merlin also provides high untreated yields whilst still retaining its milling specification.

The Community

We continue to support our local sports teams including Sleaford Bowls Club and Sleaford Elite Gymnastics and have donated to Forage Aid again through our sales of Evelina spring barley.

As always, we wish you a productive harvest and look forward to working with you over the coming season.

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Gemma Clarke
MANAGING DIRECTOR

Nelson Winter Wheat

— INFORMATION

- German E wheat
- High quality and high protein grain
- Premium earning potential
- Strong disease resistance
- Excellent weed suppressant



— ABOUT

A German E Quality milling variety, Nelson has shown itself as a consistent variety which should continue to be considered both under organic and conventional regimes. Nelson has a high untreated yield potential and should be considered both for milling and feed. Nelson produces an excellent quality grain sample with one of the highest specific weights and hagerbergs.

Nelson is a tall variety with a stiff straw and is early to mature. It has high untreated yields and an excellent disease package making it a consistent and reliable performer.

"We've been supplying German E Wheats to the UK market for ten years and Nelson really stands out. We have seen excellent quality results as well as strong disease resistance. Plus, it has shown to help to suppress blackgrass because of its height. Nelson has proven itself over the years to be a consistent and reliable variety capable of achieving organic milling premiums."

Trevor Cope, Chairman

	UNTREATED	UNTREATED	TREATED	UNTREATED	TREATED	UNTREATED	TREATED	TREATED	TREATED
Skyfall	5	73	73.3	89.2	104.1	69	76.7	12.8	247
Crusoe	1	75	76.7	105.7	102	75.6	78.6	13.3	294
Nelson	1	82	88.3	112.8	98.3	76.4	78.3	13	355

*AGRIL Harvest 2019 (Essex)

	MATURITY	UNTREATED CROP HEIGHT	TREATED CROP HEIGHT	UNTREATED YIELD %	TREATED YIELD (T/HA)	UNT SPECIFIC WEIGHT (KG/HL)	TREATED SPECIFIC WEIGHT (KG/HL)	TREATED PROTEIN (%)	TREATED HAGBERG (S)	N OFFTAKE
Skyfall	6	80	74	115	8.67	70	80.7	13.8	365	217
Crusoe	6	80	73	70.3	9.18	65	81	13.7	348	212
Nelson	8	93	88	117.8	8.42	76.5	83.5	14.2	378	201

*AGRIL Harvest 2018

	GREEN LEAF RETENTION (30/6)
Nelson	55%
Skyfall	33.80%
Crusoe	36.30%

— BUY-BACK

Buy-back contracts are available. Please get in touch with Tom Desborough at Cope Seeds for more information, by emailing tom.desborough@copeseeds.co.uk.

KWS Extase Winter Wheat

— INFORMATION

- Highest untreated yield on the AHDB Recommended List
- Highest Septoria Resistance of any variety on the AHDB Recommended List
- Milling Premium Potential



— ABOUT

Offering the highest untreated yield on the whole of the 20/21 AHDB recommended list of 93% of treated controls; KWS Extase is group 2 milling wheat offering not only solid baking performance but also a wealth of agronomic features. It has excellent standing power, early harvesting and a robust disease package allowing for flexibility of management on farm.

With its specific weight of 78.4 kg/hl, a HFN of 297 seconds - the highest score for both characteristics of any Recommended breadmaking wheat- and a milling specification protein of 12.6% make it the outstanding choice in this market group.

Its speed of movement through stem extension is faster than average and closer to that of varieties such as Gallant so growers will want to prioritise it ahead of others when planning spring fertiliser schedules. Care must be taken in planning sowing to make the biggest advantage of earliness. Sowing later maturity crops before earlier ones can nullify an advantage. We would suggest sowing KWS Extase before KWS Siskin. Early maturity is a key characteristic for any milling type, ensuring that grain quality is preserved, especially in a catchy harvest.

"Extase's speed of movement through stem extension is faster than average and closer to that of varieties such as Gallant, so growers will want to prioritise it ahead of others when planning spring fertiliser schedules. Care must be taken in planning sowing to make the biggest advantage of earliness. Sowing later maturity crops before earlier ones can nullify an advantage. Early maturity is a key characteristic for any milling type, ensuring that grain quality is preserved, especially in a catchy harvest."

James Maguire, KWS

RGT Wolverine

— INFORMATION

- Europe's first BYDV resistant wheat
- Very high yielding, even when BYDV is absent
- Consistent performer in all regions
- Good disease resistance
- Excellent straw strength
- Good grain quality

— ABOUT

Europe's first barley yellow dwarf virus (BYDV) resistant wheat is a major breakthrough in European plant breeding. RGT Wolverine is a newly recommended Group 4 feed wheat producing very high yields, whether BYDV is present or not, offering security, ease of management, and peace of mind. Its performance is underpinned by a solid agronomic package and a strong disease resistance profile.

KWS Siskin

— INFORMATION

- Excellent Septoria tritici at 6.5
- Superb physical grain quality
- Vigorous growth habit with wide sowing window

— ABOUT

KWS Siskin is a group 2 variety with good untreated yields and excellent yellow rust resistance. It's so versatile, it can grow anywhere on the farm. Combining high yields, exceptional Hagberg, strong protein (12.7% from milling trials) and its positive ukp status, KWS Siskin opens multiple end-markets for farmers, unlocking premiums for their shed load of grain.

In addition it's consistent across soil types and performs well as both a first and second wheat. KWS Siskin has one of the best Septoria tritici scores of 6.5 on the list and scores high for mildew and yellow rust.

RGT SAKI Winter Wheat

— INFORMATION

- Flexible drilling date and rotational position
- Suitable for light and heavy soils
- Orange blossom midge resistant



Cathy Hooper, RAGT Seeds

— ABOUT

One of the most exciting feed wheats to hit the recommended list recently, RGT Saki is earning itself a place on both conventional AND organic farms across the country, taking 5% of the market during Autumn 2020. Due to its all-round attributes, we predict this market share to grow this coming Autumn.

RGT Saki offers a unique combination of high yields, both treated and untreated, which is underpinned by its exceptional disease resistance scores with the added bonus of RGT Saki being Orange Wheat Blossom Midge resistant.

The variety is a consistent performer across all regions as both a first and second wheat, it also benefits from a wide sowing window.

As a soft variety, RGT Saki offers the potential to earn a soft wheat premium similar to that of KWS Firefly, Elicit and Revelation but with a higher untreated yield potential. RGT Saki's disease resistance scores are exactly the same as our most popular organic Wheat variety Revelation but with an improved Septoria tritici score and a marked untreated yield advantage.

RGT Saki is slightly taller than Revelation but offers good standing power. Like Revelation, it is a later maturing variety and is best drilled from October onwards.

All in all, it's performance in both official and independent untreated trials suggest that RGT Saki will build on its reputation as one of the most reliable wheats available to growers.

"It has looked as good as anything we have seen in terms of disease resistance. Levels of yellow rust in susceptible varieties are now very high, but RAGT Saki has remained incredibly clean across the board.

This includes high-pressure inoculated yellow rust trials in the east and a well-grown trial in Oxfordshire, where yellow rust was firmly established as the main disease at the T2 timing.

Levels of Septoria tritici are relatively low across England due to the dry weather, but it was noticeable in our own untreated second wheat trials at Ickleton, on the Cambridgeshire/Essex border. RGT Saki looks as clean, if not more so, than Extase, which has the highest Septoria tritici rating of a UK fully recommended variety.

The same goes for other trials we have seen, reinforcing last year's observations when late Septoria came in after very wet weather in June.

RGT Saki is a really hard-working variety that delivers. We expect it to prove popular for growers looking to achieve the full potential from their crops, whether they farm conventionally or organically."

Cathy Hooper, technical sales manager, RAGT Seeds



RGT SAKI

NOTHING MESSSES WITH IT.



Grow to expect the best

RGT SAKI

G4 WINTER WHEAT

EXCEPTIONAL DISEASE RESISTANCE AND HIGH YIELDS, WHETHER TREATED OR UNTREATED.

CHARACTERISTICS:

-  Consistent performer across all UK regions
-  Excellent disease resistance
-  One of the highest yielding G4 wheats
-  Good straw strength

RAGT varieties include RGT Skyfall – the UK's most popular Group 1 wheat. RGT Wolverine – Europe's first BYDV resistant wheat. RGT Planet – the most widely grown spring barley in the world. Oil Seed Rape BIPO Royalty Area Collection Clearfield® and hybrid varieties. And with a mixture of over 10 new varieties for 2020 alone, isn't it time you discover seed varieties you can have total confidence in. RAGT – grow to expect the best.



RGT Saki
Recommended List 2020/21

Let's talk **01799 533700** or visit ragtseeds.co.uk

Varieties to watch out for...

KWS Dawsum Winter Wheat



— INFORMATION

- **High yielding**
- **Excellent disease profile**
- **Exceptionally marketable grain**

— ABOUT

KWS Dawsum is the new barn filling wheat onto the UK market. Offering growers the ultimate in flexibility on farm, delivering fantastic yields right across the early mainstream and late sown slots (106%, 114% and 108% in KWS trials sown September, November and January respectively).

