

Oilseeds Session

Chair: Nigel Padbury, Premium Crops

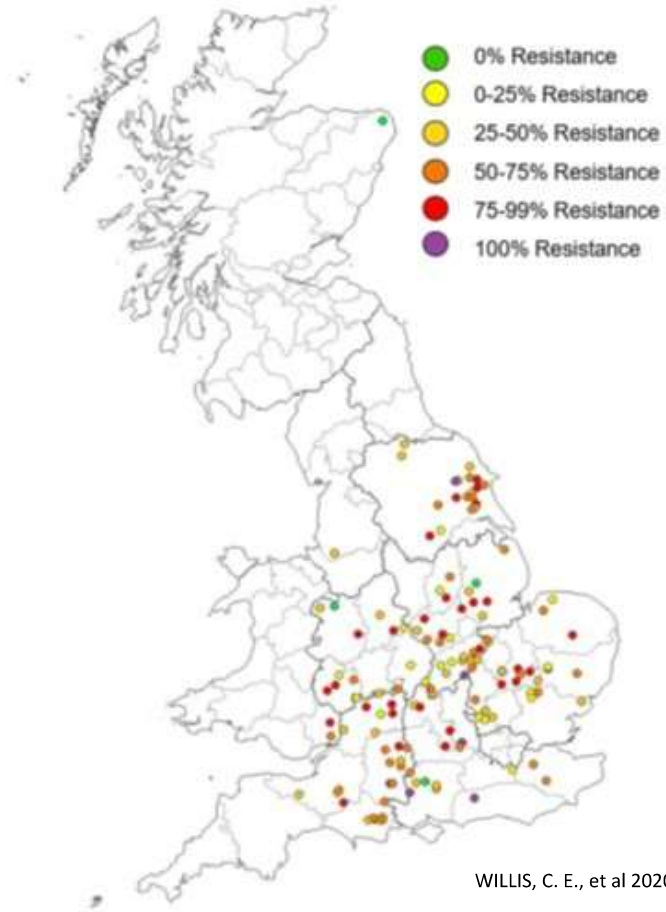
Speaker: Duncan Coston, ADAS



The public enemy no 1* - *Psylliodes chrysocephala*



ORTEGA-RAMOS, P. A., et al 2021 *GCB Bioenergy*, 0, 1-20.



WILLIS, C. E., et al 2020. *Crop Protection*, 138, 105316.



* Although totally my favourite!

IPM Strategies for Controlling Cabbage Stem Flea Beetle: An update on 4 years of field trials

- Adult monitoring
- In lab studies on CSFB development
- 16 field trial
 - Drilling date
 - Companion planting
 - Organic amendments (2-trials)
 - Stubble management (2-trials)
 - Cultivation (2-trials)
 - Plant growth regulator (2- trials)
 - Companion planting
 - Seed rate
 - Cultivation method, companion and autumn vigour
 - Rolling, seed rate and companion planting
 - Seed rate and companion planting
 - Companion planting/ trap crops and flower margins



Drilling date is king!

