



GRIMME'S UK EXPANSION

Mr Grimme opens the new extension at Swineshead.



UP BEET WITH REXOR 620

Sugar beet demonstration report and machine updates.



BELT PLANTING IS BETTER

The Grimme GB215
Belt Planter is
a winner.



ALL THE LATEST GRIMME NEWS

The latest news and developments straight from Grimme.

Welcome

Welcome to the "new look" Inform. The content retains its focus on UK growers although the format gives us the opportunity to present this in what we hope you agree is a more readable style.

In this edition we take a look at Grimme options for sugar beet and include the very first user field-test report from Richard Sneath, the winner of our recent competition for a 10 day trial of the Rexor harvester.

We also take a look at how three growers are using different Grimme machines to extend their options for destoning, planting and harvesting.

ASA-LIFT features in this edition too not just with current designs that are applauded for their simple design and rugged construction but also with a glimpse of the future with the customer-led widespan development project that has its roots in a much earlier concept first proposed in the 19th century!

There's plenty more besides, although I would like to highlight the Team Grimme bike ride from York to Grimme HQ in Damme, Germany. 288 miles in 2.8 days is quite a marathon but it is in support of a worthy cause – the charity, Children with Cancer. If you can help the team reach its £15,000 target, please do.

Hope you enjoy the read!

Ralph Powell Editor for Grimme UK



Grimme UK's Expansion Completed



The Open Day at Swineshead on the 12th March saw the official opening of the completed expansion at Station Road

Mr Franz Grimme, accompanied by his wife Christine, announced the opening of Grimme UK's Technicom and Academy as the final part of the expansion which has seen the workshop and stores extended and the construction of a new/used machinery covered area as well as hard standing areas for machines.

The new facilities at Swineshead in some way mirror the facilities at Damme to allow Grimme UK to display new machinery, support training of staff, both Grimme UK and dealer staff respectively and to enhance the apprenticeship schemes Grimme UK and Brooksby Melton College now offer the industry.

Brooksby College has also invested in new teaching facilities for their agricultural students and it is welcoming to see this investment as we read of other companies also promoting apprenticeship courses within the industry.

Team Grimme Ride Again

On the 1st September 2013 Team Grimme embarked on their first ever Charity Cycle Ride, covering 100 miles in less than 7 hours, raising over £5,000 for local charities.

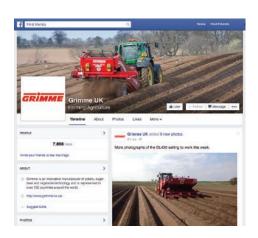
On the 7th May 2015 Team Grimme ride again, only this time challenging themselves to cycle from their Retail Outlet at York to the Grimme factory in Damme, Germany, a total of over 288 miles!! Team Grimme will be attempting this epic ride in under 3 days, and in doing so aim to raise £15,000 for their chosen Charity: Children with Cancer UK.



Donate by visiting www.justgiving.com/teamgrimme/

Facebook

Grimme UK's Facebook Page is proving to be popular and now provides another way of inter reacting with customers and operators. The feature 'Precision Potatoes... the future' is a yearlong social media feature following grower James Daw as he uses variable rate planting, fertiliser applications and yield mapping and highlighting up and coming technology within the industry. Working with Deutz Tractors and Soil Essentials who are providing the soil data analysis.



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Find out more at facebook.com/grimmeuk

Introducing the ASA-LIFT WS9600 Widespan

'The ASA-LIFT WS9600 widespan is a customer led research project in Denmark where the topic of widespan and controlled traffic farming is researched at a practical level.



The machine is a gantry system, currently 9.6m track width when in field mode but could theoretically be any length to suit any system; each end of the machine is modular comprising of its own engine and drive system and a fly by wire system linked to accurate GPS ensure the machine follows the customers 3.2m bed system and reduces travelling and compaction.

On the headlands the wheels can turn through 90 degrees so the machine can turn within its own length and most surprisingly the centre section can be removed quickly and swapped so it can be either a tool carrier or harvester. The wide span has a lot of potential as

a tool carrier utilising standard implements or as a platform for a vegetable harvesting rig'.