Couple these benefits with the excellent disease package, including 6.3 for septoria and 9 for yellow rust plus the exceptionally marketable grain of 80.1 kg/hl and you have a D-awesum variety which will earn itself a place on every farm.

We will have C2 Organic KWS Dawsum next year but if you are interested in the variety for this Autumn, please get in touch with Gemma as we are looking for seed growers of this new and exciting variety.

LG Astronomer

— INFORMATION

- **One of the most complete agronomic packages available on the AHDB RL 2021/22**
- **Soft wheat, with the highest untreated yield (86%), combined with the best group 3 specific weight available (77.8 kg/hl)**
- **Excellent disease profile, with OWBM resistance**



— ABOUT

LG Astronomer stands out with its excellent quality attributes. It has one of the best specific weights on the RL of 77.8 kg/hl, and a good secure HFN of 238 this is very important for a biscuit wheat.

The variety is equally as good as a second wheat or a first wheat, and in Limagrain trials, performs very well in both medium and heavy soil types - which is backed up by the AHDB RL data sets.

"However, despite having the qualities sought by biscuit makers and distillers, LG Astronomer will also strongly appeal to feed growers, as a result of its good agronomics.

LG Astronomer is moderately tall, with stiff straw and OWBM resistance, and a similar maturity of '+1', to KWS Firefly.

Achieving high yields and gaining a premium is always an attractive proposition for growers, as they look to maximise their most profitable crop - and now with the added bonus of on-farm security, LG Astronomer makes for a really attractive package for the coming season," says Ron Granger from plant breeder Limagrain UK.

"The variety is equally as good as a second wheat or a first wheat, and in Limagrain trials, performs very well in both medium and heavy soil types - which is backed up by the AHDB RL data sets."

Ron Granger, Limagrain UK



WRITTEN IN THE STARS



LG ASTRONOMER

WINTER WHEAT

Agronomics and Quality you've been looking for

@LGSeedsUK   

lgseeds.co.uk/lg-astronomer

Winter Wheat Blends



— WHY LOOK AT GROWING BLENDS?

We have launched a pre-mixed range of organic wheat blends range to meet growing interest in this approach.

Blends are nothing new, back in the 1980s there were many 1,000s of tonnes of seed blends being sold and grown in the UK. However, with the pressure on seed plants to get tonnage through in the Autumn, they faded away.

It is believed that growing blends helps to increase yield potential whilst reducing disease pressure and recent research by Dr Kristoffersen's at the Aarhus University helps to verify these claims.

Looking at over 19 years-worth of official Danish data, a 4 way blend was grown each year in official trials as a reference. The results showed the blend reduced Septoria severity by approximately 10% with an increase in yields of 1.4%. In untreated trials, these advantages increased to 17% reduction in Septoria severity and 2.4% increase in yield.

We believe blends should be considered by organic growers and we are now offering two organic wheat blends that have been carefully considered and selected to ensure we can offer you buy back contracts for each. See next page for further details.

Summit

Organic milling soft wheat blend

— ABOUT

This season, we are offering a 2-way soft wheat blend with a milling buy back. The blend will be a later maturing crop with high yield potential and tall straw, perfect for weed suppression. The varieties within the blend are proven organically and together offer some protection against Orange Wheat Blossom Midge.

A buy back for Summit with a premium over organic feed wheat is available.

APEX

Organic dual purpose wheat blend

— ABOUT

Apex combines three of the best wheat varieties for untreated yield potential, Septoria tritici resistance & early maturity. Not only is Apex strong agronomically, the grain quality of this blend is superb with high specific weights, high habergs and potentially levels of protein suitable for milling. This blend is suitable both for feed and milling markets.

A buy back for Apex is available for either feed or milling.

Valerie Winter Barley

— INFORMATION

- 2-row feed barley
- Highest combined disease resistance scores of any variety
- High untreated yield
- High specific weight

— ABOUT

Valerie is an exciting addition to our portfolio, offering high untreated yields, a high specific weight together with a low screenings score. It is an ideal feed barley with a medium length straw and excellent standing power also offering a good all-round disease package.

ENTRY NAME	COMBINED DISEASE RESISTANCE SCORE	SPECIFIC WEIGHT (KG/ HL)	UNTREATED YIELD (%)
Valerie	24	70	83
California	22	68.2	79
KWS Tower	21	67.6	72



Mascani Winter Oats

— INFORMATION

- Milling potential
- Reliable and consistent
- High specific weight and kernel content

"There have been other winter oat varieties added to the Recommended List in the last few years. For various reasons, none of them have suited the end market or been as reliable on farm as Mascani."

Tom Yewbrey, Senova

— ABOUT

Senova's top-selling winter oat variety, Mascani, continues to dominate the market. Against a background of ever-increasing demand for oats and oat-based products, millers are keen to secure supplies of good quality oats for both traditional uses and new innovative markets.

Thanks to its superior grain quality and performance in the mill, Mascani now commands around 75% of winter oat plantings in England and remains the frontrunner for autumn 2021 drillings.

Bred by IBERS, Mascani has reached this market position by being both the miller's favourite and a reliable performer on-farm.

Agronomically, Mascani has a strong disease resistance package including the best mildew score and good straw strength, whilst its early maturity helps with harvest workload planning.

Look out for new variety Cromwell which is coming through the testing system and has given some very promising early results. A Mascani cross, it has both the required grain quality and the agronomic characteristics that indicate success.

ENTRY NAME	STRAW LENGTH (CM)	RESISTANCE TO LODGING (1-9)	MATURITY	MILDEW RESISTANCE (1-9)	CROWN RUST RESISTANCE (1-9)	KERNAL CONTENT	SPECIFIC WEIGHT	SCREENINGS (% THROUGH 2MM)
Mascani	117	6	0	6	5	76.6	53.1	1.8
RGT Lineout	114	6	-1	3	5	73.6	51.9	6.7
RGT Southwark	122	5	-1	3	8	73.3	53.7	6



Spelt is continuing to increase in popularity, both with millers and growers.

We therefore felt it was important to increase our offering of varieties to ensure we had varieties to suit differing situations. We are proud to be offering four varieties for the autumn and importantly an offering for the Spring should we have another wet Autumn causing difficulty sowing.

Convoitise Winter Spelt

NEW

— INFORMATION

- **High untreated yields**
- **High specific weight**
- **Bread making quality**
- **Variety adapted to organic and low input farming**
- **Increasingly used in livestock rations**

— ABOUT

Spelt is an ancient grain which has been around for 7,000 years and harvested for food for over 2,500 years. Its profile has changed very little over this time. The crop is enjoying a revival in popularity in artisan breads and cereals and is increasingly employed as a component in livestock rations.

Convoitise has a strong disease profile, with good resistance to Septoria tritici, yellow rust and mildew. It has good protein content and a high specific weight, with an average to tall height.

VARIETY	YIELD (T/HA)	POWDERY MILDEW (1-9)	SPECIFIC WEIGHT (KG/HL)	HEIGHT (CM)
Convoitise	3.57	5	48.4	130
Zollernspelz	3	4	44.8	128

*Untreated Agrii trials data, 2019

"This is the first year we have grown Convoitise, but although it was our last drilled crop in mid-November it has grown steadily and strongly since, and looks like being a good contender as a second crop in our rotation"

Gerald Osborne, Grower



Zollernspelz Winter Spelt

— INFORMATION

- Modern spelt variety with high yield and traditional flavour
- Stable yields on poor soils
- High standing power and good disease resistance

— ABOUT

Fits particularly for rough and humid locations. Highly recommended for organic farming, Zollernspelz has been a firm favourite for a number of years. Liked by growers and end users.

Woldemar Winter Spelt

— INFORMATION

- Taller than Zollernspelz but with similar maturity
- Good standing ability
- High quality grains

— ABOUT

Woldemar is a popular spelt variety amongst German organic growers. It has a good disease profile and meets millers requirements.

Divimar Winter Spelt

— INFORMATION

- High and stable yield
- Large grain
- Excellent grain quality
- High protein content
- High resistance to lodging

— ABOUT

A mid-early spelt, suitable for organic and conventional farming, Divimar is a medium to tall variety, with a large grain, good disease resistance, and good winter hardiness.

Wirtas Spring Spelt

— INFORMATION

- Exceptional milling quality
- High protein content (14%+), hagberg and specific weight
- Higher nutritional benefit vs winter varieties
- Good all-round disease resistance
- Excellent characteristics gives farmers more flexibility

We are excited to offer for this spring organic Wirtas spelt seed with premium buy-back contracts.

As one of the only (if not the only) spring spelt varieties on the market, Wirtas has exceptional characteristics and gives farmers more flexibility.

Our experience and research has shown an improvement in the quality of Wirtas compared to winter varieties and as such, Wirtas trades at a premium over winter spelts. It is very much like comparing winter wheat with spring wheat where the yields of spring wheat are lower, but the quality stronger. Wirtas will not yield as well as a winter spelt, but when compared to spring wheat, it is comparable in yield and able to

produce good quality which the mills like. The scientist behind Wirtas confirm that spring spelt, like spring wheat, has better quality than the commonly cultivated winter spelt and contains more gluten, protein and minerals such as iron, zinc and copper. The 2019 harvest results from the Organic Research Centre are promising where the crop was relatively disease free and mirrored similar results from previous Agrii trials. Like winter spelt, Wirtas is best grown on less fertile land to prevent possible lodging.

