

# Check the pulse for Brexit opportunity

## Technical Pulse crops

**With the right incentives and a commitment from growers, there's a very promising future for protein crops. CPM assesses the policy pathways, market opportunities and varieties that could make that happen.**

**By Tom Allen-Stevens**

**UK growers have the opportunity to displace a considerable proportion of imported soya and make a step change on their journey to Net Zero. But it will take a firm commitment to bring a pulse into the rotation, and solid support for home-grown protein crops from Government.**

The call comes from PGRO CEO Roger Vickers following the release of Defra's *Path to Sustainable Farming*. The policy paper, released at the end of Nov, sets out the Government's Agricultural Transition Plan, shifting payments from direct subsidy to public money paid for public goods.

"The need for home-grown pulses has received plenty of support from the wider public, but not a lot has happened on farm or in terms of policy that would effect any change," he told *CPM*.

He points out the Defra policy paper

included commitments to sustainable food and farming practices, although there was no mention specifically of any incentives for pulses. "The obvious place for this is the Sustainable Farming Incentive," he suggests.

"The door's wide open for pulses. I can't think of another crop group that could offer a better pathway to a more sustainable way of farming and source of food."

Roger's not in favour of a direct crop subsidy nor area payment for pulses, but suggests there could be an option to meet a particular target under a wider incentive for more flowering crops, for example. He's also keen to see the crop receive more R&D and on-farm agronomy support to boost returns from pulses under the elements of the Defra plan to improve farm prosperity.

"If every UK grower brought a



*The door of opportunity is wide open for pulses, reckons Roger Vickers.*

*“There are growers producing excellent pea and bean crops and following really innovative practices that would be fascinating to explore.”*

well-managed pulse crop into the rotation, that would bring the current crop area from the current 5% of arable cropping to 15-20%. This would have a substantial impact on the 3.8M tonnes of soya we currently import and result in a massive reduction in our overall carbon footprint, not to mention the soil health and other environmental benefits that would bring."

The renewed call for action builds on PGRO's *Blueprint for UK Pulses in a post-Brexit world*, a strategy document produced two years ago. This laid out specific steps to exploit the potential of pulses to address the changes and challenges facing growers, researchers and traders following Brexit:

- Encourage cropping for environmental good. Specifically targeting pulses and vegetable legumes to aid the sustainability of UK food production systems in agriculture.
  - Take an approach to crop protection and nutrition to assist the production of pulse crops, ensuring more economic productivity and reliability.
  - Incentivise the feeding of UK-produced plant proteins to drive local demand and fuel production.
  - Stimulate investment of private equity in industrial processing and ingredient manufacture to kick-start demand and to drive increased, more efficient production and to add value.
  - Increase education of growers and the supply chain about the environmental and economic benefits of pulse production.
  - Set out a clear strategy of education in schools via the national curriculum to stress the health benefits of pulses, food origins and to encourage healthy eating choices.
  - Require public procurement and service providers to take a lead in the provision of healthy pulse-based diets and education initiatives.
  - Require Government departments to collate and distribute timely, accurate public supply statistics.
  - Set up a market and research development platform with trade and research organisations to identify research priorities for funding initiatives with a unified approach.
  - Use public funds for public good research directed at agronomic risk reduction, developing UK traits for genetic improvements, pulse crop diversification and added-value processing.
- Roger believes the ability for growers to ►



muddy boots

by **TELUS**  
Agriculture

► apply good agronomy and crop protection is mission critical in building a greater area of profitable protein crops. “The direction of travel is towards regenerative agriculture. But these systems still include an element of crop protection to optimise productivity and result in the most sustainable outcome,” he points out.



*Policy support for pulses could see the crop included under a wider incentive for more flowering crops.*

“The amount of agrochemicals applied to pulses is miniscule, but growers and agronomists cannot be hemmed in by regulation that prohibits its use. The loss of products such as diquat with no viable alternative results in a vicious circle for protein crops. It’s a sector too small to warrant the large investment needed by agrochemical companies to support products, but too large to qualify for a derogation or EAMU.”

