

“With cost pressures and herbicide resistance increasing, conventional growers are showing an interest in inter-row kit.”



LAMMA preview Drills and cultivators

Drills 'n' hoes

From direct fertiliser drills to interrow hoes, there was a huge array of cultivation kit launched at last month's Agritechnica. But what's relevant to the UK market? And what can farmers expect to see on display at next month's LAMMA event? CPM finds out more.

By Charlotte Cunningham

With an increasing focus on preserving and getting the best from our soils, there's never been a more important time for drills and cultivation kit. But regardless of whether you're looking for something that's deep-working or fast-moving, chances are there's something to suit you on the market.

To give CPM readers a flavour of what to expect in the drill and cultivation department at next month's LAMMA event (7-8 January), we've picked out some of the key developments.

Väderstad

After launching on the market in November, Väderstad will be showcasing its new Carrier XL 425-625 cultivator — fitted with the CrossCutter Disc — at the NEC next month.

Designed for conserving moisture in the seedbed, the cultivator has the ability to work at ultra-shallow depths of only 3cm, as well as down to 5cm, across the full working width of the machine. According to Väderstad, this enables efficient mixing of crop residues within the topsoil and encourages an early weed chit.

"A shallow stale seedbed increases the number of seeds germinating, and encourages earlier emergence," says UK marketing manager, Andy Gamble. "This then means the following crop can either be drilled earlier or with the extra time created, used to prepare an even better seedbed."

Also new and set to be on display at LAMMA is the latest addition to Väderstad's Tempo L range — the Tempo L 8 — which is claimed to combine high-speed precision drilling with high capacity output of both seed and fertiliser.

As suggested in the name, the Tempo L 8 has eight row units, boasts a 3000-litre fertiliser hopper, and is available in row spacing options from 700-800mm, making it a fairly versatile tool.

The new 3000-litre fertiliser hopper is also

available on the 12 and 18 row Tempo L models and is based on the same high capacity Fenix III metering system as the 5000-litre hopper, delivering up to 350kg/ha fertiliser at 15km/h planting speed, says the firm.

Pöttinger

Though visitors won't be able to see it in the flesh at LAMMA, the Terrasem Fertiliser Pro mulch seed drill (with direct fertilisation) is the next big thing from Pöttinger.

One of the real selling points of this piece of kit is that the simultaneous use of tool combinations (for example, front board with tillage discs) in combination with applying fertiliser while drilling avoids multiple passes — a particularly important consideration for many growers as pressure builds on the industry to work towards reducing emissions and cutting costs.

So how exactly does it work? "Seedbed preparation is taken care of by the compact disc harrow or low disturbance wave disc harrow," explains the firm. "The fertiliser is then placed by the Fertilizer Pro coulters in a double-shoot row between every second seed row."

The placement depth of fertiliser can be adjusted hydraulically within a range of 10cm independently of cultivating and sowing depth, adds Pöttinger. "The surface

is then consolidated across the whole area by the packer before the seed is planted.

“The Fertilizer Pro coulters then uses precision techniques to place the fertiliser next to the seed. Not only does this save fertiliser and minimise unproductive losses, it also promotes faster development of the root mass and contributes long-term to optimum yield.”

Vredo

Netherlands-based manufacturer, Vredo, are expected to showcase a number of innovations at LAMMA, after launching in Hannover last month.

Among them is the Vredo overseeder which now boasts a new crop drill system



The Terrasem Fertiliser Pro mulch seed drill (with direct fertilisation) is the next big thing from Pöttinger.

feature that allows farmers to sow arable crops directly onto stubble, without any tillage, on 15cm rows.

Now available on the Agri Twin and Agri Air series, the base of the machine

comprises a pair of cutting discs with an inter-row distance of 7.5cm.

To sow arable crops deeper, every second pair of discs can be pulled up high hydraulically. “This way a sowing distance ▶

Dance of the inter-row cultivators

With questions over the future of glyphosate still looming in the air, it's fair to say that the industry is seriously beginning to consider the implementation of other solutions, should we lose the chemical control.

With that in mind, there's been an increasing number of manufacturers adding inter-row kit to their armoury.

Claydon

Among them is Claydon, set to debut a 6m version of its new TerraBlade heavy duty inter-row hoe at the NEC next month.

Claimed by Claydon to be “simple, reliable and economically priced” the TerraBlade Inter-row has been designed to help eliminate weeds alongside herbicides in a conventional arable system as well as providing a robust solution for organic growers.

Launched as a result of farmer demand for the existing TerraBlade range, the new 6m, 20 tine and 8m, 26-tine heavy duty versions will sit alongside the four other pre-existing standard models and have been optimised to perform even on heavy soils.

Carried on the tractor's front linkage and and steered manually, the TerraBlade incorporates a heavy-duty box section steel frame with a fixed centre section and two vertically folding wings. Tines can be adjusted to suit any row width and the fine blades mean the TerraBlade can work effectively up to 30mm deep.

In terms of power requirements, the 8m model requires a minimum 80hp tractor and has an optimum working speed of 6km/h, providing an average work output of 4ha per hour, according to Claydon.

“The TerraBlade provides a valuable additional weapon in the agricultural industry's weed control armoury,” says Jeff Claydon. “We developed it for

farmers who need an effective, reliable, low cost, mechanical method of removing weeds from their crops, which is becoming increasingly important, for several reasons.