While becoming more popular, spelt is still a niche market and we would advise growers to sign up to a contract whether through us or your preferred trader. If you would like more information, please call Gemma on 01529 421081.

— ABOUT

We are excited to offer for this spring organic Wirtas spelt seed with premium buy-back contracts.

Elego Winter Rye

— INFORMATION

- **High untreated yield potential**
- **Good disease resistance**
- **Early-medium maturity**
- **Competitive to weeds**
- **Dual purpose – feeding and milling**



— ABOUT

Now in its 4th commercial year in the UK, Elego is increasing its popularity both with growers and millers. Elego is a population (Non-Hybrid) variety bred by the Austrian Plant breeder Edeloff, one of the countries most established rye breeders.

Elego is an early to medium maturing variety, equally suited to forage or grain production. It has a high untreated yield potential accompanied by an excellent disease resistance profile. The variety is tolerant of poor harvesting conditions and its stable Hagberg makes it an ideal variety for milling.

Elego is a tall variety with the ability to outcompete weeds which makes it ideal as a cover crop, with sown on its own or in a mixture with vetches.

Elego makes an ideal forage crop as it can be grazed later in the Autumn and earlier in the spring than most grass leys due to its ability to grow in colder soil temperatures than grass.

"Elego is doing a great job this season of smothering out weeds. Again, we grazed the crop quite hard with sheep and it bounced back well. Again, this rye went to both a local miller and a local dairy farmer who is still seeing the benefits of feeding rye."

Mike Stringer, Yorkshire

— WHY GROW TRITICALE?

A cross between Wheat and Rye, its large and deep root system makes Triticale an ideal crop for marginal or drought prone land as it is better able to find moisture and nutrient deeper within the soil.

It is a low input species with excellent all round disease resistance, high in protein and with a good specific weight.

Triticale, being a tall species is able to smother soil borne weeds much better than most other cereal crops and the straw, as well as producing good yields is nutritionally superior to most other grains due to its higher lysine content.

Triticale is less likely to be grazed by Rabbits over the winter and is useful as a crop to be grown in field adjacent to woodland areas. It has many uses including forage production, milling or for AD plants meaning there are more marketing opportunities and is an ideal crop for the livestock farmer.



Agostino Winter Triticale

— INFORMATION

- **Established variety**
- **Consistent yield potential**
- **Good grain quality**

— ABOUT

This year we have the established variety Agostino available as a conventional Untreated option, so derogations will be required.

RGT Beetle Blocker, Oilseed Rape

— INFORMATION

RGT's new high-vigour oilseed rape, RGT Blackmillion, has got off to a strong start at Shimpling Park Farm in Suffolk with grower John Pawsey.



— BUY BACK

We continue to offer contracts for Beetleblocker with attractive premium and a secure demand from the market. If you are interested in knowing more, please contact Tom or Gemma for further information **01529 421081**.

— ABOUT

Beetleblocker is an innovative oilseed rape/ companion crop mixture that possesses natural deterrents to cabbage stem flea beetle, giving the crop a real chance to establish and thrive organically.

The mix consists of new high gross output hybrid oilseed rape, RGT Blackmillion, along with two legumes, fenugreek and berseem clover.

Beetleblocker emits an aniseed like smell that deters the flea beetle and trial data has shown that by the last week in October, there is a 70% decrease in their population. The fenugreek in the mixture offers some nitrogen fixing ability and weed suppression but being susceptible to frost will die off after the winter. Berseem clover will fix atmospheric nitrogen, releasing it to the growing plants whilst at the same time offering a good level of weed suppression. Like the fenugreek, berseem clover is not frost tolerant so will die back leaving the established OSR crop to grow on in the spring.

— TIPS

To give the companion crop elements of the mixture a good chance of getting away early it is best practice to drill 7-10 days earlier than you would for oilseed rape (by the 2nd week of August).

We do recommend putting more than 7-10 packs in the drill at the same time to avoid separation (depending on drill type)

Through further research, oilseed rape does best when nitrogen is readily available to the seedling so it would suit recently natural fertilized fields.

Slug pellets are permitted to be used in organic systems to help control the increased slug populations due to OSR residues.

OSR straw has an increasing demand particularly in the equestrian sector as it is more absorbent leading to better animal welfare.

"Drilling a reasonably small hectare meant that we could spend the time to get the best seedbed we could. Although we have an inter-row hoe I decided to broadcast the seed behind our harrow-comb weeder rather than in rows as I felt that the mix of oilseed rape, berseem clover and fenugreek should do a good job of smothering weeds which they did. Early sowing on 14th August into warm moist seedbed with a firm roll afterwards was key. Although there was some evidence of shot-holing from flea-beetle the rape quickly grew away from it and we don't generally suffer from slugs in an organic rotation. Some reasonable frosts over winter killed the fenugreek and has controlled the berseem clover. Having had no inputs I have been amazed at how great the crop looks and it has been a joy to grow it."

John Pawsey

Tundra Winter Beans

— INFORMATION

- **Market leading variety**
- **Earlier maturity than Vespa**
- **Good winter hardiness**

— ABOUT

The market leading variety Tundra, has been a very consistent variety and has been popular since it was listed.

Tundra is reliable and offers good yield potential, early maturity, stiff straw with good standing, and high protein potential.

Tundra has good winter hardiness and is suitable for end uses such as human consumption, aquaculture and feed markets.

Vespa Winter Beans

— ABOUT

Vespa is Senova's main winter bean variety in the market for this autumn's drillings.

Offering very high yields of 109 and having the joint best standing ability on the list, with a score of 8, Vespa is proof of the progress that has been made in winter bean breeding in the last few years. Now with a 10% yield advantage over Tundra, Vespa was first listed in 2018. In that time, it has met both market and farmer requirements, showing good performance across different growing seasons and conditions.

Vespa also has the bigger seed size and pale hilum favoured by the human consumption market, he adds.

A protein content of 26.1% puts Vespa on a par with other winter bean varieties and makes it suitable for both the export market and for contracts that reward protein.

Senova also has two newcomers on the PGRO Descriptive List, both of which were bred by IBERS Aberystwyth. Vincent is the highest yielding winter bean on the latest list on 110 with extremely large seed, while Norton, which has a yield of 107, is an earlier variety.



"Establishment issues and spring drought were the two challenges for winter beans last year. Despite those, Vespa performed well and opened a yield gap with its competitors"

Mike Stringer, Yorkshire



The Winter Bean creating a real buzz!

With the highest available yields on the PGRO Descriptive List, excellent standing ability and large grain, pale hilum variety Vespa is the perfect choice for your rotation and the feed and export markets.

Winter beans – the perfect fit

- Yield benefit for the following wheat crop
- Low growing cost
- Good break crop gross margin
- Good opportunity to control grass weeds
- Ready markets for feed and export use

Other Senova winter bean varieties:



NOW AVAILABLE

Download the fifth edition of our popular winter bean growers guide at www.senova.uk.com or www.winter-beans.co.uk



Welcome to the Estate Brand of premium grass seed mixtures. This range is named after some of the well-known farming estates in Lincolnshire and the surrounding counties.

Formulated in association with one of Europe's leading grass breeders, this new range brings together some of the top NIAB recommended varieties within each mixture. Focusing on high sugar content and digestibility as well as yield and disease resistance and persistence if applicable. Duncan Hendry, our Grass and Small Seed Specialist and I, have over 80 years of experience combined in the seed industry selling grass seed mixtures which is our main area of expertise.

Whether it is a short term or long term mixture for hay, silage, or grazing, we are confident that there is a mixture to suit. We are also happy to make any unique modifications that you may have.

As well as our new Estate Range we are still able to offer our range of standard organic grass mixtures which many of you have been happy with. Please see our website for the updated brochure for our organic standard mixtures. We are here to help advise and whether you choose from our standard or Estate range, we are sure you will be pleased with both the quality and price.



Simon Travers

GRASS & SMALL SEEDS MANAGER

Aubourn 2 Year Short Term Ley (70% Organic)

4.50 kg	ORGANIC Shakira Diploid Italian Ryegrass
4.60 kg	ORGANIC Hunter Tetraploid Italian Ryegrass
3.90 kg	Cazzano Tetraploid Italian Ryegrass

13.0 kilos per acre

Belton 2 Year Short Term Red Clover Ley (70% Organic)

4.50 kg	ORGANIC Shakira Diploid Italian Ryegrass
4.25 kg	ORGANIC Hunter Tetraploid Italian Ryegrass
0.75 kg	Cazzano Tetraploid Italian Ryegrass
3.00 kg	Amos Red Clover

12.5 kilos per acre

— ABOUT

This grass mixture is formulated to provide large cuts of protein rich hay or silage. It can be grazed if required and is ideal for lamb fattening.

When ploughed, the red clover will leave good quantities of residual nitrogen in the soil for the following crop.