Managing director of LS Plant Breeding Chris Guest believes the reduction in oilseed rape area and move away from sugar

beet do create opportunities for pulses. “Current market demand could utilise a doubling in the pulse area — there’s currently lots of interest in pea protein,” he says.

“The UK would require investment in a fractionation plant to properly benefit from this new and exciting market opportunity. New technological advances, for example the work being done by the Cambridge start-up Xampla looking at a plastic alternative from pea protein, is very exciting for the future.”

In beans, he believes there’s a “huge opportunity” in the animal



## The trusted farm management software that puts you in control of your data

**Greenlight Grower Management** from Muddy Boots enables you to access, create and share cropping plans and farm records in real time with both agronomists and your workforce.

Instant visibility of data helps inform your decision-making in areas like spray timings, cost of production and optimising yield. The platform allows you to work in more efficient, agile and productive ways while simultaneously helping you to be more cost efficient.



### Work on the move

Upload geo-located pictures as you encounter them



### Ease of use

Quickly record on farm activities, using real time data



### Be Audit Ready

Demonstrate compliance to fertiliser applications

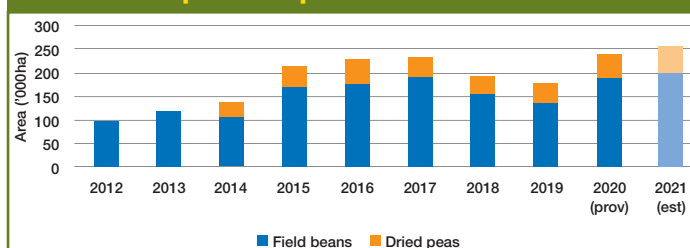
**Start your free trial today**

Call us on 01989 780540

[sales@muddyboots.com](mailto:sales@muddyboots.com) | [muddyboots.com](http://muddyboots.com)

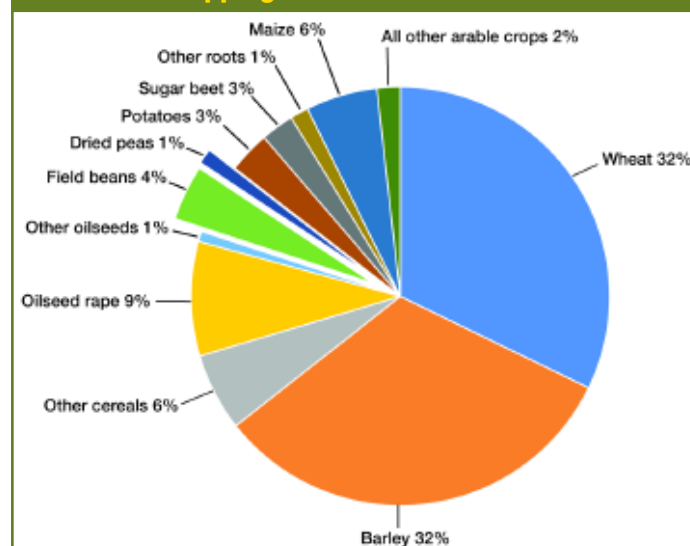


### Trend of UK pulse crop



Source: Defra; 2021 figure – AHDB EBS.

### UK arable cropping for 2020



Source: Defra.

feed sector, particularly in monogastrics, such as pigs, and poultry. LSPB is responsible for breeding or marketing over 85% of the bean varieties grown in the UK and Chris sees great potential for those low in vicine and convicine (LVC). These are pyrimidine glycosides that can decrease feeding efficiency in monogastric animals.

"I don't see a rise as significant as a quadrupling of the pulse crop area, but policy support is justified — work by the Game and Wildlife Conservation Trust has shown the benefit of beans and peas within the rotation to farmland wildlife, with an extension to the flowering period benefiting insect life and onwards to bird species including the grey partridge.

