

As well as providing a shop window for manufacturers and service providers, the **Cereals Event, taking place** on 15 and 16 June, also offers a wealth of free advice and information. CPM looks at what's on show this year.

By Mick Roberts

Time invested in researching the latest trends and innovations is seldom wasted. So although returns from arable farming may be poor, a visit to Cereals this year could provide the answer to how to increase yields, combat weeds, improve soil fertility and health or find how the latest machines could help improve efficiency.

Cereals remains the UK's premier show, and returns to the familiar site at Chrishall Grange, near Duxford, Cambs. According to the 500 exhibitors likely to attend, there'll be

much to see, and some of this will be for the first time in the UK.

New techniques, such as cover cropping or field-mapping with drones will doubtless dominate many arable farmers' conversations, while others will seek improvements on conventional solutions. Whatever the system, there's still a need to renew or update equipment, and increased accuracy is a sure way to help save money and boost profit.

The new Argus Twin system for the Amazone ZA-TS spreader, for example, provides constant monitoring of the fertiliser distribution pattern using radars above the spinning discs. These check whether the pre-determined throw for the material type, application rate and width is correct and if not, automatically adjusts the settings to compensate.

Kuhn's latest Axis .2 fertiliser spreaders have larger hopper capacities and a new chassis to carry heavier loads. There are four models in the range, providing spreading widths from 28-50m and capacities from 1000 litres to 4200 litres.

All are equipped with EMC (Electronic



Mass Control), which meters fertiliser flow by measuring each spreading disc's drive torque. The fertiliser flow from each disc is constantly measured and automatically adjusted to maintain the correct application rate across the machine's entire spreading width.

Wider row setting

Mzuri will be exhibiting its recently updated Pro-Til Select 6T, 6m wide strip-till drill, which can be operated at both 35cm and 70cm row widths. This, says the firm, enables users to select the wider row setting to maximise light penetration through the crop, which it adds, results in healthier and bushier plants with higher yields.

The latest Select 6T and the Pro-Til 4T models at Cereals will also be fitted with the

66 There'll be much to see, and some of this will be for the first time in the UK. >>



The Argus Twin system for the Amazone ZA-TS spreader uses using radar sensors to monitor the application rate and distribution.

latest design spring-loaded pivoting discs that provide better straw clearance than before, along with a fertiliser placement option behind the leading tine.

Available in 4m, 6m and 12m working widths, the Avatar SD is the first direct drill from Horsch, which employs two rows of discs. The first straight disc slices through trash and works in front of a smaller, angled opener disc and seed coulter. A steel,

Cereals preview

angled press wheel consolidates the soil on the seeding slot.

Drilling depth is controlled by a larger, stronger version of the firm's Pronto rubber suspension system, which is able to apply up to 200kg of coulter pressure. An ISOBUS terminal is standard.

Väderstad will be showing its latest Spirit R 300-400S drill, which uses E-Control and the SeedEye monitoring calibration system and is available with 12.5cm or 16.7cm row spacings.

The drill is fitted with System Disc Aggressive cultivation, which provides two rows of 450mm diameter discs mounted in an X formation. A new electrically driven seed mechanism provides a wide range of seed rates from a flexible rubber metering unit. Seed is gravity fed into the air flow to the distribution heads.



Mzuri's Pro-Til Select 6T is now fitted with the latest design spring-loaded pivoting discs that provide better straw clearance.

With SeedEye calibration, operators need only set the desired seeds/m². The flow is then monitored by optical sensors in the seed tubes and the system adjusts the rate to match. It's said to be up to 99% accurate when counting oilseed rape seeds, for example. ▶



conjunction with your cultivator.

The improved germination and more

consistent growth of seed means a

more even and stronger crop.

Press wheel for consolidation

Double Disc with Scraper

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The Horsch Avatar SD is the first direct drill from the company and uses a straight disc to cut through trash followed by an angled opener disc and seed coulter.



Väderstad's recently introduced 3m and 4m Spirit R 300-400S drills can be equipped with the SeedEye calibration system.

▶ Weaving will be launching its updated zero-till drill at Cereals. The company says the GD Drill aids volunteer control, reduces establishment costs and can drill into standing crops in a variety of seed beds.

The refreshed design sees the seed hopper capacity increasing to 2.85t with a new easy-access hopper cover. It comes fitted as standard with Mitas' new Agriterra 02 tyres to help alleviate compaction and wheelings. There's also a new variable front weight block to allow operators to match the balance of the machine to the tractor.

The GD Coulter, angled at 25° so it lifts a band of soil and drops it back on top of the seed, has a new operator friendly seed tube, that can be detached from the disc coulter within seconds if blockages arise, says the firm.