Belvoir 3-4 Year Medium Term Ley (70% Organic)

2.50 kg	ORGANIC Tetragraze Tetraploid Hybrid Ryegrass
3.25 kg	ORGANIC Perseus Festulolium
3.35 kg	ORGANIC Nifty Diploid Intermediate Perennial Ryegrass
3.90 kg	Nolwen Intermediate Tetraploid Perennial Ryegrass

13.0 kilos per acre

— ABOUT

This mixture will produce high quality forage whether it is cut or grazed, because of its perfect balance of hybrid and perennial ryegrass together with the inclusion of festulolium. If grazed, the sward will be productive for around 3 years. If cut, it should last well into the 4th year. The inclusion of festuliums will help to bring up nutrients from the soil as they are renowned for their deep root abilities. This mixture will also respond well to bagged nitrogen applications.

Buckminster 3-4 Year Organic Red Clover Ley (70% Organic)

2.60 kg	ORGANIC Tetragraze Tetraploid Hybrid Ryegrass
3.25 kg	ORGANIC Perseus Festulolium
3.25 kg	ORGANIC Nifty Diploid Intermediate Perennial Ryegrass
0.90 kg	Nolwen Intermediate Tetraploid Perennial Ryegrass
1.50 kg	Amos Red Clover
1.50 kg	Global Red Clover

13.0 kilos per acre

— ABOUT

This medium term mixture is formulated for cutting which could be aftermath grazed if required. It will also provide high yields of protein rich hay or silage.

Red clover is relatively easy to establish and is higher yielding than white clover. Please do keep in mind this is perhaps not the best option for breeding ewes because of high oestrogen levels in the red clover.

Doddington 3-4 Year Organic White Clover Ley (70% Organic)

2.60 kg	ORGANIC Tetragraze Tetraploid Hybrid Ryegrass
3.25 kg	ORGANIC Perseus Festulolium
3.25 kg	ORGANIC Nifty Diploid Intermediate Perennial Ryegrass
2.40 kg	Nolwen Intermediate Tetraploid Perennial Ryegrass
0.50 kg	Brianna Very Large Leafed White Clover
0.40 kg	Dublin Large Leafed White Clover
0.60 kg	Buddy Medium Leafed White Clover

13.0 kilos per acre

— ABOUT

Ideal both for cutting and grazing, this mixture will produce a clover rich sward, full of protein and trace elements. The white clover will fix good quantities of atmospheric nitrogen which it will release into the soil for the grass to utilise. This ley will be more persistent than the shorter term mixtures.

Elsham Long Term Organic Ley (70% Organic)

2.10 kg	ORGANIC Nifty Diploid Intermediate Perennial Ryegrass
1.70 kg	Nolwen Tetraploid Intermediate Perennial Ryegrass
2.75 kg	ORGANIC Fojtan Festulolium
2.45 kg	ORGANIC Toddington Diploid Late Perennial Ryegrass
2.50 kg	ORGANIC Nashota Tetraploid Late Perennial Ryegrass
1.00 kg	Comtal Timothy

14.0 kilos per acre

0.40 kg	Briana Very Large Leafed White Clover
0.50 kg	Dublin Large Leafed White Clover
0.60 kg	Buddy Medium Leafed White Clover

— ABOUT

Organic Elsham is a flexible long term ley that can be cut for hay and silage, but will additionally provide high quality grazing for cattle or sheep.

The proportion of white clover within the mixture will also fix the atmospheric nitrogen to supply the companion grass that will add protein and trace elements to the animal's diet.

Harlaxton Organic Herbal Dual Purpose Ley (70% Organic)

1.25 kg	ORGANIC Fojtan Festulolium	0.30 kg	Sheep's Parsley
1.25 kg	ORGANIC Niva Cocksfoot	0.35 kg	Choice Chicory
1.00 kg	ORGANIC Dolina Timothy	0.25 kg	Plantain
1.75 kg	ORGANIC Diwan Tetraploid Intermediate Perennial Ryegrass	0.55 kg	ORGANIC Red Clover
1.45 kg	ORGANIC Nifty Tetraploid Intermediate Perennial Ryegrass	0.15 kg	Yarrow
1.10 kg	ORGANIC Laura Meadow Fescue	13.0 kilos per acre	
1.25 kg	Sainfoin	— ABOUT	
0.75 kg	ORGANIC Lucerne	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.	
0.40 kg	Alsike Clover	Whilst recent trends have been towards simple mixtures contain 3 or 4 varieties of ryegrass with a couple varieties of clover. A herbal mixture on the other hand, contains a diverse combination of species which all contribute to the sward.	
0.30 kg	White Clover Blend	Even though these mixtures tend to be more expensive in comparison to conventional ley, this mixture improves the performance and health of the animal.	
0.40 kg	Birdsfoot Trefoil		
0.50 kg	Sheep's Burnet		

Revesby Organic Herbal Light Land Ley (70% Organic)

2.20 kg	ORGANIC Fojtan Festulolium	0.35 kg	Sheep's Burnet
2.50 kg	ORGANIC Niva Cocksfoot	0.25 kg	Sheep's Parsley
1.30 kg	ORGANIC Dolina Timothy	0.35 kg	Choice Chicory
1.60 kg	ORGANIC Diwan Tetraploid Intermediate Perennial Ryegrass	0.20 kg	Plantain
1.70 kg	Sainfoin	0.80 kg	ORGANIC Metis Red Clover
0.70 kg	ORGANIC Lucerne	0.10 kg	Yarrow
0.40 kg	Alsike Clover	— ABOUT	
0.30 kg	White Clover Blend	Formulated to perform as well as the Harlaxton mixture but designed for lighter soils with less ryegrass and more of the deeper rooted species such as Festulolium, Cocksfoot & Timothy.	
0.25 kg	Birdsfoot Trefoil		

Scawby Short Term Organic Overseeding Mixture (70% Organic)

3.50 kg	ORGANIC Hunter Tetraploid Italian Ryegrass
3.00 kg	Cezzano Tetraploid Italian Ryegrass
3.50 kg	ORGANIC Tetragraze Tetraploid Hybrid Ryegrass

10.0 kilos per acre

— ABOUT

This mixture is ideal for overseeding either damaged pastures or ones that are showing signs of wear. The mix can be directly drilled into the existing sward, or it can be broadcast which helps to extend the ley for a further 2-3 year. If broadcast, the sward should have just been cut or grazed for the best results.

A passing of a chain harrow will then open the sward and then after broadcasting the seed a roller, preferably a ring roller, should be used. This not only presses the setting into the soil but re-firms up the surface creating a better environment for the seed to germinate into.

Tattershall Long Term Organic Overseeding Mix (70% Organic)

2.75 kg	ORGANIC Tetragraze Tetraploid Hybrid Ryegrass
2.25 kg	Perseus Festulolium
4.25 kg	ORGANIC Diwan Tetraploid Intermediate Perennial Ryegrass
0.75 kg	Nolwen Tetraploid Intermediate Perennial Ryegrass
0.75 kg	Briana Very Large Leafed White Clover

10.0 kilos per acre

— ABOUT

This overseeding mixture is designed to improve a ley which is due to be down for a further 4-5 years.

— SPECIAL MIXTURES

We are happy to quote for any mixture of your own formulation. Please contact us for price and availability.

Simon Travers -
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— SUBSTITUTIONS

Cope Seeds stock an extensive range of grass seed varieties, but there may be a variety listed in the brochure which is not available. Cope Seeds & Grain reserve the right to substitute any unavailable variety with a suitable alternative.



Organic Arable Silage Mixtures

Arable silage mixtures are an ideal addition or alternative to grass or maize silage. Quick growing, these mixtures can be taken for silage in 10-12 weeks from sowing or left until 14 -16 weeks to be harvested as whole crop.

At a reduced seeding rate, arable silage mixtures can act as an excellent nurse crop to an undersown grass ley although for successful grass establishment, the arable silage mixture should be harvested no later than 10-12 weeks from sowing.

When thinking about which mixture to choose please bear in mind that there is a large differential in the thousand grain weight of barley (50g), oat (45g), pea (250g) and vetch (50g) so this should be born in mind when selecting the right mixture for your needs.

All mixtures are 70% organic and therefore meet the minimum requirements of the organic certification bodies to be accepted for organic production as either silage or wholecrop. Please be aware that if these mixtures are taken through to the combining stage and are harvested as grain, then a 100% organic mixture must be sown. Like grass mixtures, a derogation form must be submitted but this can be done retrospectively.

Arable Silage Number 1

Probably the most widely sown arable silage mixture, this mixture is high on the barley content with the peas adding a useful protein boost to the mix. This should give a ratio by number of seeds of 85% barley and 15% peas.

60% ORGANIC Spring Barley
10% ORGANIC Spring Peas
30% NON-ORGANIC Spring Peas

Arable Silage Number 2

This mixture, with it's higher pea content will produce a silage or wholecrop that is higher in protein than mixture number 1 and will also leave a useful amount of residual nitrogen for the following crop.

By number of seeds, this should give a ration of 75% barley & 25% peas.

40% ORGANIC Spring Barley
30% ORGANIC Spring Peas
30% NON-ORGANIC Spring Peas

Arable Silage Number 3

A traditional mixture containing oats as well as barley, oats tend to do well in less favourable conditions or areas of high rainfall.

By number of seeds, this should give a ratio of 41% barley, 47% oats & 12% peas.

30% ORGANIC Spring Barley
30% ORGANIC Spring Oats
40% NON-ORGANIC Spring Peas

Arable Silage Number 4 (New)

A high protein, lower carbohydrate mixture which should also provide large amounts of residual nitrogen for any following crop.