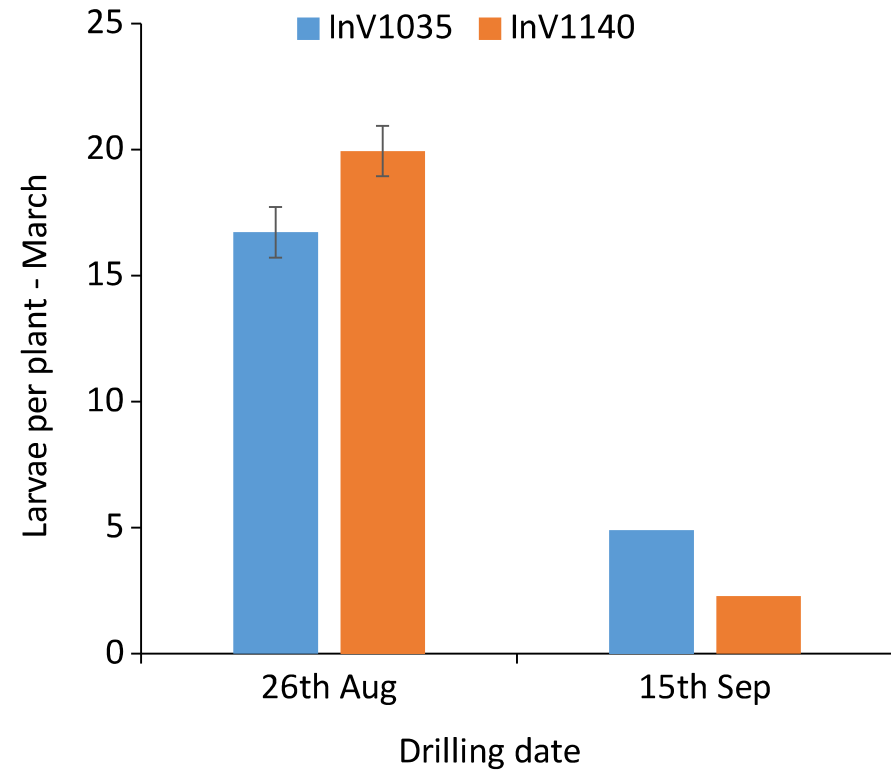
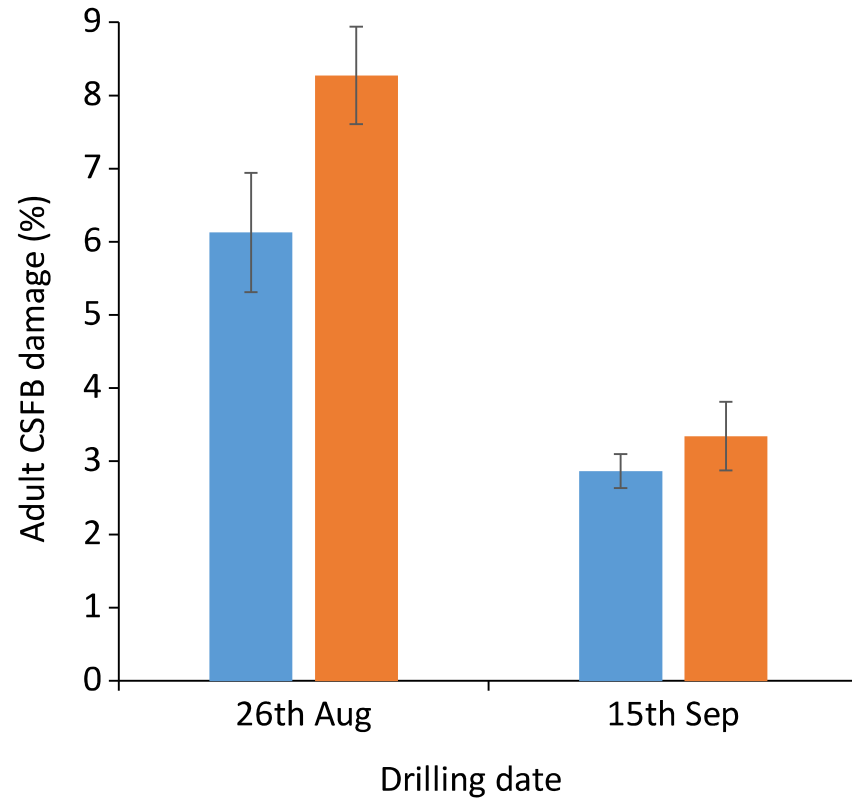