Weaving's updated GD Drill has a larger hopper and new generation Mitas tyres.



Tractors on parade

For those who missed it at LAMMA, earlier this year, Fendt will be displaying the mighty 1000 Vario Series. There are four new models including the 1038 (380hp), 1042 (420hp), 1046 (460hp) and 500hp flagship 1050.

All are equipped with the renowned Vario transmission. The new TA 400 transmission, however, is built specifically for the 1000 Series and developed together with the 12.4-litre MAN engine.

New Holland's latest additions include six new models in the T6 range, which deliver rated powers from 115-145hp — all but the smallest also offering a 30hp 'boost', in certain operations.

A four cylinder, 4.5-litre FPT engine now sits in all models, except the largest T6.180, which retains the 6.7-litre, six cylinder. This develops a rated power of 145hp, which boosts to 175hp — the same output as the four-cylinder T6.175 model.

There's a choice of New Holland's Auto Command CVT transmission or Electro Command powershift transmissions on all models, except the smallest and largest, which both have the powershift as standard.

When it comes to harvesting, Massey Ferguson is showing its flagship MF Delta 9380 equipped with its ATRAX, triangular track option for the first time at Cereals. These are said to reduce compaction by distributing the weight over four mid-mounted rollers, while still keeping the machine within 3.5m for transport.

Sprays & Sprayers

With its arena display of more than 50 working machines, Sprays & Sprayers remains a big draw for many Cereals visitors. As usual, the event will also provide a platform for the launch of a number of new products.

John Deere is debuting its R4050i self-propelled equipped with a lightweight, but extremely strong carbon-fibre boom, which is said to be five times lighter than steel. This allows tank capacity to be increased to 5000 litres as well as an opportunity to shift the weight distribution across the machine.

First unveiled at Agritechnica in Germany last autumn, the 36m-wide carbon fibre boom can also apply at 18m. The firm says it's not only lighter, but also five and half times stronger than steel and able to flex, which reduces stress that can cause fractures in metal. The lower weight also improves boom ride by reducing yaw and roll movements.

John Deere is also adding two new trailed sprayers to the top of its M700 and M900 Series, which now include the option to fit BoomTrac automatic levelling and LED field lighting. Previously these were available only on the 'i' versions of these mid-spec machines.

Another machine first seen at Agritechnica, the Kuhn Lexis 3000 will also be making its UK debut at Cereals. It's available with a wide choice of boom types, in widths from 18m to 24m and with the firm's Trapezia or Equilibra pendulum linkage suspension systems.

Setting up the sprayer is by Manuset



New Holland now fits 4.5 litre, four cylinder engines in all but the largest model in its latest T6 range of mid-power tractors.

Cereals preview

Need to know: Cereals 2016

- Dates/times: Weds 15 June and Thurs 16 June, 8am-6pm. Car parks open at 6:00am
- Address: Chrishall Grange, Nr Duxford, Cambs
- Directions: Just off the A505, close to junction 10 of the M11
- Nearest station: Whittlesford Parkway and Royston
- Ticket prices: £24.00 or £20.00 for students. Further discounts for groups
- Newsletter: Sign up to the Cereals newsletter and get a £4 discount off tickets, or as low as £12 for students
- Website: www.cerealsevent.co.uk

rotary valves, which Kuhn says require 30-50% fewer operations than others. Spray regulation and control is via the DPAE system or the optional REB or REB3 as well as the full-colour VisioRed electronic terminals.

The new Vison cab on the Challenger RG600D self-propelled sprayers is 32mm wider than before, offering nearly 15% more volume with a wider windscreen and Category 4 filtration. Inside there's a generous passenger seat and a hot/cold box.

A new 10.2in touch-screen terminal is standard, while a second is an option. Designed and built 'in-house' by parent

company Agco, it's the first to integrate new software for the automatic steering system, rate controller and auto-section shut-off. New TaskDoc Pro software offers variable rate applications, 1m wide section control and enables wireless data transfer.

Challenger's new RG300 trailed sprayers, which inherit two thirds of their technology from the self-propelleds, will also be on show at Cereals.

Amazone, meanwhile, is now offering electrically operated AmaSelect individual nozzle control with 50cm shut-off for its Pantera self-propelled and UX trailed sprayers. Used in combination with the GPS-Switch headland and SectionControl,



Massey Ferguson is showing its flagship MF Delta 9380 equipped with its ATRAX, triangular track option for the first time at Cereals.



John Deere will be previewing the new 36m carbon fibre boom on the 5000-litre capacity R4050i self-propelled sprayer.











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Cereals preview



A new cab provides operators of the Challenger 600D Series with more space as well as a new touch screen terminal.