The ration by number of seeds for this mixture should be 55% barley, 26% peas & 19% vetches.

30% ORGANIC Spring Barley
40% ORGANIC Spring Peas
20% NON-ORGANIC Spring Peas
10% NON-ORGANIC Spring Vetch

The Link Between Forage Crops & Nutrition

Whatever your system, you need to have the best available forage for your stock for both grazing and your winter feed. It needs to be able to support your production targets and expectations.

The limiting factor for production in the ruminant is getting the correct nutrient levels from the forage portion of their diet for the target milk production (plus maintenance) or live weight gain within the dry matter intake of any given animal. Dry matter intake being the constraining factor.

To achieve this, the highest quality and quantity of forage must be produced. As most production systems rely on grass as the predominant product, the leys must be maintained by regular reseeding or overseeding which increases area yield nutrient production and utilisation which increases overall performance.

To help reduce reliance on bought-in feed, here are some options for consideration:

1. Wholecrop cereals are an economic source of energy in the form of starch, giving high yields in one cut, allowing an opportunity to establish a new ley. Cut at 40-45% dry matter with no wilt it produces a high starch but is low in protein.

2. Arable silage, a mixture of cereal and legumes such as peas. This crop is quick growing and can be cut from 10-12 weeks from sowing and depending on the inclusion of peas can significantly improve available protein. This crop again produces a large quantity of high protein and starch. In both cases the fibre from the cereal increases the scratch factor which will enhance dry matter intake.

3 We can also look at the introduction of clovers and lucerne either as straight crops or within ley mixtures. As companion species, they will enhance the growth of the grasses because of the atmospheric nitrogen fixing ability and will significantly increase protein in grazing and silage.

4. Herbal leys will, because of their deep-rooted growth habit retrieve a higher level of the minerals than usual making them available to the stock whilst grazing and in the silage. This will reduce the necessity for large amounts of supplementary minerals to be supplied, it will not reduce the need totally, but it will have an impact on their purchase.



Can lupins play a role in homegrown protein?

Lupins are a high protein, high energy grain legume that has a protein and oil make up that may effectively help replace imported soya in many situations. Lupins can be cut and ensiled, taken as whole crop or crimped and fed alone or can be grown, harvested and fed as a mixture with a cereal, especially Spring Triticale.

There is a distinct difference between the different types of Lupins and their feeding values so knowing what type of Lupin you are growing is important. Typical Crude Protein levels of Lupins are 30%-34% (Blue Lupins), 36%-42% (Yellow Lupins) and 36%-40% (White Lupins) with an average oil content of 6% (Blue), 4% (Yellow) and 10% (White). Overall energy M.E. is between 13.5 MJ/Kg (Blue), 13.0 MJ/Kg (Yellow) and 15.0 MJ/kg (Blue).

Feeding trials from a variety of international sources have shown that dairy cows, fed lupin protein in a balanced diet performed slightly better than those who derived their protein from Soya meal. Yellow or narrow leafed lupins have been successfully fed to laying hens without compromising performance or egg quality.

Lucerne as a homegrown forage

Lucerne (or Alfalfa) silage has been shown to improve forage intake and improve milk protein when included in a dairy cow's diet yet despite this, livestock producers have been reluctant to grow this crop and the area down to Lucerne is small. Perceived to be difficult to grow and conserve, this situation is changing through the arrival of varieties more suited to UK conditions and more appropriate additives to help fermentation.

— WHY SHOULD I GROW LUCERNE?

- **High dry matter yield** – It's DM yield can be comparable with Italian Ryegrass yet will last up to 4 years in the field. Cut at the right growth stage, Lucerne is low in fibre and high in energy.
- **High protein** – Throughout the various growth stages of the plant, the protein content ranges from 15% to 20%
- **Rich in minerals** – also vitamins and trace elements
- **Drought tolerant** – Lucerne is well known to be more drought tolerant than ryegrass and in dry summers, will outyield either Ryegrass or Forage Maize
- **Soil structure** – Lucerne has a deep tap root which, when searching for moisture and minerals can penetrate down up to 3-metres. The breakdown of these roots can contribute greatly to the soil structure, fertility and humus content of the soil, assisting in drainage as well as, being a legume, contributing nitrogen to the soil.

— HOW CAN IT BE USED?

Lucerne is probably best ensiled but can also be fed if other fodder is not available at time of harvest. Lucerne hay is an excellent product if the weather conditions are right for haymaking. Lucerne hay is well liked by horses and large amounts are often imported from America on account of the high quality. Lucerne hay can also be fed to beef or dairy cattle with excellent results. Specialist drying companies also use Lucerne to produce pellets high in energy and protein and again, large quantities of Lucerne pellets are imported into the UK as demand outstrips supply. Grazing cattle on Lucerne is not recommended due to the high risk of Bloat.

— FIELD SELECTION

Field selection is important with Lucerne. A field with free draining soil and a pH of between 6.0 and 7.5 is the best place to grow the crop. Lucerne is very sensitive to poor drainage and waterlogging of the crop will have disastrous results. Soil compaction will restrict root growth and Lucerne cannot tolerate acid soils.

— VARIETAL SELECTION

It is important to select varieties that are suitable to Northern Europe. The majority if not all the varieties that have had organic seed available over the last few years are of Southern European origin and may not be suited to the colder UK climate and may not survive our winters. It is probably best to seek a derogation to use non-organic seed of more suited varieties if you can and the lack of seed of suitable varieties should be used as the reason to ask for a derogation. Varieties with a proven disease resistance, especially to wilt are also best used.

— SOWING

Lucerne seed requires inoculation with a suitable Rhizobium inoculant. This was traditionally supplied in a sachet of peat which was then crumbled into the seed and mixed in just before sowing. Nowadays, seed is normally supplied pre-inoculated within a seed coating which is a far cleaner method and easier to sow. Both methods are approved by all the Organic certification bodies.

Seed should be sown at 8 kilos per acre to avoid the risk of a poor establishment. The depth of sowing should be around 1-2 cm into a fine seedbed. If a companion grass is to be sown, this should be cross drilled or broadcast and should be sown separately and not as a mixture with the Lucerne seed. The rate of the Lucerne should not be reduced.

— LUCERNE SILAGE

The principles of making Lucerne silage are pretty much the same as grass or maize. Lucerne however is high in protein and low in soluble carbohydrate, needed to enable the bacteria to produce the acids which preserve the Lucerne as silage. These acids lower the pH and stop further bacteria and enzymes being produced. The process takes around 6 weeks.

The first few hours of storage can be critical. A long period of exposure to air can result in the severe deterioration of the ensiled forage. Badly fermented silage is a disaster and it is essential to use an approved additive as well as allowing proper wilting of the crop.

Please do not hesitate to make contact to discuss the options that could be appropriate for your system and situation.

— SOWING TIME

It is best sown in spring or summer when soil temperatures are high. Late Autumn sowing is not recommended as the seedlings, being relatively slow to establish will not have developed enough to last the winter. If sowing in the summer planting after winter barley is the best bet as late July/Early August is really the optimum summer sowing time and much later than this will have a risk of poor establishment.

— SOW STRAIGHT OR AS A MIXTURE?

Lucerne can be sown straight but there are several advantages to sowing it with a companion grass. These grasses should be relatively non-competitive and the 2 species most widely used are Meadow Fescue and Timothy.

Total yield of a Lucerne/Grass mixture should be higher than a pure stand of Lucerne and also, if the requirement is for silage, the presence of grass in the silage will make it easier to obtain a good fermentation as the grass has a good supply of the necessary sugars. The first cut of a Lucerne/Grass mixture should be higher than a pure stand as the grass tends to grow in advance of the Lucerne. On Organic Farms, the grass can also be advantageous as the extra competition should help with discouraging weeds. When sowing as a companion to the Lucerne, 3 kilos per acre of Meadow Fescue should be sown or 1 kilo per acre of Timothy.

If your aim is to produce hay, then a pure stand of Lucerne is really necessary.

— CROP MANAGEMENT

In establishment year, severe defoliation should be avoided. Cutting of spring established crops should be in mid-August to allow adequate recovery before the winter. Summer sown crops should be left until November before mowing which should be timed to be just before the winter dieback. Crops with companion grasses may be lightly grazed in the winter.

Once established, harvesting at the first flower bud stage (a round mid-May) is the best compromise between yield and quality. The quality falls rapidly as the flowers open. Cutting in mid-May will allow time for 3 subsequent cuts during the season (normally approximately every 6 weeks).

Autumn management is important for the crop's longevity. The last cut should take place 6 weeks before the end of the normal growing season (end of October). This will allow the plant to store food reserves in its roots for the winter period.



MULIKA

SPRING WHEAT

The UK's only Group 1 spring wheat

 **senova**

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 @SenovaLtd
www.senova.uk.com

Late autumn or spring sown, **Mulika** leaves the others outclassed. With premium quality, resistance to orange wheat blossom midge and excellent all-round disease resistance, **Mulika** continues to lead the field.

Flexibility, performance and quality in one variety . . . that's **Mulika**.

