



Using rain-out shelters to future proof UK wheat against drought

Robert Jackson

Drought

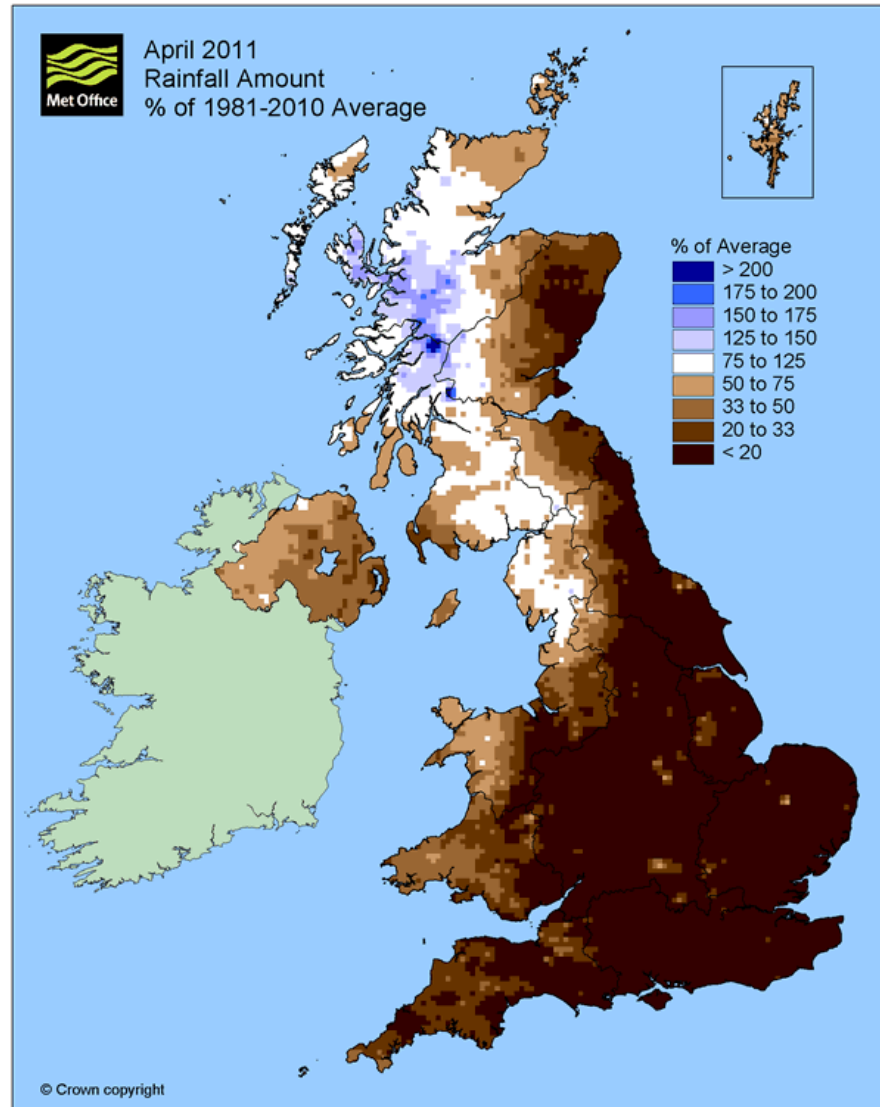
- In bad years drought can have a significant effect on yield
- Can exacerbate other issues
- Increasing yields have been masking the problem
- Important to breed varieties to overcome these issues



