The cultivation site at Syngenta's Innovation Centre at Barton comprises areas of direct drilled (l), ploughed (m) and min-till (r). The differences in establishment between these areas is now becoming apparent.

Syngenta’s Innovation Centre at Barton in Cambridgeshire is coming through a particularly wet winter. An extra 75 mm (3 inches) of rain fell compared to the long-term average, and over 150 mm (6 inches) more than last year.
The soil at Barton is heavy clay without much drainage. It was already very wet after harvest and before drilling on 27th October last year.

The cultivation field at Barton comprises areas of min-till, ploughed and direct drilled, which were all established using the same drill. The differences in establishment between these areas is now becoming apparent. Cultivating parts of the field has reduced surface compaction and increased water absorption, unlike the direct drilled area which left more surface water following the wet weather.
At this stage, crop establishment is better in the cultivated areas, with the direct drilled area slowest to emerge. The level of previous crop residue remaining in the direct drilled area also seems to have impacted on establishment. This suggests higher slug pressure where the straw hasn’t been buried or incorporated. Even shallow cultivation to 5cm before drilling seems to reduce this impact.
The team at Barton is looking forward to seeing how progress across the site develops during the spring.

“There is still crop development, rooting and black-grass control to consider, and present ground conditions mean travelling will be possible earlier in the direct drilled compared to the other cultivations. The cultivated areas are softer, having absorbed more water and need to dry before we can allow operations to begin. We’ve learnt direct drilling and terrible weather gave the lowest establishment percentages, but we’re reserving judgement on the long-term impact until later in the season. Black-grass control and yield will still be the major factors to evaluate cultivation strategies. We hope visitors to our open day on 7 June will come and see these differences for themselves.”

- Syngenta Field Triallist, Simon Gardiner

The Syngenta Innovation Centres are specialist sites spread throughout the UK, with technical field experts trialling conditions, varieties, treatments and techniques to provide advice for agronomists and farmers. Come along to one of our open days to learn more about their research, and how it can benefit your crops. [Find the dates and locations here.](#)

---

**Tags:**
Wheat
Black-grass
Innovation Centre