Mulika Spring Wheat

— INFORMATION

- Established bread making variety
- Orange blossom midge resistant
- Milling premium potential

— ABOUT

The only Group 1 spring wheat on the AHDB recommended List, **Mulika** combines premium-earning potential with a very wide drilling window – making it suitable for the UK's increasingly unpredictable climate and changing rotations.

As Jeremy Taylor, commercial director at Senova explains, "Mulika has a very loyal farmer and miller following, reflecting its role in resilient cropping strategies and ability to cope with whatever the season brings."

Mulika can be drilled any time from November through to April, allowing it to go into the ground in optimum establishment conditions. This drilling date flexibility is matched by good disease resistance scores and superb grain quality.

VARIETY	UNTREATED YIELD (% CONTROL)	MATURITY	YELLOW RUST	ORANGE BLOSSOM MIDGE RESISTANT	PROTEIN (%)	HAGBERG	SPECIFIC WEIGHT (KG/HL)
Mulika	82	0	7	Yes	13.6	321	77.4
KWS Kilburn (Feed)	82	+3	7	No	13.2	270	76.1
KWS Cochise (Group 2)	84	+1	8	Yes	13.2	239	79

AHDB Recommended List 2021/2022

Paragon Spring Wheat

— INFORMATION

- **Established**
- **Consistent and reliable quality**
- **Capable of achieving milling quality**



— ABOUT

Paragon has been a long and trusted variety by many organic and conventional growers for over 20 years. It still produces some of the best bread-making quality samples and despite being around for so long, seems to be standing up to disease pressures on farm. It has however fallen behind other varieties in terms of yields and as such is now only grown organically.

"Paragon has provided consistent quality over many years. We have received positive feedback from the millers we work with."

Tim Sellers, Paragon grower

Spring Wheat Candidates

We are pleased to have 2 lines of spring wheat in first year AHDB National List trials.

After 2 years of private trials, both lines look promising. However, one line is looking extremely hopeful for the organic market with a 3% yield advantage over Mulika, a better specific weight and milling qualities.

ENTRY NAME	YELLOW RUST (1-9) 03/07/2020	HEIGHTS (CM) 24/07/2020	YIELD (T/HA) @15% M.C. 26/08/2020	YIELD (%) CONTROLS 26/08/2020	SPECIFIC WEIGHT (KG/HL) 26/08/2020
Mulika	2.0	80.0	4.16	106.6	74.9
KWS Cochise	6.0	80.0	3.69	94.6	73.0
KWS Kilburn	6.0	80.0	3.85	98.8	69.5
SEW 19-3003	2.0	80.0	4.26	109.3	76.9

Agrii Untreated Trials Harvest 2020

Before Brexit, if we discovered a new variety we thought was suitable for the organic market, we would private trial the line and use the listing from the EU Common Catalogue.

However, since Brexit, the ruling states we must get UK National Listing which is very expensive and requires 2 years of official testing. Therefore, to offer new material to the organic market, the variety must

also show promise in the conventional sector for the fees incurred to be viable. This is a shame as the organic market is missing out on the opportunity to grow improved and more suitable varieties. We are pushing the authorities to change this ruling for 'niche' sectors and will keep you updated on our progress.

Evelina Spring Barley

— INFORMATION

- Established feed barley variety
- Extremely clean
- High untreated yield potential
- Tall straw with high straw yields
- Very vigorous & competitive to weeds



— ABOUT

Proving itself over the past 7 years as a reliable and consistent performer, Evelina is easy to manage, providing high grain and straw yields. Quick to establish and with a growth rate faster than other varieties, this makes Evelina especially competitive to any weed contamination and also to a later spring sowing should conditions dictate. It is the tallest variety in our portfolio and probably the tallest variety still commercially available with a height akin to varieties from the past such as Hart and Dandy.

"Overall it's an easy to grow and a tidy feed variety to go into ration mixes. It combines well and produces a good-looking grain with a decent specific weight as well as a good straw crop,"

Richard Monk, Hampshire Evelina grower

Laureate Spring Barley

— INFORMATION

- Malting variety with premium earning potential
- High untreated yield potential
- Performs across all regions and soils

— ABOUT

Fully approved for both distilling and malting however, with its high untreated yields, resistance to brackling and good all-round disease resistance, Laureate is just as much at home as a feed barley. A reliable performer in all areas of the UK and all soil types.

VARIETY	UNTREATED YIELD (% CONTROL)	MATURITY	MILDEW	RHYNCHOSPORIUM	APPROVAL FOR BREWING	APPROVAL FOR DISTILLING
Laureate	93	+1	9	6	Yes	Yes
RGT Planet	91	0	9	5	Yes	No
Propino	82	0	6	5	No	No

AHDB Recommended List 2021/2022

LG Diablo Spring Barley

— INFORMATION

- Highest yielding approved dual use variety
- Short and Stiff
- Consistent for quality and yield

— ABOUT

LG Diablo is the highest yielding, fully approved, dual use malt distilling and brewing variety.

It has shown high yield potential and consistent yield over a number of variable seasons, combined with one of the best untreated yields available.

The variety has a solid disease package and meets the requirements for both grower and end user.

LG Diablo has a high specific weight, combined with low screenings and a high hot water extract - a valuable characteristic recognised by maltsters.

Skyway Spring Barley

— INFORMATION

- Highest treated (108) and untreated (101) spring barley available
- Big specific weight and low screenings.
- Significant performance advantage in the East (+3%) and West (+8%)
- Good disease package
- Good lodging and brackling resistance, medium early maturity

— ABOUT

Skyway has the highest untreated yield on the 2021/2022 AHDB recommended list with a significant yield advantage over its nearest rival. Medium height, it has good resistance to brackling and disease. It is under test for MBC approval for brewing.

"If you look at the untreated yield of 101% being the highest on the RL - why wouldn't you grow Skyway as organic?"

Rodger Shirreff, National Seed Business Manager, Agrii

Westminster Spring Barley

— INFORMATION

- Long established variety and a grower's favourite in testing environments
- Suitable for malting and feed
- Tall and stiff, with good disease resistance and a high specific weight

— ABOUT

Westminster is one of the longest serving spring barleys still being grown, and although no longer on the AHDB Recommended List, it's still a popular variety amongst both organic and livestock growers.

Westminster is now outclassed in terms of trial yield results, but still produces good yields on-farm and offers good agronomic attributes which growers appreciate.

Suitable as feed or malting, Westminster is an ideal all round, secure variety.

Delfin Spring Oat

— INFORMATION

- **Highest Untreated yield of any listed variety**
- **Capable of achieving milling specification**
- **Superb resistance to Mildew**

— ABOUT

Delfin has the highest untreated yield on the AHDB recommended list and has performed well for growers over the last 3 years, staying clean and producing good yields on farm. Although the tallest variety on the list, it still has good standing power of 8 and manages to smother weeds well.

Yukon Spring Oat

— INFORMATION

- **Established and consistent**
- **Capable of achieving milling specification**
- **2nd highest untreated yield**

— ABOUT

Now in its 5th year, Yukon is proving to be a consistent and reliable variety for both the grower and miller achieving high yields coupled with good grain quality. Yukon is the shortest strawed variety in our portfolio but offers a sound disease package scoring a 7 for mildew and a 5 for crown rust which is the highest score of any variety on the AHDB list.

Naked Oats

— ABOUT

Did you know that we are one of the few representatives of Spring Naked Oats in the UK? We successfully supply and contract back large volumes of Naked Oats within the conventional sector, giving growers the premiums and the security that they need. We are now doing the same with organic growers and have several organic growers growing

for premium domestic outlets this season. It is our plan to continue working hard to create an even larger market for organic Naked Oats and are currently working with a few interested parties overseas. If you have any interest in growing naked oats organically, please get in touch for further details.



Merlin Spring Oat

NEW



— INFORMATION

- High treated & untreated yields
- High specific weight & kernal content
- Lowest screening losses of any spring oat variety
- Outstanding disease resistance including an 8 for mildew
- Early to mature
- Best standing of any variety scoring a 9 for lodging

— ABOUT

This new outstanding addition to the spring oat market delivers an unrivalled combination of yield, agronomic features and disease resistance. Merlin Spring Oat is suited to all regions in the UK and produces high quality oats when grown either organically or conventionally.

VARIETY	UNTREATED (% 5 YEAR MEAN)	AHDB 3 YEAR TREATED MEAN
Merlin	98	105
Canyon	96	102
Aspen	86	99

VARIETY	LODGING 1-9 (NO PGR)	RIPENING	MILDEW 1-9
Merlin	9	-1	8
Canyon	7	0	8
Aspen	7	0	4
Delfin	8	0	8

(AHDB 5 Year Mean)

VARIETY	KERNEL CONTENT	SPECIFIC WEIGHT (KG/HL)	SCREENINGS (%)
Merlin	73.4	51.5	1.6
Canyon	73.2	51.7	2.4
Aspen	73.8	51.7	2.1
Delfin	73	50.9	2.8

(AHDB 5 Year Mean)

"Merlin established well and has strong disease resistance. It was harvested on the 22nd August and despite the catchy weather at the time, it was standing well and combined easily. The yield was 69t from 9.3ha in a tough year. This was a better yield than other spring oats we were growing so I am optimistic that Merlin will be a good variety to grow as it becomes more widely available."