▶ the system is said to save up to 5% by reducing overlaps.

AmaSelect provides four nozzles in quad holders in 50cm spacings on the booms. As well as turning each on or off individually, the system can also be set to automatically change between different nozzles. This can be used, for example, to maintain the spray quality if pressure changes due to the sprayer working faster or slower.

A new ECO transmission, console and electrically adjustable armrest head the list of improvements on all versions of the latest Berthoud Raptor sprayers, while the mid-cab models are now available with hydraulic track and height adjustment.

On all models, except the 2540, the new Bosch Rexroth hydrostatic transmission automatically adjusts the engine speed and

Information stations

Cereals is further improving its knowledge transfer role for farmers at this year's event with the addition of a new drone zone and soil pit, which will run alongside existing features, including the crop plots, arable and technical seminars as well as the renewables, post-harvest technology and business areas.

Drone zone

Here AgHawk will be demonstrating a quadcopter that can be used for taking videos and imagery for mapping to produce both visible and NDVI field maps of an entire field. It will also explain how this data can be uploaded via the internet and processed in the cloud, then

Kuhn describes its new Lexis 3000 as an entrylevel addition to its range of trailed sprayers.

hydrostatic setting according to the load. which can also be combined with a cruise control setting. There are three speed ranges and in the top transport range, speeds are attained at 1700-1800 engine rpm.

Mid-range cab models now receive new bonnet styling and Cat 4 carbon cab accessed via a web based mapping portal.

Soil pit

NIAB TAG has created an 8m long, 4m wide and 1.2m deep, walk-through soil pit to provide visitors with an eye-level view of the local soil profile and study the rooting of a range of cover crops and cereals to illustrate the benefits of a well-structured soil. Four mixes of cover crops have been selected for their strong root growth to give visitors clear ideas of the impact that these crops have on soil.

Equipment can also be seen at work in the working demonstration area and Sprays & Sprayers arena.







A lower specification and a plastic tank make the Horsch Leeb LT trailed sprayers a more cost effective option in its GS range.

filtration. The machines are now also available with hydraulically variable track width (except on the 2540). All the main control functions are now grouped together on the console fitted to a new electrically adjustable armrest, which is mounted to the latest pivoting seat.

The new Horsch Leeb LT trailed sprayers go on show at Cereals for the first time and while they still offer the firm's high specification, many of the features are options to reduce the starting price.

The sprayers are equipped with a plastic 4000 or 5000-litre tank and are available with 18-42m wide booms and active Boom Control system. A piston diaphragm pump is driven by an on-board load-sensing hydraulic system and the sprayers are controlled by the firm's own ISOBUS

NRoSO and BASIS points at Cereals 16

Visitors following knowledge trails at Cereals will be able to collect NRoSO and BASIS Continuing Professional Development (CPD) points.

A maximum of six NRoSO points/day are available — two for attending the event plus a further four points from the trail. There are eight exhibitors on the trail, each offering two points, which allows members to choose those that are most relevant to their needs.

BASIS members can claim a maximum of six CPD points per day — two for attending the event and four from the exhibitor knowledge trails. At this year's event 20 different exhibitors will be offering points, allowing members to gain points that are specific to their interests and needs. One point can be claimed from each exhibitor.

Exhibitors participating offering NRoSO and BASIS points include:

BASIS		NRoS0
Agrii	Natural England	NRoSO stand
Bayer Crop Science	NIAB TAG	Velcourt
Calcifert	Omex Agriculture	Bayer Crop Science
D&H Group	PGR0	Dow Agrosciences
Dow Agrosciences	Soyl	Syngenta
DSV UK	Sustainable Soil Management	Water UK, Certis & DeSangosse
FERA	Syngenta	
Fibrophos	Velcourt	
ILEX Envirosciences	Yara	
LIMEX		

terminal or via a compatible system.

The entry-level ECO model has manually operated valves for both the suction and pressure sides. The mid-spec machines

offer automatic tank rinsing with the Continuous Cleaning System (CCS), while the Pro version comes with electronic valve control similar to that on the GS models.



The Cirrus drill benefits from perfect seed placement thanks to the 880mm diameter radial Matrix tyres and the RoTeC pro coulters.

Upfront, the CrushBoard levels ahead of the discs with the aggressively-angled twin-row cultivator disc element providing a fine, level finish every time.

Finally, seed coverage is carried out with either the Exact harrow IIIS or the Roller harrow depending on soil type.

- Perfect seed placement for better results
- Options of seed only or seed and fertiliser
- Perfectly placed large capacity hopper for optimum weight transfer
- Easier pulling uses less fuel.