“In recent years numerous agrochemicals, including herbicides, have been lost to more stringent legislation, some of those which remain are becoming more costly and less effective, while an increasing number of farms are turning to organic production where such products cannot be used.”

Opico

Also making waves in the interrow market is Opico, who have launched a complete range of Hatzenbichler inter-row cultivators for UK farmers.

Austrian firm, Hatzenbichler, is well known for its comb weeders, grass harrows and seeders, but although the manufacturer has been building inter-row cultivators for 65 years, it's only recently that precision guidance technology has made them a realistic option for mainstream arable production.

“We've traditionally sold most of our comb harrows to organic producers wanting to control weeds in broad-acre combinable crops and vegetable producers looking to reduce herbicide usage,” explains Opico managing director James Woolway. “However over recent years, with cost pressures and herbicide resistance developing more and more, conventional growers are showing an interest.”

With working widths stretching from 3m right up to 18m, the new Hatzenbichler cultivator is likely to provide a solution for a variety of cropping options and row spacings, says Opico.

The principle for all versions remains the same — tines mounted on parallelograms with individual depth wheels running between the crop rows — which work to cultivate the soil surface by



Claydon's TerraBlade Inter-row has been designed to help eliminate weeds alongside herbicides in both conventional and organic arable systems.



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slicing through weed roots leaving unwanted plants to die on the surface.

There's a choice of points and tines which need to be matched to the job in hand, for example, A-shares mounted on S-tines for deeper work, or duckfoot shares and L-blades mounted on the Hatzenbichler Vibro-tine. On top of that there's a whole raft of additional options including plastic finger wheels that flick out weeds in the crop row and crop protectors that shield delicate plants from soil throw.



Building on its existing EasyDrill and MaxiDrill range, Sky Agriculture are set to announce a whole host of updates at LAMMA 2020.

► of 15cm is being created,” says the firm. “This system doesn’t cultivate the soil, instead, it only slits it, meaning less machine power is needed.”

The overseeder is also suitable for grassland, making it a fairly versatile investment for growers.

Sky Agriculture

Building on its existing EasyDrill and

MaxiDrill range, Sky Agriculture are set to announce a whole host of updates at LAMMA 2020.

The new 20 Series updates to the EasyDrill and MaxiDrill include a redesigned electronics package with blockage sensing, individual row shut off and ISObus control as well as a second “Pro-Hopper” allowing four products to be individually metered and distributed at once.

With grain and fertiliser main tanks as standard and the possibility of adding one or two smaller Pro-Hoppers, the range of possible applications the machine can be employed for is effectively extended. “The operator can now place seed, fertiliser, companion crops and plant protection products accurately in one pass,” says the firm. “For example, an oilseed rape can be sown with fertiliser, alongside a companion crop of beans and phacelia to reduce insect predation and insecticide usage.”

As with the previous generations of Sky drills, 20 Series machines have two outlets.



Designed for conserving moisture in the seedbed, Väderstad’s cultivator has the ability to work at ultra-shallow depths of only 3cm.

The first being the disc couler and the second, a placement tube with three different positions to allow depth to be varied.

The top-spec option for the new drills is ‘E Drive Premium’. As well as offering left and right section control, E Drive premium provides electronic shut-off for each individual outlet, with the result that the drill can be set to seed with any number of row configurations from the touch of a button.

This added ability to shut off individual rows means that whatever the width of the sprayer or spreader, it no longer needs to be a multiple of the drill width — simply enter the sprayer or spreader width into the control box and the tramlines will be calculated and set automatically.

“With sustainability and the environmental agenda at the forefront of most farming minds, the control update and option of a fourth hopper and metering unit delivers a multitude of options for farmers to reduce their input costs and more accurately target where products are placed,” says Joe Redman, Sky Drills specialist at Opico. “There’s also greater opportunity to improve soil health and reduce chemical usage through companion cropping. Sky has delivered what our customers have been asking for.” ■

The Vredo overseeder boasts a crop drill system feature that allows farmers to sow directly onto stubble, without any tillage.



Not at LAMMA, but worth a mention...

Amazone

Although Amazone aren’t going to be present at next month’s LAMMA event, the firm did drop over 60 new innovations at Agritechnica that are worth noting.

This included the extension of the Catros range of compact disc harrows, with the introduction of the new CatrosXL in widths from 3m up to 8m.

According to Amazone, the 610mm diameter discs offer the chance to handle more organic matter as well as potentially deeper working depths.

Upfront the CatrosXL can be equipped with either a straw harrow or the new knife roller to pre-work crop residues ahead of the cultivator.

On the seeding front, there was a buzz around the new mechanically-driven Cataya conventional seed drill and the new Avant 02 front tank drill combi. The Avant features the FTender front tank which can be used, not only for seed, but also for fertiliser in combination with such as a rear-mounted Centaya air drill combi, explains Amazone.

For more on seed and feed drilling, see Tech Talk on p54.

Horsch

Another name not anticipated at the event is Horsch. However, the firm did use Agritechnica as an opportunity to launch a neat new trailed compact disc harrow, designed to boost flexibility.



Amazone dropped over 60 new innovations at Agritechnica, including the new CatrosXL widths.



Horsch used Agritechnica as an opportunity to launch a neat new trailed compact disc harrow, designed to boost flexibility.

On the new generation Joker RT, users will find 52cm serrated discs — for aggressive working — arranged in pairs on the suspension and therefore allowing a large clearance for harvest residues.

Flexibility has been optimised by the customer ability to add tools — such as a knife roller — in front of the discs.