Richard Monk, Hampshire Arable Farmer



Somtri Spring Triticale

— INFORMATION

- Produces high grain yields
- Low input variety
- Suitable for drought-prone land
- High resistance to fusarium and ergot
- Tall variety, suitable for fodder or whole cropping for AD

— ABOUT

Somtri is an established German triticale which has been grown conventionally and organically in the UK for over 10 years. It produces high grain yields and is a consistent performer, in both treated and untreated conditions.

Somtri has long straw but excellent resistance to lodging. Due to its height, it can smother out weeds, but it's also stable with few incidences of lodging due to its deep root system. Because of its strong root development, Somtri may tap into nutrients and water from deeper soil layers, making it a very tolerant variety to stressful situations. The variety has a low susceptibility to fusarium and ergot giving a production of healthy and unpolluted fodder.

Somtri is an incredibly versatile variety. It's able to perform on drought prone land to heavy clay and can be drilled from November right through to April/ March time.

Untreated yield (t/ha) results - 2019

TRIAL SITE	LEADENHAM (LINCS)	THROWS (ESSEX)
Somtri	3.7	4.6
Trimour	2.9	3.5
Doublet	3.9	4.7

(Agrii harvest 2019)

Treated yield (t/ha) results - 2019

TRIAL SITE	LEADENHAM (LINCS)	THROWS (ESSEX)
Somtri	5.39	7.05
Trimour	5.37	5.93
Doublet	5.06	5.96

(Agrii harvest 2019)



VARIETY	SPECIFIC WEIGHT	CROP HEIGHT
Somtri	76.3	105.0
Trimour	75.8	95.0
Doublet	73.9	101.7

(Agrii harvest 2019)

Triticale/Lupin Mixtures

Triticale/Lupin mixtures are an excellent alternative to barley, oat and pea mixtures when harvested as whole-crop and offer the same flexibility with lower inputs and excellent feed values.

— TRITICALE/WHITE LUPIN MIX

The most popular Triticale/Lupin combination which should produce a high bulk, high protein forage. Some growers have seen yields on a par with Forage Maize but with protein, energy values and palatability that have allowed concentrates to be lowered by as much as 50%. Typical yields for this mixture should be around 14-19 tonnes per acre fresh yield at a DM of 25-30% with an ME of 11.0-12.0 MJ/Kg and a Crude Protein of 13-17%.

Sown at 75 kilos per acre, this should be done between March and Early May and wholecrop harvested in late August. This will give time for the land to be prepared for an autumn sowing of a grass ley, catch crop forage or a winter cereal. This mixture could be undersown with Italian Ryegrass for extra grass in the Autumn and following spring and is ideal for both organic and conventional growers looking for a low input crop.

— TRITICALE/BLUE LUPIN MIXTURE

This mixture is ideal for sowing in the North and the South West in situations where earliness and disease resistance are key factors. The quality is similar to the Triticale/White Lupin mixture although yields tend to be slightly lower due to the earlier harvest date. It is suitable for both low input and fully organic systems with an expected FW yield of 12-15 tonnes per acre with a DM content of around 25-30%, an ME of between 11 and 12 MJ/Kg and a Crude Protein level of between 13 and 17%.

This mixture should be sown at 60 kilos per acre in early to late April and should cut a wholecrop in mid-late August which like the White Lupin mixture will give time to prepare the land for a following crop of grass, catch crop forage or winter cereal. This mixture can also be undersown with a grass ley.



Spring Rye

Rye grain is proving to be extremely popular among food and health lovers across the UK.

It's versatility is a key part of its marketability and it has many uses including flour, rye bread, rye beer, crisp bread, some whiskeys, some vodkas, and animal feed. It can also be eaten whole, either as boiled rye berries or by being rolled, similar to rolled oats.

Rye grows well in much poorer soils than those necessary for most cereal grains. It is an especially valuable crop in regions where the soil has sand or peat. Rye plants withstand cold better than other small grains do.



Boyko Spring Rye

NEW

— INFORMATION

Boyko Spring Rye is a new outstanding variety which has a high yield potential and very early heading. Its high resistance to fungal diseases means it's a low input variety and is suitable for both conventional and organic farming.



Victus Spring Bean

PREMIUM BUY BACK CONTRACT AVAILABLE

— INFORMATION

This will be the 3rd year that we are able to offer Victus as part of our portfolio. Victus is a low vicine and convicine bean, offering the end user added benefits, particularly when added to layers hens and broiler diets. It is this feature that caught the eye of Hi Peak Feeds and we are now able to offer a buy back contract on Victus with a premium over the standard organic feed bean price, a first in the industry which we are extremely proud to champion.

Victus is an early maturing variety with higher yields than established varieties like LG Cartouche and Vertigo according to the PGRO descriptive list.



Lynx Spring Bean

— INFORMATION

Lynx is a high yielding variety with good protein content. It is a tall variety but with good standing power and the highest resistance to powdery mildew of any variety on the PGRO descriptive list.

Eso Peas

— INFORMATION

Eso is a medium to late maturing yellow pea variety. It is medium tall with excellent standing power and disease resistance, especially to *Ascochyta pisi* and is equally suited to both forage and grain production.

Pioneering Bean/Wheat Bi Crop Contract

The UK desperately needs more organically grown home proteins, but unfortunately, beans, as one of the only protein crops we can grow organically in the UK, have been struggling to perform in recent years.

Also, we regularly hear about the level of protein in imported wheat being far superior than our domestic organic feed or milling wheat and as such UK farmers are penalised for this.

With the help of Stephen Briggs from Abacus Agri, we have put together a contract that allows you to grow beans and wheat as a bi crop to help overcome some of these problems.

- We are confident that bi cropping beans with wheat will help to reduce the weed burden beans can suffer.
- Due to the wheat pulling forward the harvest date of the beans and the beans lengthening the harvest date of the wheat, we are confident that both crops will mature at the same time
- Whilst leaving residual nitrogen in the soil for the next crop, there is also evidence that the beans can help improve the protein level in the wheat, increasing the chance of the wheat making milling specification
- Expect yield to be similar or slightly more than a mono crop

If this pioneering bi cropping contract is of interest to you for either spring or autumn, please get in touch with Tom who will be pleased to answer any questions you may have.



Increasing demand for UK-grown low vicine/convicine beans

UK-demand for Low vicine or low convicine (LVC) beans is increasing because the key attributes of these specialist varieties present wider market potential than the spring and winter beans that are traditionally grown in the UK.

LVC beans also have strong sustainability credentials, because they can compete with imported soya, as well as delivering impressive yields.

Victus is a new LVC spring bean variety bred by LS Plant Breeding – leading pulse and oilseed rape breeders.

According to Chris Guest, managing director from LS Plant Breeding, there is exciting potential for home-grown spring beans. The market for UK-grown beans has really shifted over the last few years, and we are seeing increased amounts available for use in animal feed rations due to a reduced percentage passing for human consumption specification.

"LVC beans have strong market potential because they can be used for human consumption, animal feed, and they have the added benefit that they can be incorporated into animal rations at a higher level than standard beans, due to their high protein levels and low vicine/convicine content.

Victus is an LVC variety which stands out in terms of yield potential, disease resistance and standing ability, which trials show," adds Chris.

Agronomy

Victus is on the 2021 PGRO Descriptive List in the 'Pale Hilum LVC' category thanks to its good agronomics, high protein and low vicine and convicine content which are characteristics that will help to further develop the UK pulse market with end-users.

"Trial results show high yields, and although these are conventionally grown, the impressive downy mildew resistance score is scored from untreated disease plots," says Chris.

Victus also has very high yield potential on the Descriptive List, close to the most widely grown variety Lynx.

Growing varieties in the UK that can compete with Soy is high on the agenda for Hi Peak Feeds – the largest organic feed mill in the UK.

"Sustainability is critical to our business, as we strive for positive environmental impact. The opportunity to not only source more UK grown raw materials but to source beans which will reduce soya imports is vital," says Peter Griffin from Hi Peak Organic Feeds.

To find out about exclusive buy-back contracts with Cope Seeds and Grain to supply Hi Peak Feeds with Victus beans, contact tom.desborough@copeseeds.co.uk.

FOR PULSES TRUST **COMBINING EXCELLENCE**

-  UK Pulse Market Leader
-  No. 1 Selling Spring Bean Variety
-  Highest Yielding Marrowfat Pea
-  Top for Downy Mildew Resistance

- Lynx
- Yukon
- Victus
- Macho
- Ghengis
- Vertigo
- Fanfare
- Bolivia
- Allison
- Tiffany
- Akooma
- Bluetime
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- Greenwich
- Croft
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Organic Market Update

We hear from Tom Desborough, our senior grain trader about organic markets this year...

What a year...the headlines would be: Covid19, BREXIT, a very wet autumn, a very dry spring and let's not forget lockdown 1,2 & 3.

Let's take a look at the past, to wrap up the season, the present in terms of current markets and the future, to see where values maybe this coming season

The Past

It seems a long time ago now, but let's look back at the growing season for harvest 2020. We had a very wet autumn (2019) and a very dry spring (2020) which meant planted areas went out of the window and changed on a daily basis. However, the spring planted area was much higher than in normal years due to the wet autumn and we saw our highest level of spring seed sales since 2012, including a record sale of spring oat and spring barley seed sales.