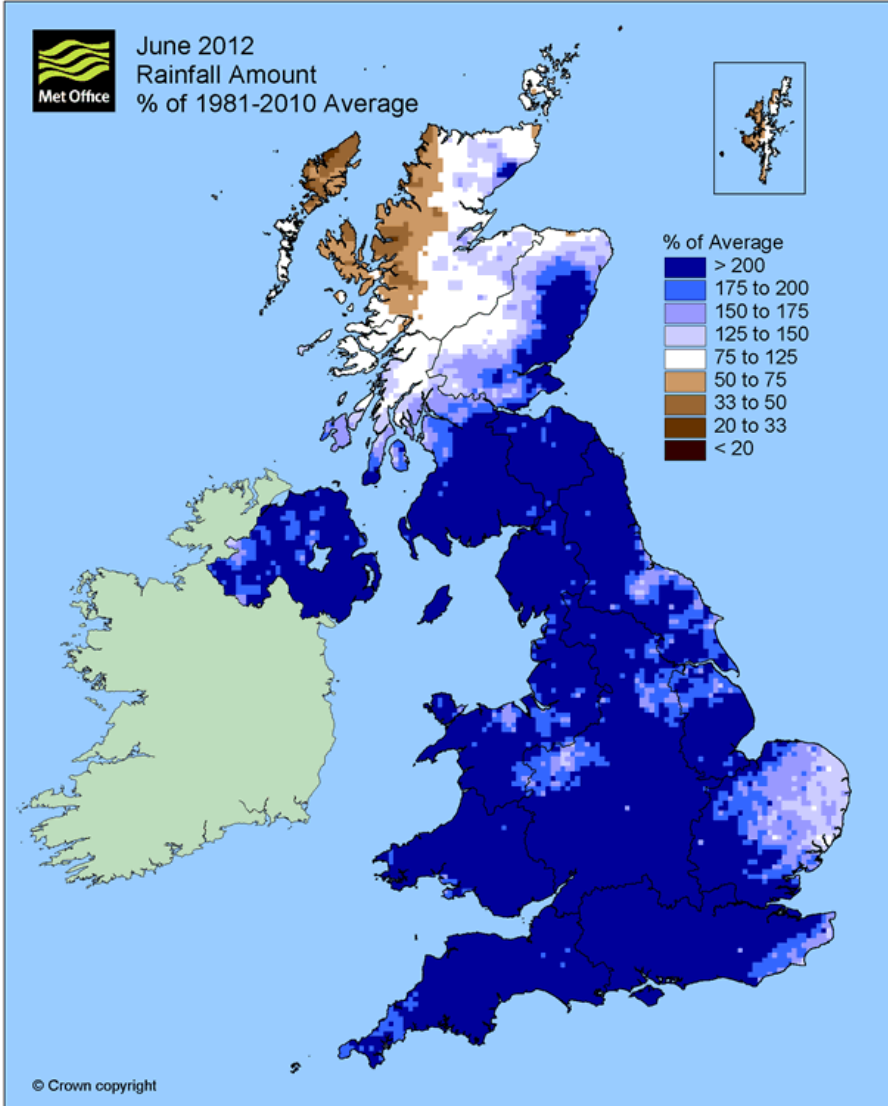
Drought in the UK



Drought in the UK



2012!!

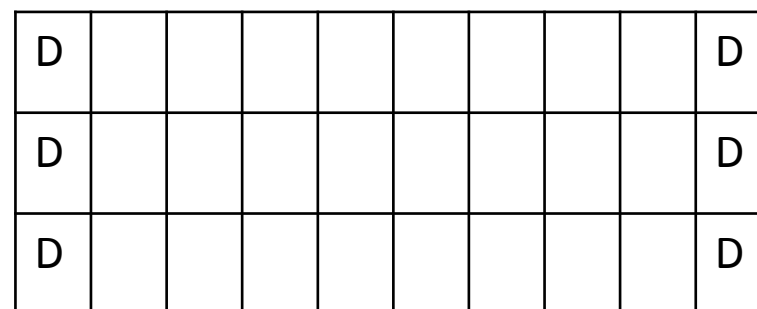
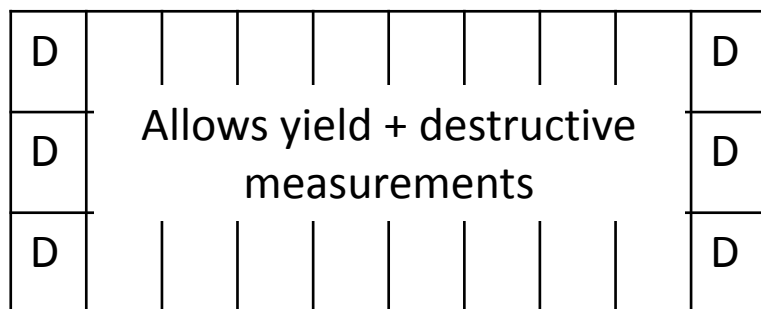
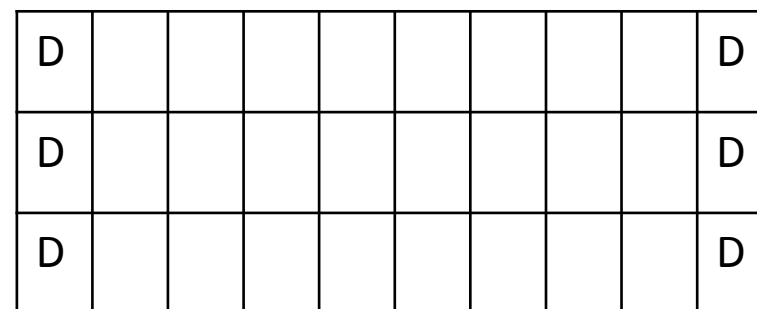
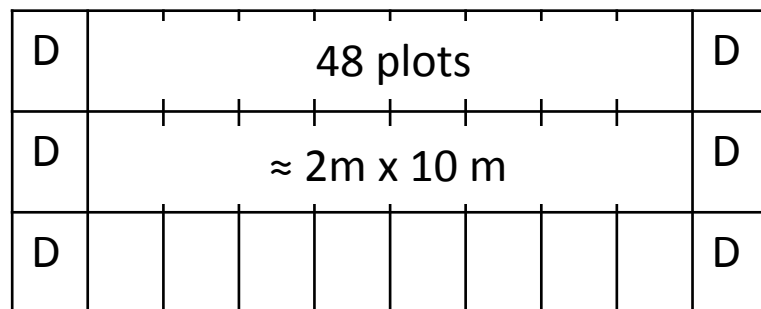