- Each drill date in separate field
- Disc/no disc
- 2 OSR varieties

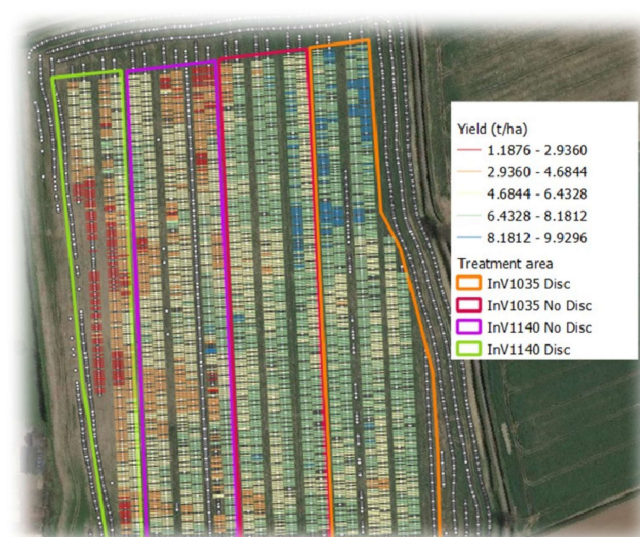
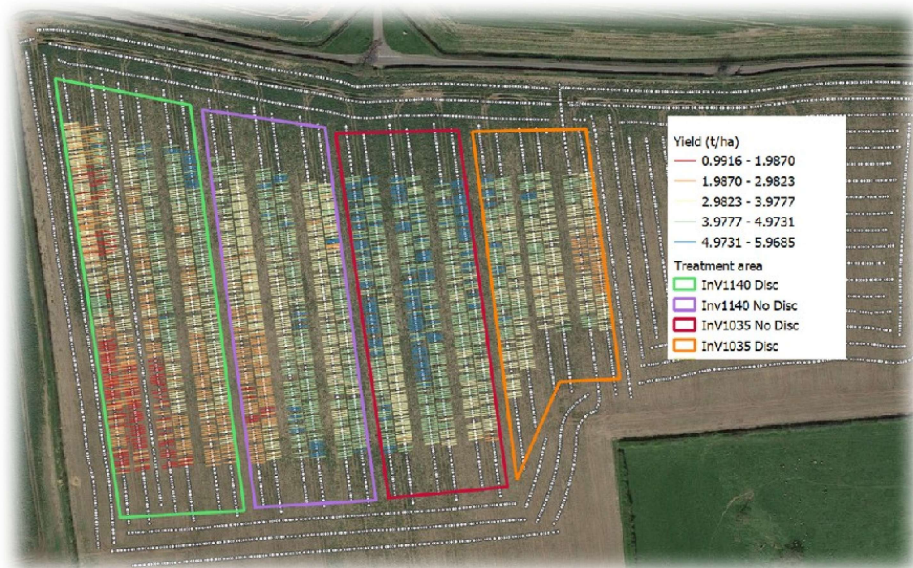
| Variety | Autumn Vigour | Spring Vigour |
|---------|---------------|---------------|
| InV1035 | Strong | Good |
| InV1140 | Good | Strong |

Located: near Telford, West Midlands

CSFB and altering drilling date.