This concept was first discussed and proposed as an idea by Alexander Halkett in 1858 and an interesting article (pdf) can be found on www.jstor.org/stable/41334925

UK Events

Cereals 2015

10.06.2015 - 11.06.2015 Lincoln www.cerealsevent.co.uk/

Royal Highland Show

18.06.2015 – 21.06.2015 Edinburgh www.royalhighlandshow.org

Potatoes in Practice

13.08.2015 Dundee www.huton.ac.uk

British Potato 2015

12.11.2015 – 13.11.2015 Harrogate www.bp2015.co.uk

Worldwide Events

Potato Europe 2015

02.09.2015 - 03.09.2015 Kain (Tournai) (Belgium) www.potatoeurope.com

Agritechnica 2015

08.11.2015 – 14.11.2015 Hanover, Germany www.agritechnica.com

Yugagro

24.11.2015 – 27.11.2015 Krasnodar,Russia www.yugagro.org

Agribex 2015

08.12.2015 – 13.12.2015 Brussels, Belgium www.agribex.be



Find out about the **GB215** on page 6

Up Beet



Early last November Grimme UK held its first public sugar beet demonstration in conjunction with British Sugar and BBRO (British Beet Research Organisation) near Swineshead and took the opportunity to invite growers and contractors not only to see the full range of sugar beet machinery in the field working but also the facilities offered by the company's UK headquarters.

The company's strategy is based on working closely with the customer base and as with the potato sector of the Grimme Company, to develop this relationship to use Grimme's manufacturing skills and the requirements from the users base be it growers and or contractors.

Grimme entered the sugar beet market with the Maxtron 620, the first self-propelled harvester to use tracks and has developed the Rexor as an all-wheel self-propelled harvester. Additionally the Rootster has been developed as a trailed harvester for growers not able or wanting to use a self-propelled harvester.

In addition to harvesters, topping and flailing units are also available together with a range on handling/cleaning equipment for biomass production. With the acquisition of Kleine, Grimme is also able to offer beet loading units from clamps to trailers.

New developments for the harvesters were demonstrated on the day and included the new Combi-Topper which can be set from the cab to spread full width or to the side, a walking share system as opposed to the standard Oppel wheels. The new topper comes from requests for a side discharge from contractors who lift for farmers who want to feed their livestock on the tops.

The walking share is more versatile than Oppel wheels as it can work in wet, heavier conditions and where stones are a problem. Other new features for 2015 across the range include minimal scalpers which are lighter and reduce crop losses compared to standard scalpers. LED lights will replace Xenon work lights. The Rexor 620 ad 630 harvesters will feature a new armrest providing improved driver comfort and more direct control.

The general opinion on the demonstration day by the contractors present was that the harvesters had done an extremely good job under the extremely challenging lifting conditions.

The day also saw the opportunity to be entered into a draw for the use of the Rexor with the walking share for ten days. The winner was Richard Sneath who was interviewed by Hugh Symington (Symingtons PR) for Inform.

Based at Pinchbeck near Spalding,Lincs, Richard Sneath harvests around 1000ha per year for growers in the area. "I'd heard from other users that the Rexor self-propelled harvester does a fair job in a wide range of lifting conditions. I've used self-propelled tanker harvesters for years and was interested to see how the Rexor would perform."

The 6-row Rexor 620 with its 22t capacity bunker arrived in the field during last year's campaign accompanied by a number of Grimme technicians tasked with ensuring that Richard Sneath and his beet-harvesting team were well versed in how to drive and operate the new machine.



"The first point we noticed was that despite the complexity of the harvester, the controls were relatively few in number and were straightforward to work with,"

Richard Sneath, Pinchbeck



"The first point we noticed was that despite the complexity of the harvester, the controls were relatively few in number and were straightforward to work with," he says. "The Rexor was about as user friendly in this respect as it probably gets, though you still need a couple of days to become really used to it all." Powered by a 530hp Mercedes engine, the Rexor 620 has load sensing to give it more grunt when required, both in terms of travel and harvesting demands. This also leads to a high degree of fuel economy, says Grimme. The engine drives through a hydrostatic 40kph transmission.

