

# Trials delivery at Cambridge



There are few cities in the UK that can boast one of the largest agricultural trial sites within its boundaries. But while there are huge benefits to being next door to NIAB HQ, and at the heart of an active science and technology-based community, managing city-based field trialling and commercial cropping, alongside one of the busiest roads in the UK, has its own challenges. Head of Cambridge Trials Delivery Hannah Parish and Trials Team Manager Sue Mann explain.

**C**elebrating NIAB's Centenary in 2019 also means celebrating 100 years of trials plots at Cambridge. Books, articles and PhD theses have been written on the development of field trialling at NIAB since 1919, but today we intend to cover the here and now.

The Cambridge trials centre is the largest of all the NIAB sites, delivering around 60,000 plots each year, across more than 50 different crop species. The Cambridge farm is currently around 250 ha in size, although we are losing a significant area at HQ over the next few years to new housing developments and the widening of the A14, as Cambridge expands. As a result NIAB also has satellite sites at Hinxton and Duxford, to the south of Cambridge, to ensure our

rotations remain secure and we are able to adapt as NIAB expands its services. It means some travelling for staff and transportation of kit along the A14 and M11. We also cover the NIAB TAG Blackgrass Centre, at nearby Hardwick, with trials manager Will Smith managing and assessing cultural and chemical blackgrass control methods across a range of crop species and varieties.

With a trials team of 12 our field research programme at Cambridge is large and complex, ranging from plant breeding screens to disease assessments, evaluations of new agrochemicals to agronomy and crop production studies, alongside pathology trials, assessments of potential new crops and statutory varietal purity and multiplication tests right through to the traditional variety

tripling that NIAB built its reputation on.

And it is not just about arable crops. The field trials team works alongside our salad and vegetable trials specialist Shaun Coleman, based in Lincolnshire, travelling to sites across the UK to drill, manage and assess plots. The trials team is also supported by their colleagues in farm services, who specialise in agricultural operations, both on the trials and on other land being managed within rotations for future trials work.

Our customers are in-house and external, with industry-funded trials on behalf of manufacturers and plant breeders, statutory trials on behalf of APHA and BSPB, Recommended and National List trials, pre-breeding work including yield and multiplication plots, variety screens for plant breeders and



The full NIAB trials delivery team from every regional centre, including Cambridge



field experiments on behalf of our members, government, levy bodies and agricultural charities.

We are also responsible for ensuring the Cereals Event site and Cambridge demonstration field fully showcases NIAB's expertise and science. Our Cereals Event (13 and 14 June 2018 at Duxford, Cambridgeshire) trials team, managed by Shaun, drills and manages over 100 crop plots on the NIAB stand alone, as well as the stands for many other organisations, including Bayer CropScience and Monsanto.

The Cambridge demonstration field, co-ordinated by trials manager Sue Cahill, is home to the NIAB Open Day on 26 June, together with many other visits and tours across the summer period, and it takes many hours to ensure the field looks perfect for our visitors. However, anyone that came along to last year's event will be fully aware that we, unfortunately, cannot control the weather. With over 120 combinable crop variety demo plots, alongside 30 more showcasing our wheat pre-breeding research and over 70 plots under the NIAB Innovation Farm banner, the field is almost the perfect cut-down display of the Cambridge trials team's range of capabilities and know-how.

The Cambridge team also runs NIAB's bespoke seed handling unit (SHU) and provides support for specialist drilling and harvesting at the other NIAB regional sites. The SHU, through Stephen Morley and Ben Wright, is responsible for receiving, sampling, treating, packeting and dispatching seed across 40 different crops for national and international trials, including the AHDB Recommended Lists. This equates to an annual 120,000 packets, each fully traceable with unique identification numbers, issued to internal and external customers.

With seed handling for harvest 2019 beginning in early July our trials work for next year is underway long before we have closed the barn door on this year's harvest. The team will often be working shifts during this period to enable us to run 24/7 on combines and in the SHU. The sun never sets at NIAB.



*Drilling the cereals plots on the NIAB TAG stand for the 2018 Cereals Event in October 2017*



*The Cambridge Demonstration Field is the perfect practice site for plot combine training*



*Not everything is mechanical with the output from some research plots needing manual sorting*



*The genetics and breeding mini-plots ready for harvest*