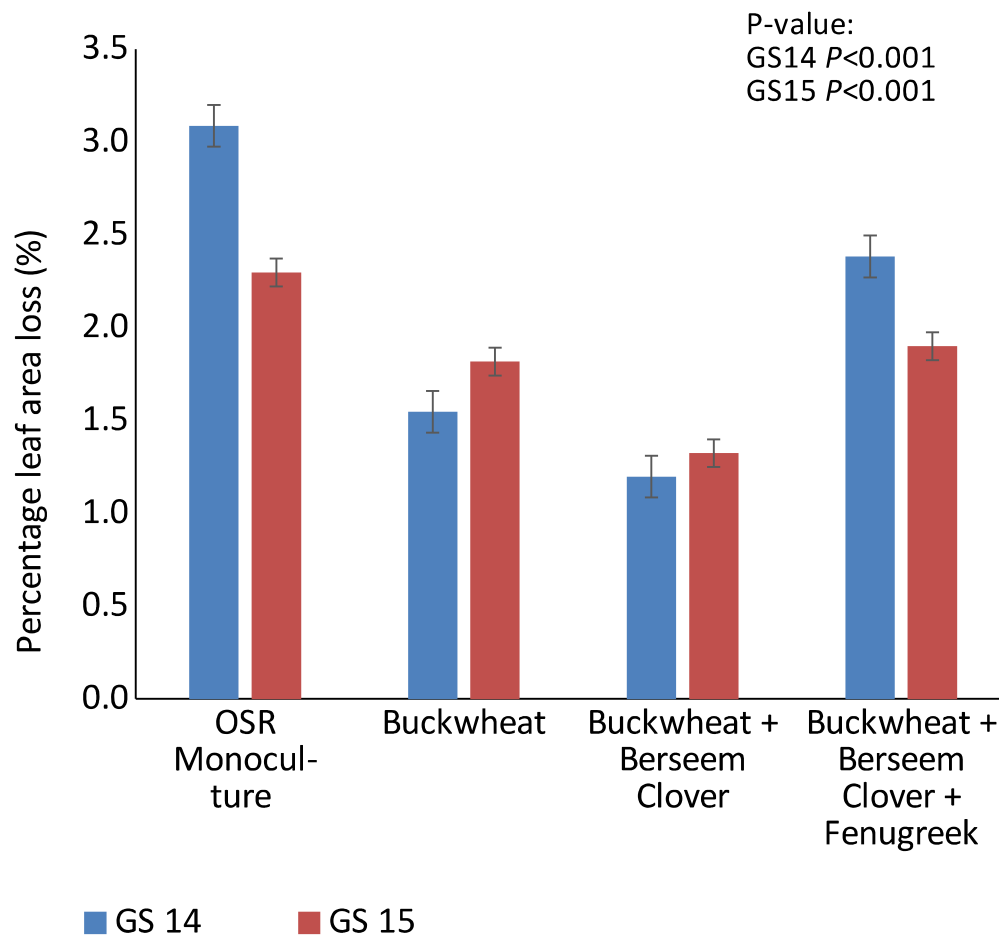
