



We are pleased to present the August 2025 edition of our newsletter. Recent highlights from across DSW include:

## BREEDER’S TOOLKIT TRIAL SITE VISITS

We've been in the field visiting our Breeder's Toolkit trial sites! Thank you to Elsoms Seeds, DSV UK, KWS, RAGT, Syngenta, NPZ UK and Limagrain for hosting us. It was our last visit to Syngenta's site at Whittlesford in Cambridgeshire which is due to close at the end of the year. Special thanks to Olga and Duncan, it's been great working with you over the years!



Breeder’s Toolkit Trial Site Visits

## PHOTOSYNTHESIS MEASUREMENTS

At the end of June 2025, Joana Amaral (postdoctoral research) and Louis Monnier (Masters student) from Lancaster University visited Nicolas Virlet (research scientist), March Castle, and others at Rothamsted Research to take photosynthesis measurements from field grown wheat. This is a collaboration between the teams led by Elizabete Carmo-Silva at Lancaster and Malcolm Hawkesford at Rothamsted.

Joana and Louis are lab-based researchers who focus on photosynthesis and the CO<sub>2</sub>-fixing enzyme Rubisco. The team worked together in this field campaign to collect photosynthetic trait data from 100 wheat genotypes in a field trial under conventional tillage versus zero/minimal tillage. Besides lots of data, this was a valuable experience to learn about field work and its complexities for the Lancaster researchers!



Photosynthesis measurements in the field at Rothamsted

## RECENT PUBLICATIONS

**Dorussen et al. 2025.** Homoeolog expression in polyploid wheat mutants shows limited transcriptional compensation.

**Bradbury et al. 2025.** Integrating genome editing with omics, artificial intelligence, and advanced farming technologies to increase crop productivity.

**Rickard et al. 2025.** Field plants strategically regulate water uptake from different soil depths by spatiotemporally adjusting their radial root hydraulic conductivity.

## DATES FOR YOUR DIARY

|                          |                                                  |
|--------------------------|--------------------------------------------------|
| 25 September 2025, 14:00 | DSW Online Talk – Abdul Kader                    |
| 14 October 2025, 10:00   | DSW Online Talk – Scott Boden                    |
| 6 November 2025, 14:00   | DSW Online Talk – Noam Chayut                    |
| 3 December 2025, 14:00   | DSW Online Talk – Catherine Evans & Matthew Paul |
| 29 January 2026, 14:00   | DSW Online Talk – Sajjad Raza & Erika Kroll      |

## STAY CONNECTED