An articulated chassis with two wheels at the front and two at the rear, the Rexor can be set to run in a crab position which ensures the front and rear wheels travel in different tracks. "The harvester uses wide 800/70 R 38 tyres to spread its weight over the full working width of the machine and, as

well as reducing ruts, it treats the soil evenly making post-harvest cultivations easier to achieve." Despite his initial concerns. Richard Sneath was surprised just how well the Rexor's powered Oppel lifting wheels performed even in the stickiest of conditions - they were set to run at about 30% faster than forward speed and they kept clean and working as a result. With the beet on board, the initial cleaning takes place on the six axial rollers which take the beet to the first of the three cleaning turbines. "The rollers did tend to become encased with soil when working in some of the worst conditions but, none-the-less. they always achieved a reasonable degree of cleaning and reduced the demands made on the turbines," he explains. Having passed through the turbines, of which can be fine-tuned in terms of speed and the hydraulic setting of the guide bars, the beet heads for the bunker via a ring elevator and auger. The 33m3 bunker holds 22t of beet and is emptied using an 1800mm wide unloading elevator. "There was only one occasion when we were confined to unloading on the headlands," he says. "The harvester wasn't troubled by the wet ground but the tractors pulling the trailers clearly were." Other features finding favour included the LED lighting, providing "even better operating conditions than in daylight", the generous supply of strategically placed cameras that send images to the in-cab monitors and the manoeuvrability of the machine.

"The turning angle it achieves using front and rear axles and the articulated joint has to be seen," says Richard Sneath. "Tight headland turns pose no problems, but it's important to line up with the rows squarely for the next bout to allow the automatic guidance system to kick in. "Overall, I was impressed with the Rexor's performance, the conditions it dealt with and the quality of the sample it produced," he concludes.

Grimme UK
has appointed
Lee Bright as the
Sugar Beet
Sales Manager.



Lee comes with a wealth of knowledge of sugar beet machinery and Grimme products. Since his appointment Lee has been involved with an extensive harvesting demonstration programme during the 2014/15 lifting campaign.

Rexor 620

Туре	Self Propelled
Engine	Mercedes 530hp
Capacity	22 Tonnes
Features	7m turning circle Oppel wheels Choice of toppers Articulated chassis Turbine cleaning system



Belt Planter with Ridging Hood Leaves Cup Option in Shadow

Replacing a 3-row cup planter for a 2-row belt planter has increased output, reduced costs and improved accuracy and ease of handling for George Thompson Farms of Holbeach Hurn in Lincolnshire.

GB215

Type Trailed Belt Planter

Rows 2

Row 70 - 91,4 cm

width

Capacity 1500kg

Features Automatic depth control

Levelling of planting

elements Steering

VC 50 Control Box

Adjustable for seed size

Adjustable ridging hood

The company's farm manager Tim Merrison admits that he has only had the experience of one season to test the new Grimme GB215 belt planter, but it has been long enough to convince him not to go back to the old system.

The farm runs to 3000 acres in Norfolk and Lincolnshire and supports cereals, sugar beet, potatoes, onions, a dairy herd and beef and sheep unit.

The 270 acre potato operation produces around 20t/ac of high quality produce for both processing and the bag trade. Main varieties grown include Maris Piper, Challenger, Performer, Agria and Ramos.

"Producing bruise free potatoes with good uniformity and a low number of greens is our objective and is the key to maximising yield and quality," he says. "Competition is so fierce that



there is no margin for error. Reputation is also very important in this industry and so if our suppliers can see that we consistently produce high quality potatoes then hopefully we will be first on the list for orders.

"When quality is high everyone is going to move their crop easily, but when yields and quality are low, it really separates the wheat from the chaff," he says. "Because we only grow for the chip trade and they only sell 5-6 bags a day the purchaser sees pretty much every potato personally, so when you compare to a purchaser who buys in bulk there is always some movement on quality, but we have no choice. The quality has to be there every time."

Lifting normally starts for Mr Merrison on September 15th with everything going into store, with grading starting in December going through to June the following year.

The quest for quality starts with the land preparations.

After the potato ground has been ploughed and prepared, planting into 36 inch rows begins immediately using the new GB215 belt planter pulled by a Fendt 220hp on narrow wheels with a Grimme bedformer on the front.

The Fendt used to pull a trailed harvester but when that was sold for a Grimme Varitron 200 the tractor was moved onto the planter.

The GB215 planter replaced a different 3-row planter for a number of reasons, but mainly for its improved accuracy, higher output, lower horsepower requirement, and improved back up and service from Grimme.

"Competition is so fierce that there is no margin for error.

Reputation is also very important in this industry and so if our suppliers can see that we consistently produce high quality potatoes then hopefully we will be first on the list for orders.

Tim Merrison, Lincolnshire



The GB215 planter replaced a 3-row Standen Big Boy for a number of reasons, but mainly for its improved accuracy, higher output, lower horsepower requirement, and improved back up and service from Grimme.