"It will be interesting to see how Defra's innovation and R&D element rolls out as there are many potential opportunities here, including further potential work on LVC beans. We'll assist wherever possible with industry lobbying to ensure that additional R&D can be targeted to the pulse crop," adds Chris.

Roger's also keen for support for farmer-led R&D. "There are growers producing excellent pea and bean crops and following really innovative practices that would be fascinating to explore. Let's find the IPM approaches progressive growers are already utilising and make a step change in prospects for the crop," he says.

## New-look Descriptive Lists

The PGRO has launched its 2021 Descriptive Lists (DL) for combining peas, winter and spring beans. The list represents a significant change for the levy-funded lists as the data moves from its long-established Recommended List format.

"The result will be a more open system that gives breeders the freedom to innovate," says PGRO principal technical officer Stephen Belcher. "They'll know their products will be independently trialled and presented without judgement giving them the opportunity to react more quickly to market interest."

Challenging weather was a theme across all crops during the 2020 trials, he reports, but several new varieties have delivered encouraging results and the conditions provided a greater level of disease information for pulse growers.

"Lack of rainfall post drilling in the spring gave rise to patchy and uneven emergence for many trials and crops with double emergence a common occurrence."

Yields are therefore well down on 2019, with winter beans suffering the worst. The control yields for 2020 were 2.72t/ha for

peas, 3.68t/ha for spring beans and 2.67t/ha for winter beans.

"Powdery mildew in peas became a significant problem late in the season, while late rust in spring beans was a problem in some trials," notes Stephen.

## Bean abundance

Stella, one of three new varieties from Saaten Union now tops the list with a yield of 108%, just ahead of LSPB's Lynx, added to the list five years ago. Capri and Daisy, also from Saaten Union, have also joined the 2021 list.

"Both Lynx and Yukon continue to show very good tolerance to downy mildew," comments Stephen. Bolivia, from LSPB has been added to the electronic version of the DL, available on the PGRO website, while LG Viper and LG Sphinx from Limagrain and Allison from LSPB will be added, subject to



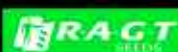
*A pulse crop in every rotation could have a substantial impact on the 3.8M tonnes of soya imports and result in a massive reduction in the UK's carbon footprint.*

confirmed National List status.

Although all eight trials were taken through to harvest, yields varied from 6.29t/ha in North Yorks to 1.88 t/ha in Lincs, Stephen notes. Vespa is still the top-yielding winter bean variety at 109%.

Vincent and Norton, both from Senova, are ►

# NUMBER ONE GROWN SPRING BARLEY ON THE PLANET



Grow to expect the best

## RGT PLANET

SPRING BARLEY

THE WORLD'S NUMBER ONE BREWING VARIETY COMBINING YIELD AND QUALITY.

COMPLETE PACKAGE CHARACTERISTICS:



UK and global export markets



Excellent agronomic profile



Excellent grain quality



Consistent performer



RGT Planet, Recommended List 2020, High yielding, fully approved, spring barley.



Let's talk: 01799 533700 or visit [ragtseeds.co.uk](http://ragtseeds.co.uk)





*Chris Guest believes there's a huge opportunity in the animal feed sector for beans, particularly in monogastrics, such as pigs and poultry.*

► new high-yielding additions to the list, subject to confirmed NL status.

"Spring bean Lynx has proven itself as a very consistent performer," comments LSPB's Chris Guest. "A great combination of yield and agronomics still make this the market leader. Macho has a very large seed size, making it suitable not only for human consumption export markets but also the fish food market where the skins are removed."

Chris points growers to the availability of LVC varieties. "We're working hard to build awareness of this valuable trait, present in Victus, Tiffany and now Bolivia. LVC represents an added benefit to other market opportunities.

"Yukon, new to the market last year, combines very early maturity with excellent downy mildew resistance and brings a new opportunity to growers from York to the Scottish Borders where late harvest can lead to issues." There's limited seed availability of this variety for next year, however, he adds.