Researching drought in the UK



Layout

10m gap



Tunnel



Rainfed/Irrigated



The material

- Still open to discussion
- Modeling the effect and timing of drought
 - Necessity of smaller trial means in depth monitoring
- Starch mutants
- Small amount of legume work (for rotation)



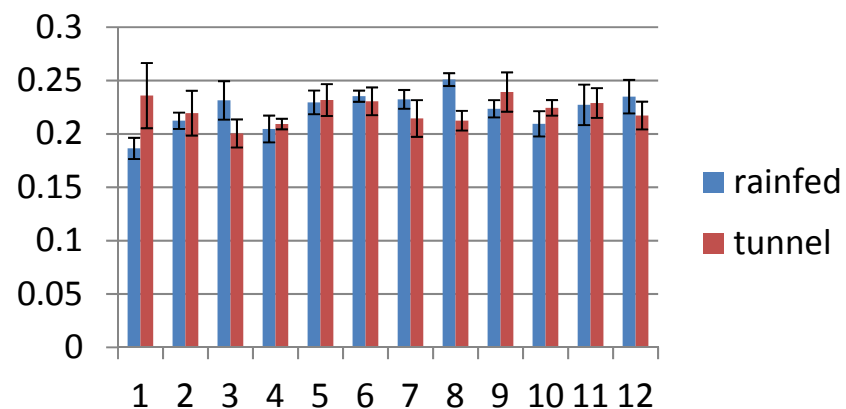
Potential crossovers with other DFW work packages

- Modelling
- Root/soil analysis
- Disease
- Remote sensing
- Extreme environments

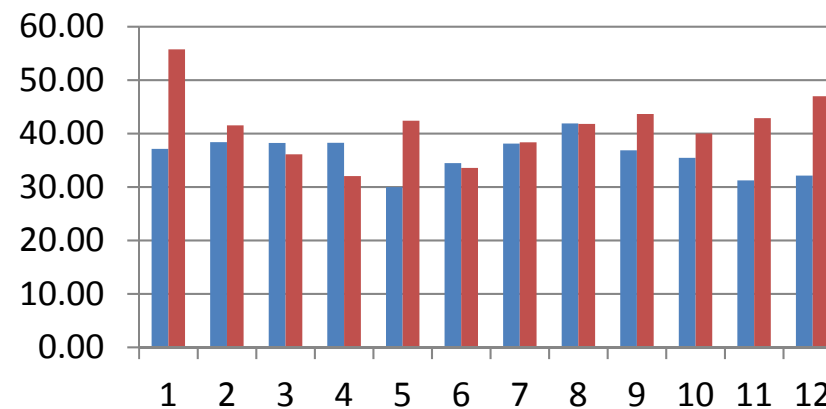


Previous drought studies

Yield 2015 (kg m⁻¹ row⁻¹)



Flag leaf DW/FW %





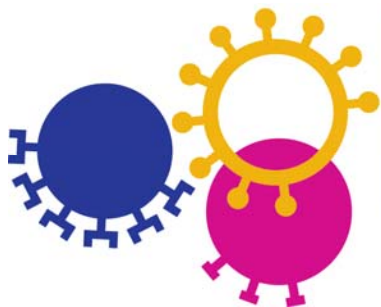
Acknowledgements



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