"The big decision was whether to replace the cup planter for a belt planter," says Mr Merrison.

Historically, George Thompson
Farms has grown only one variety of
potato – Maris Piper – but a change
in strategy increased the number of
varieties now being grown to five.
Mr Merrison says that this makes it
impractical to keep changing the
cups between varieties.

"Now all we do is alter the belt from outside the planter with a lever and then alter the speed of the belts from the cab to give the correct spacing," he explains. "In the past it could easily have taken half an hour to change the cups. Our forward speed has also increased by about 2kph because we don't have the risk of potatoes falling off the cups. A higher forward speed and less downtime setting up for different varieties has increased our flexibility, which means we are less dictated to by the weather because we can be more selective on when to plant.

"Where I think some growers have concerns about whether to go cup or belt is the accuracy issue. The spacing between potatoes is more accurate with a cup planter when there are no misses, but the number of potatoes planted within a given distance for a cup or belt planter is the same," says Mr Merrison.



"Growers who use cup planters are missing a trick in my opinion. Belt planters have been around for years and it seems that more growers now see the benefits. We have only used the GB215 for one season but I don't want to go back to a cup planter again."

Mr Merrison aims to plant 20ac/day which means a forward speed of about 6kph. The bedtiller on the front of the planting rig does not slow the operation down.

"Forming the ridge is essential so having the 'speed hood' facility on the GB215 is a major asset," he says.

"The hood effectively moulds the soil into a ridge shape. We plant into 1.8m beds which means greens are minimised provided about 12 inches of soil is kept on the shoulders of the ridges.

"Grimme makes two options of centre plough within the planting hood which suits our soils.

On the light land where soil depth isn't an issue the centre of the bed is set to about three inches, whereas on the heavier land where we only want to move the top six inches of tilth and avoid bringing up sticky soil from deep down, the centre plough is set to nine inches," he says.

But, with some of the crop being windrowed on the lighter land, Mr Merrison has adapted the speed hood to include a mid-sized version of about 5 inches, which gives the space needed between the rows to deposit the crop.



Breaking the Clod Barrier



A Grimme CS150XL destoner has enabled a South Yorkshire farming company to significantly improve the effectiveness and speed of the destoning operation and, on some soil types, cut out a cultivations pass.

A machine's ability to work efficiently in a range of soil types comes high on the list of important features NL Durdy and Son Ltd looks for in the machinery and equipment it uses in its potato enterprise at Well Green, Barnby Dun, grown primarily for McCain. "The equipment, particularly the machinery we use to create the seedbed, has to be versatile," says Nick Durdy. "It has to work effectively in ground that ranges from pure sand to full bodied, and both can be found in the same field."

Historically, all the 'bodied' potato land was ploughed and treated with suspension fertiliser, then ridged up in front of the destoner and planted. On some ground, however, there was a problem with the destoning operation.

"The destoner we were using was taking too much clod out," explains Mr Durdy. "And when Peter Mason of Grimme mentioned that they had a new star-type destoner, the CS150XL, we arranged for a demonstration. We were very impressed and surprised at what it could do. We bought it straight after the demonstration, half way through the 2014 planting season."

Two of the most effective of the CS150XL's components are the hydraulically adjustment of the star element and the powered 'scrubber' web, which runs over the top of the main web – its purpose to hold back clods so they are broken up more effectively. The downward pressure of the scrubber web on the main web can be altered and it can also be reversed from within the cab to increase its clod breaking capability even further.

Commenting on the CS150XL's performance, Mr Durdy says: "The RotaPower rotors at the front of the machine start to break up clod and the sieving capacity is easily altered to suit the conditions, as, although the space between the stars is set manually, the gap between the banks of stars is altered hydraulically from the control terminal in the tractor cab.

"By varying the pressure on the scrubber web and reversing it we break up 70% of the clod, which puts more soil through the stars and onto the bed. Previously, on some ground we had to use a bed tiller as there were no sides to the beds and the planter couldn't drop down.

Also CS150XL is longer than our previous destoner and by lifting the back axle you can increase the

steepness of

the web.

As a result the material stays on the web for longer so there is more sifting and separation and a greater cleaning effect."

The bigger sieving area has also helped increase output by 1kph.

"The level of clod shatter we can achieve through the ability to adjust the sieving capacity to suit the conditions, and vary the pressure on the scrubber web and reverse it means that we have been able to reduce overall establishment costs on some land as we have been able to cut out the bed tiller pass," explains Mr Durdy.