Nudging just behind Lynx in yield terms is LG Raptor, scoring 105% over control on the new DL, notes Limagrain pulse breeder Will Pillinger. "Yield is the most important factor for spring beans, and a major focus in our breeding programme. LG Raptor offers extremely high yield potential that could see it out-yielding the market leader by next season."

This season has seen the variety produce a uniform sample, while it also has solid agronomics and traits, he adds. "It is fairly early to mature, stands well and offers a good disease package including rust. This combination of traits makes it a good variety for the north."

LG Raptor is suitable for human consumption, fish feed and animal protein markets.

## Peas progress

At 120% of controls, last year's newcomer Kameleon from Senova tops the yield rankings in the yellow/white pea category, closely followed by Orchestra at 115%, notes Stephen. "New to the list for 2021 are Kaiman from Senova and IAR Agri's Raider."

New additions in green/blue peas for 2021 are LSPB's Stroma, Kiravi from Senova Greenway and Mikka (IAR Agri). "Kactus emerged top of the yield rankings at 112%, closely followed by Bluetime and Stroma at 111%. Blueman came top for tolerance to downy mildew with a rating of 8. Kactus, Karioka, Mikka, Croft and LG Aviator followed with 7," he adds.

In the marrowfats, Akooma from LSPB is new to the 2021 list with a yield of 97% — 11% higher than Sakura — and with a very large seed size, notes Stephen.

"Our new marrowfat pea is really exciting," comments Chris. "The market has been

crying out for a new marrowfat for many years, one that also improves yield and agronomics at the farm level. Akooma really looks to be a step in the right direction in this segment." End user testing has just started and early indications have been very positive, he reports.

LSPB's Bluetime brings a high-yielding green/blue pea to growers in the South at 111% of controls, he notes, while Blueman offers high resistance to powdery mildew, along with its score of 8 to downy mildew.

LG Aviator has the same high resistance to powdery mildew, offering a 7 against downy mildew, points out Will. New to the list last year and with a yield rating of 103% over control, LG Aviator is a multi-podded variety type, he explains.

"For each node it produces, there are three pods. This means there are more pods at the top of the plant, making for a more even maturity with less competition for light. This is a significant characteristic in building yield. It's early, and has good ratings for standing ability and straw length (rated 6)," he adds.

More analysis and the full 2021 PGRO Descriptive List can be found in the current copy of the Pulse magazine, included with this issue of CPM. ■



*Lynx remains the market leader for spring beans, although newcomer Stella now leads on yield.*

## Peas please despite rise in supply

With AHDB's Early Bird Survey figures suggesting a further slight rise of 7% in the area grown to pulses, the trade is reporting increased interest in pea cropping for 2021 and requests for contracts are being welcomed, notes president of Pulses UK Lewis Cottey.

"As for beans, the large Australian crop has begun to find its way into the market. With better visual quality, they're undercutting UK feed bean prices and demand for UK beans for human consumption has dried up."

The variability of the cropping season remains a conundrum, he says, but there's confidence demand will return later in the winter. "For now, feed bean prices appear to be supported by recent increases in wheat, soya and rapemeal prices."

These are seeing beans leave the farm at £210/t. Prices for new crop (2021) are around a £30/t premium on Nov wheat. Good sample marrowfat peas are currently getting up to £305/t on the open market while contracts for new crop are getting up to £335/t ex farm. Pale/bleached green/blue peas might get £220/t with the best quality trading at £270/t. New crop contracts are in the range £215-260/t ex-farm.

"More recently yellow/white peas have started to attract a little more interest from both domestic processors and European buyers, although from a very low level within the UK. This probably reflects the growing profile peas are getting in health messages, flour production and snack processing," adds Lewis.



*Yellow/white pea interest reflects the growing profile they're getting in health messages, flour production and snack processing.*

Current values are in the region of £215/t ex farm. He tips yellow peas as having a significant role to play in the future of UK pulse production, and notes 2021 contracts are available.