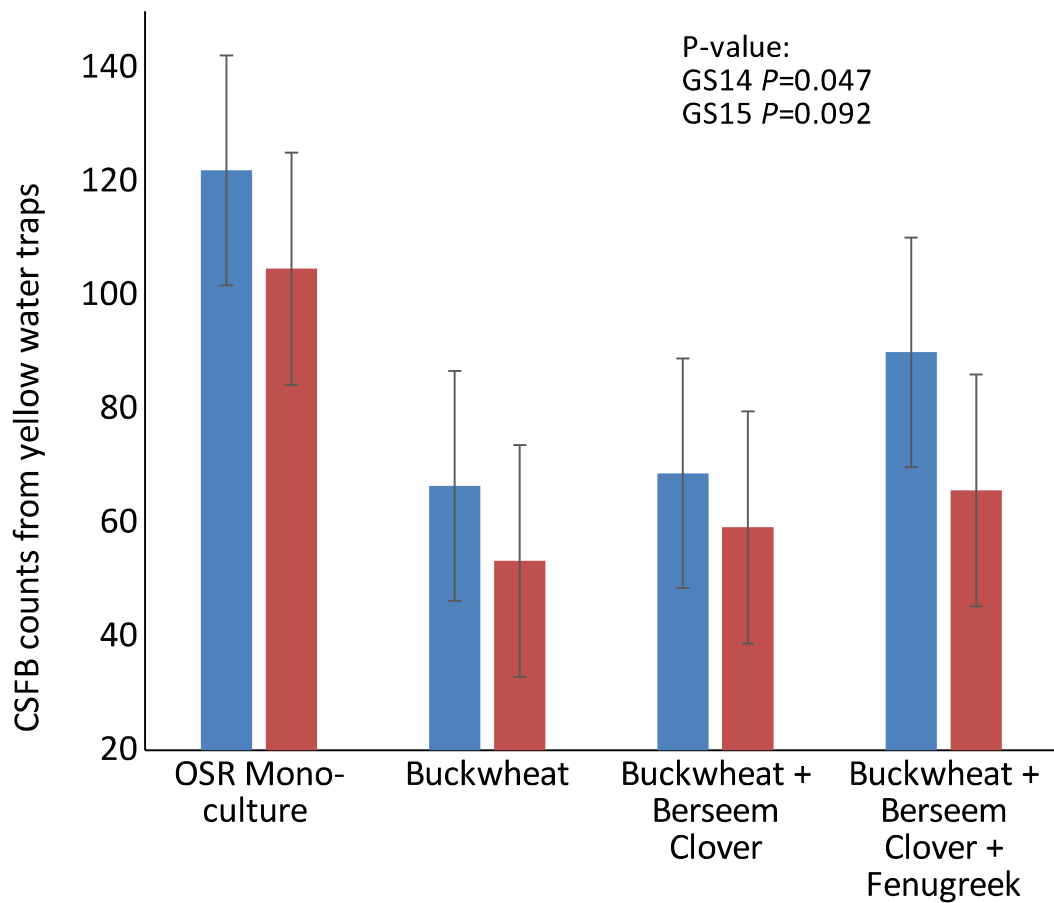