"We now use the rotary tiller only on the ground that needs it. The increased output of the CS150XL enables it to stay well ahead of the planter."

"It has to work

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Nick Durdy, South Yorkshire



One Root Crop Harvester Fits All and Keeps Costs in Check



Homogenising the lifting operation on an intensive root crop enterprise in the Norfolk Brecklands has helped improve production efficiency by utilising one harvester in the rotation.

Grimme was tasked by Raker Farms, Croxton, near Thetford of supplying a harvester capable of lifting 800 acres of onions, carrots and potatoes. The company now runs two trailed GT170's lifting constantly between June and the end of November.

Raker Farms manages 1800 acres of light Breckland sandy soil which also supports sugar beet and wheat. About 80% of the potatoes are grown on contract for selected major retailers and for processing.

All three main root crops are grown on 1.83m beds, which mean wheel widths remain constant and bed cultivating and bed making equipment can be utilised across each crop.

The harvesting operation is where the most significant cost and time investment has been made. Both the

Grimme GT170's are pulled by Fendt tractors and are fitted with the Double Multi-Sep.

One machine has picking off table with potato mulcher.

Root harvest at Raker Farms is a lengthy process which starts in mid-June with the carrots before moving onto onions in August and finishing with potatoes in November. With nearly six months of lifting a season, a lot is expected of the harvesters.

"We were renting in a specialist harvester to lift the pre-pack potato crop but decided to buy our own in the end to give us more flexibility," says Henry Raker.

"Using one type of harvester to lift all three crops means that slight adjustments have to be made when switching from one crop type to the next." In order to minimise downtime, the key is being able to make the appropriate alterations simple and straight forward. A full change over takes about half a day to complete and involves the changing of shears and webs and then depending on the crop, the addition or removal of discs or diablos.

"We invest in high quality versatile equipment," says Mr Raker.

"We can't afford the downtime at harvest from broken machines and we must have kit that is easy to adjust to suit different crops.

"With Grimme the price reflects the quality which we accept, but it's worth the investment."

Mechanically, the Grimme GT170 harvester is a well designed and well built machine. And the Multi-Sep enables the GT to handle pointed and round vegetables."

Customised and Maintained Carrot Harvester Key to Success



Operating bespoke carrot and parsnip harvesters is the key to maximising quality without compromising output says the farm director of East Anglia-based Tompsett Burgess Growers (TBG Ltd).

Ian Hall manages the production of 2000 acres of carrots and 1100 acres of parsnips from the company's base at Isleham in Cambridgeshire. Soils include black fen and a mixture of sands, loams and sandy/loams.

He remembers the company buying its first ASA-LIFT harvester about 10 years ago and now with each new harvester purchased since, the current fleet now stands at five harvesters. "We bought our first harvesters direct from ASA-LIFT but the two most recent purchases have come via potato manufacturer and ASA-LIFT importer Grimme UK based in Swineshead, Lincolnshire," he says.

"We like ASA-LIFT trailed harvesters because they are a simple design and a no frills work horse. With vegetables grown on contracts where crop is lifted to order we need machines that can keep lifting in virtually any condition. Being a trailed machine too gives us greater flexibility because it's easier to move about between fields and on the public highway."

TBG Ltd supply domestic packers such as Produce World a as well as export markets. Current annual output is 80,000t of dirty carrots and 22,000t of dirty parsnips. "Each new harvester is an improvement on the previous model," says Mr Hall.

"For example, the first machine we bought had no floating axle. Everett Brothers, the agent at that time, worked with ASA-LIFT to design and fit an axle which enabled us to maintain a constant depth.

On the second machine we added a rubber belt above the second web to stop carrots bouncing off the web and onto the floor.

The third harvester was a prototype parsnip machine which employed cleaning stars, but we have since converted it to a three web machine

In 2013 the company then bought a new three web machine with a new elevator designed to be gentler on the crop and has recently taken delivery of its fifth machine – a TRS-170DF ASA-LIFT carrot harvester.

Eight web drive sockets on the new harvester replace six on the older models and the wheel motors are bigger which gives additional oil flow per revolution, giving the harvester more power.

Equipped with large floatation tyres, the TRS-170DF is pulled by a 200hp tractor and lifts carrots drilled in an 80 inch bed. In normal conditions harvesting speed varies between 2.5-5kph.