Unfortunately, with high levels of spring barley in the ground and Covid-19 rearing its ugly head in March 2020 many malting barley crops inevitably ended up in the feed heap. This increased the supply of organic feed barley dramatically. Organic malting barley is a very small market and maltsters felt early on that demand would be low as the niche brewers were first to be hit. Once harvested (2020) feed barley had good uptake in the early part of the season but as the new year came, demand lessened and even drew to a halt.

Fortunately, while organic spring oat plantings increased, the uptake has been good, large feed homes seemed to keep oats featuring in the rations and milling oats seemed to move nicely into the mills.

Feed wheat moved well albeit at a frustrating level over conventional wheat prices, with the premiums seen over the past several years reduced. Milling wheat held a premium and moved well throughout the season.

Due to their being difficulty importing protein from China and India during the pandemic and freight costs being extremely high, domestic protein prices held up and beans were in demand.

The Present

Oat contracts have since slowed down with export problems and while we are fortunate to have high domestic demand for milling oats, we should be conscious of the Brexit impact and how this has affected markets into Europe which are now much more difficult to attain.

There are also several parcels of feed oats left unsold which will be carried over into the new season.

Barley is currently difficult to move, leaving merchants and growers holding feed barley with some likely to be carried over into the new season.

Feed wheat and milling wheat is now sold out as we await new crop with a particular earlier shortage to soft wheats.

Feed beans as predicted in last year's brochure were certainly the crop of the season in terms of value albeit they performed terribly on farm during the 2020 growing season.

The Future

Please be assured, we will continue looking for export homes for all domestic organic grains beyond Europe and have been pleased to open-up our first deal into the middle east for spelt and milling wheat. While this is not a huge market, it shows what is possible and we will continue pushing the quality, provenance, and traceability benefits of UK organic grain.

To bat off the negative impacts of Brexit and Covid-19 we have developed some intuitive ideas on how we can add value to growers, give outlets for crops and develop different products.

To give you a little glimpse of some of the things we have been looking at:

- We have worked very closely with the feed homes and flour millers and have developed several blended wheat contracts both organically and for regenerative farmers that we are very excited about. These are not populations but carefully thought-out certified varieties, that we will watch throughout the growing seasons and modify if needs be. We have support from several millers who are excited to be working with us on this and the response from growers has been fantastic.
- Secondly, we also spent time speaking to an organic agronomist to help create contracts using Bi-cropping. The organic market desperately needs UK protein and the millers need higher protein crops, so by putting our heads together we have developed a contract we hope will help. The crops are cleaned and separated, and the individual crops then go onto their respective homes. Our contracts incorporate wheat and beans, pea and oats and peas with naked oats, again some fantastic support from both growers and end users.
- We still have our Premium bean contract offering £30 premium over organic feed beans. There is no extra specification requirement, you just have to grow Victus to attain the premium.
- We are also working closely with Wild Farmed Grain to help grow their area of population and blends to service new markets.
- We have also developed a new market for organic naked oats for use in chocolate, cereals and biscuits and look forward to helping grow this market and increase the demand to offer new and exciting crops for you to consider.

Prices

New crop prices have been slow to come forward, but as we write, we predict new crop wheat will be £250-260 ex farm with feed barley, feed oats and feed triticale £10-20 behind.

Feed Beans will certainly break last year's records and there is no reason to predict seeing prices less than £395 ex the farm.

If you are interested in any of our contracts or will have grain to trade this coming harvest, we will be pleased to speak with you. We look forward to hearing from you and wish you a good harvest.



Tom Desborough

tom.desborough@copeseeds.co.uk

TIROS Seed Treatment

— INFORMATION

Seed treatment TIROS is comprised of a unique combination of endophytes which enable all crops to fix nitrogen, sequester phosphorous, potassium and zinc, and better withstand drought stress.

The first true endophytes to be commercialised in the world, TIROS also improves plant germination, increases growth of root and shoot biomass, and creates more robust crops which can handle stress.

The seed treatment is approved for use in organic systems and maximises biological nutrient availability, showing an average yield increase of 5% in trials.

If you are interested in your seed being treated with Tيروس this season, please ask.

ONE SMALL STEP
FOR MAN
ONE GIANT
LEAP FOR
BRITISH
AGRICULTURE



- ✓ Optimise germination & establishment
- ✓ Increase root and shoot biomass
- ✓ "Endophytes" are living biology within the plant
- ✓ Fix atmospheric Nitrogen
- ✓ Enhance nutrient uptake throughout the season to maximise crop growth
- ✓ Reduce abiotic stress
- ✓ Solubilise and mobilise soil phosphorus into and within the plant
- ✓ Optimise green leaf area
- ✓ Maximise yield – average yield response 0.55 t/ha over equivalent farm standard



We've rolled out two more high performers.

Elsoms' track record of breeding market leading Spring Oat varieties for the UK continues with Delfin and Yukon topping the AHDB Recommended List:

DELFIN

The UK's **highest yielding** Spring Oat variety, with:

- ✓ **Outstanding** treated and untreated yield
- ✓ **Robust disease resistance**, including mildew and crown rust
- ✓ Great straw strength, with **excellent lodging resistance**

YUKON

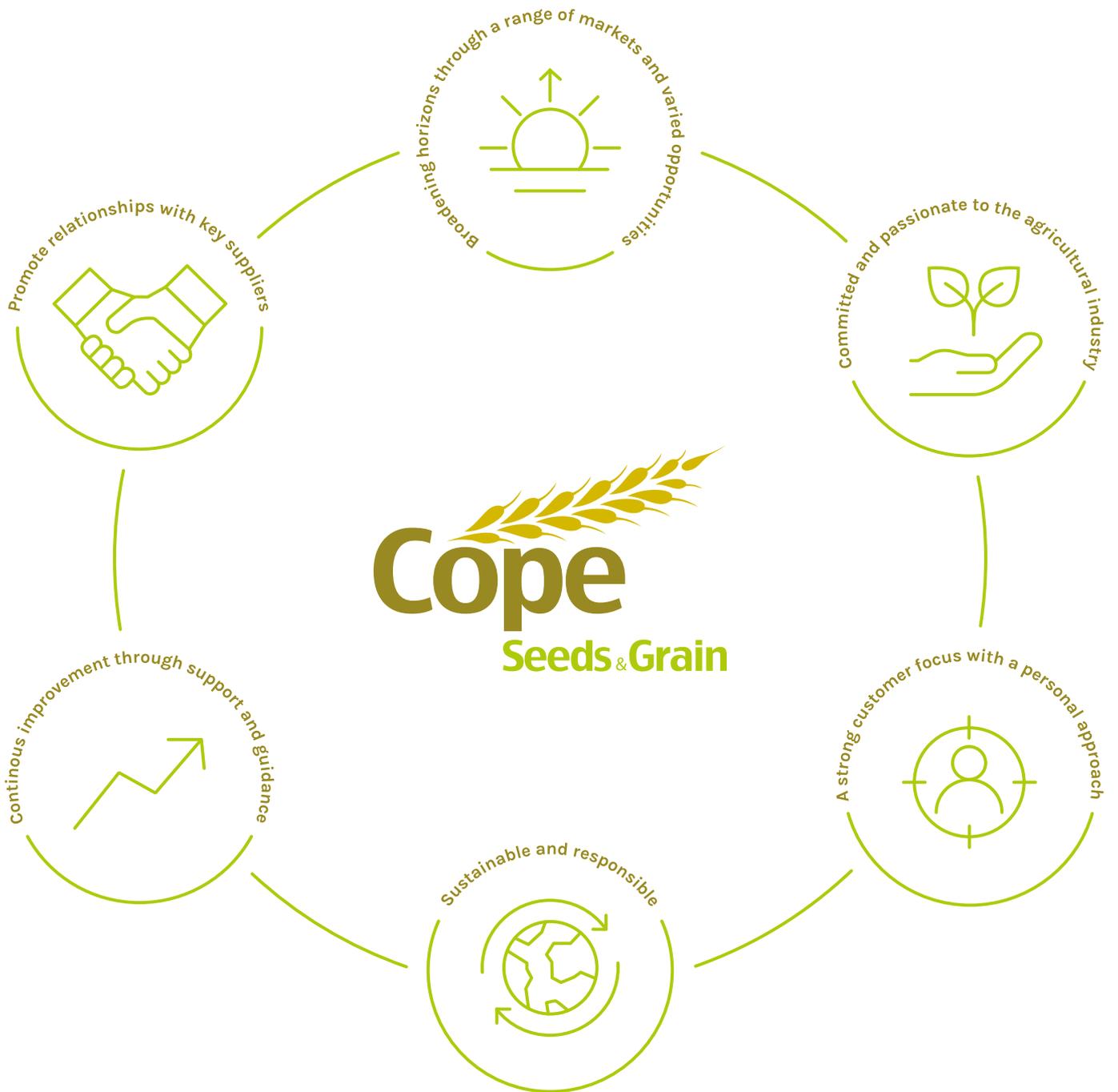
Consistent **high performing** Spring Oat variety, with:

- ✓ **Excellent** treated and untreated yield
- ✓ **Impressive disease resistance**, including mildew and crown rust
- ✓ A stiff strawed **early variety** for early harvest

Speak to Cope Seeds today
about availability.


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