

March 2017 mechanical weeding blog

The days are lengthening and warming and the wheat and weeds are really starting to grow. However, it seems that for every warm drying day, we have a wet blustery one, or at least part of the day meaning that soil conditions are still too wet to travel without making a mess. The weeds are becoming more erect in their growth habit and as a consequence will be causing more shading on the wheat crops.



January



March

These photos show the difference in wheat and weed ground cover between January and March.

The weeds will also now be competing strongly for nutrients available from the soil and necessitating control as soon as conditions allow to reduce competition for light and nutrients. Later on competition for water is also likely to be an important issue, especially on the thin Cotswold brash soils on which this experiment is being conducted.



The weeding equipment has started to arrive and the experimental design is finalised. The Garford Robocrop is here and the TRP Rotanet and the Combcut are ready for despatch. An initial assessment of weed and wheat biomass will take place as a baseline for the study.

Trial design for mechanical weeding project, Roundabouts, Harnhill Manor Farm, Cirencester

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|------------|---|--|---------|---------|-------|---------|---------|---------|-------|---------|------|
| | Block 1 | | | | | Block 2 | | | | | |
| 100m | Rotanet | Control | Garford | Combcut | Opico | Combcut | Rotanet | Control | Opico | Garford | 100m |
| 20m | | | | | | | | | | | 20m |
| 100m | Rotanet | Control | Garford | Combcut | Opico | Combcut | Rotanet | Control | Opico | Garford | 100m |
| | 12m | | | | | | | | | 12m | |
| Key | | | | | | | | | | | |
| | Once with weeder (March) | | | | | | | | | | |
| | Twice with weeder (March & April) | | | | | | | | | | |
| | Rotanet | TRP Rotanet 4m width see http://www.trp.uk.com/carre-farm-machinery/carre-meadow-maintenanc | | | | | | | | | |
| | Control | No weeding | | | | | | | | | |
| | Garford | Garford Robocrop 3m width, 15cm row width see http://www.garford.com/products_robocropinrow.h | | | | | | | | | |
| | Combcut | Just Commonsense 4m width see http://www.justcommonsense.eu/en/ ALSO OPICO HARROW | | | | | | | | | |
| | Opico | Opico Comb harrow tine weeder 12m see http://products.opico.co.uk/opico-products/arable-machine | | | | | | | | | |
| | All plots 12m wide | | | | | | | | | | |
| | NOTE: In sampling avoid the first and last 10m of the plot to allow the weeder to be operating at full capacity | | | | | | | | | | |

The rest of the field has been ploughed in preparation for establishing the spring wheat which will be used for the weeding demonstrations during the event on 9th May – save the date! Hopefully, weather permitting, attendees of the event will be able to see the equipment running in this field where the crop will be less developed and also the impact of the weeders in the winter wheat where they will have already received one or two weedings.