The lifting mechanism consists of adjustable position share blades leading onto a digging web.

Carrots, soil and trash move onto a main cleaning web which is 1.7m wide and approximately 6.0m long.

A transfer roller between the digger and main web reduces crop damage and increases soil extraction. Finger bars under the main web help stop carrots falling through.

Carrots come off the main web onto a hedgehog belt to remove trash. An agitator inside the hedgehog is a particularly effective at keeping the hedgehog belt clean when working in wet lifting conditions. A smooth transition onto the star cleaning table removes any remaining loose dirt before going onto the cart elevator which is suitable for loading directly into lorries.

A redesign of the cart elevator has produced a much more compact version, which means the harvester can be moved on a lorry without the need for a movement order.

"Shallow drops between webs help the cleaning process without damaging the crop," says Mr Hall. "Three webs on the parsnip harvester maximise cleaning without causing damage. Web speed and agitation is controlled from the cab. We are now looking to replace our original harvester. A 10 year old machine which is still in a mainstream operation leaves us a bit vulnerable."

To ensure the harvesting fleet experiences minimum downtime, every machine is completely stripped down and reconditioned in the company's own workshops in Cambridgeshire and Norfolk. Worn bearings and webs are replaced.

"Changing a digger web takes about 20 minutes," says Mr Hall. "The second web takes longer. Cleaning webs should last a season but digger webs take more of the wear and tear, especially on sandy and more abrasive soils. We aim to change worn webs before the season starts, but we have experienced operators who monitor the machines on a daily basis so downtime from breakages are kept to a minimum.

"Now we think we have the ultimate carrot harvester, although there is still room for improvement. Many of our modification suggestions have been made by our operators and workshop engineers, with some of them being adopted by the manufacturer."

"We like ASA-LIFT trailed harvesters because they are a simple design and a no frills work horse. With vegetables grown on contracts where crop is lifted to order we need machines that can keep lifting in virtually any condition. Being a trailed machine too gives us greater flexibility because it's easier to move about between fields and on the public highway."

Ian Hall, East Anglia



Find out more about ASA-LIFT at www.asa-lift.com

We are not alone...

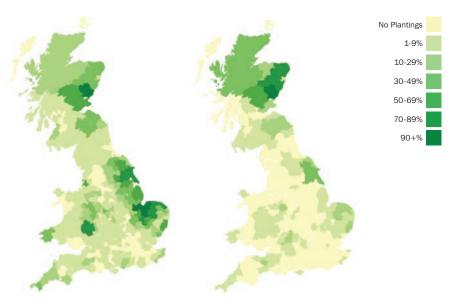
The combination of better yields and low prices from the 2014 crop is known to all, but it would seem we are not alone with this dilemma. Many European and indeed other countries across the globe are having to grapple with this problem of over 2014's overproduction (if it can be put into that context).

There are some countries trying to address the problem as we see with the Potato Council's efforts within the UK. It will be interesting to see the results of the Council's conferences and promotional activities. There are regions within some countries, such as America (California) and Australia (Western Australia), where specific targeting of the benefits of potatoes as a food source have seen an increase in fresh potato consumption. Let's hope the new promotion by the Potato Council will see that replicated in the UK.

Some statistical facts about the main production areas of potatoes grown in the UK and the purchase by households of potato products between 1974 and 2013 are featured here.

Did you know
Grimme also
sells irrigation
equipment?
High performance

irrigators, powerful pumps, fuel bowsers, hose, fittings backed by the professional support you need.



Main production areas

Source: AHDB/Potato Council Planting Returns

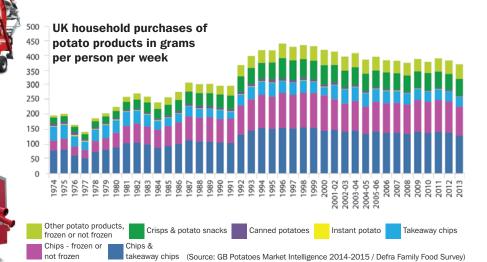
Please note: These maps are based on the proportion of growers in each county/unitary authority and show the spread in planted area rather than illustrating precise grower locations.

23% of the total GB potato planted area is in Scotland, however 40% of this is seed potatoes

12% of plantings are in the West Midlands

52% of plantings are in Eastern England and Yorkshire

14% of plantings are in the remainder of England and Wales



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