Drilling data and yield

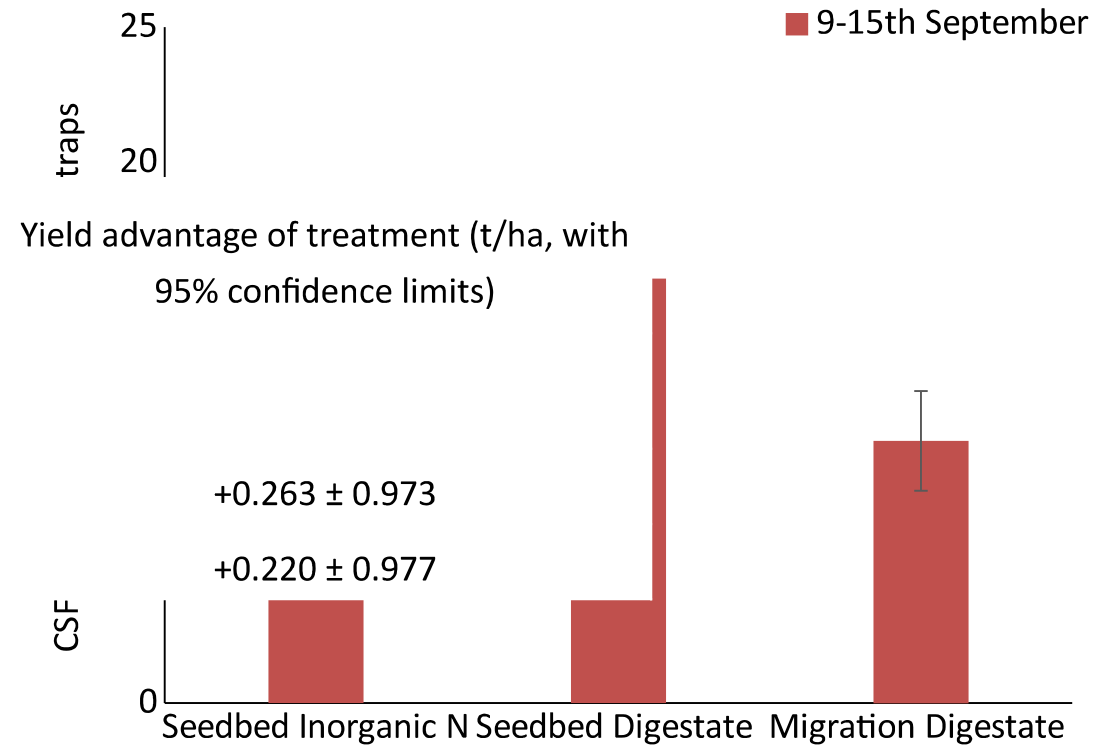
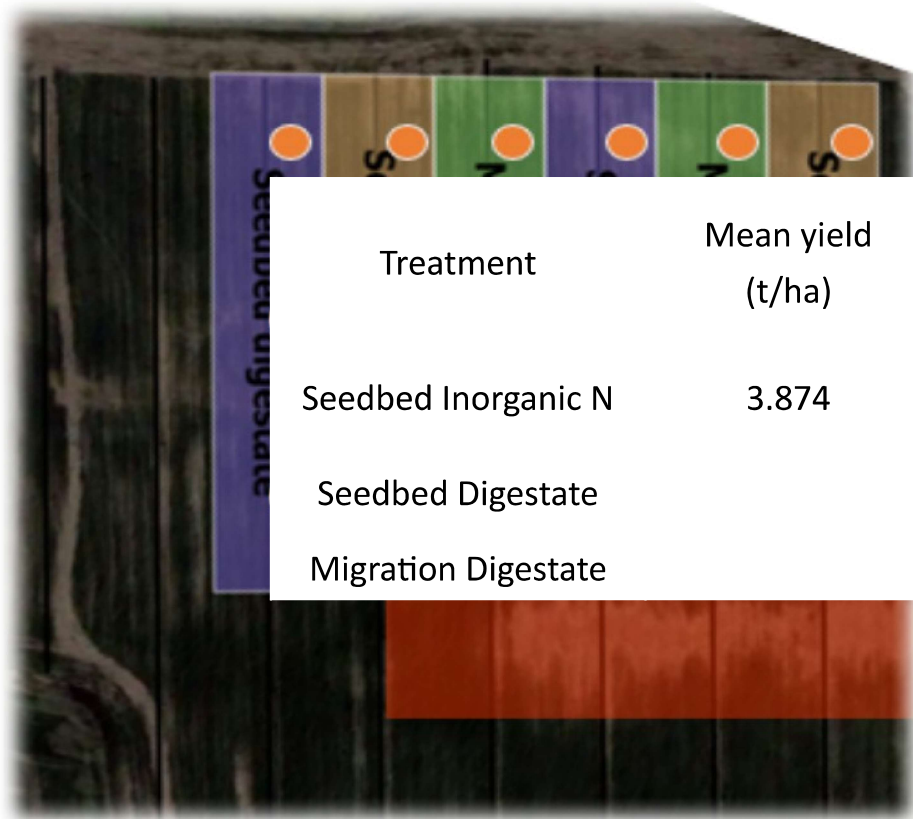


| Treatment | Mean yield (t/ha) | Normalized to average 5 year | Treatment | Mean yield (t/ha) | Normalized to average 5 year |
|-----------------|-------------------|------------------------------|-----------------|-------------------|------------------------------|
| 26/08/20 | | | 15/09/20 | | |
| Early Drill | 3.71 | 3.79 | Late Drill | 6.09 | 5.53 |

Companion planting



Migration digestate applications?



Located near Middlesborough, Teesside OSR drilled: 23/08/2021

Take home messages

- A range of alternative methods show promise to reduce the risk from CSFB to WOSR – companion planting showing consistent effect over years.
- CSFB migration show some consistency over the time of this project - Drilling date is King!
- Control strategies should be based on the drilling date
- Likely that combining multiple cultural control strategies provides better protection.
- Alternative IPM options to be investigated.... Watch this space...
- Want to get involved in the next steps for flea beetle control?

Acknowledgements



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