



Watkins and the slug sleuths

20th WGIN Stakeholders' meeting February 6th 2023









British On-Farm Innovation Network

- Launched in September 2020
- Represents farmers who carry out on-farm trials
- Particular emphasis on pre-commercial tech
- Current membership 330+, 65% of whom are farmers





Farmer-led research

- For the farmer with a curious mind
- A spray miss is never a mistake, it's a learning opportunity
- The role of science
- Push the boundaries, co-create the tools of 4AR





What BOFIN doesn't do

- Surveys
- Market testing



What about plant-breeding?

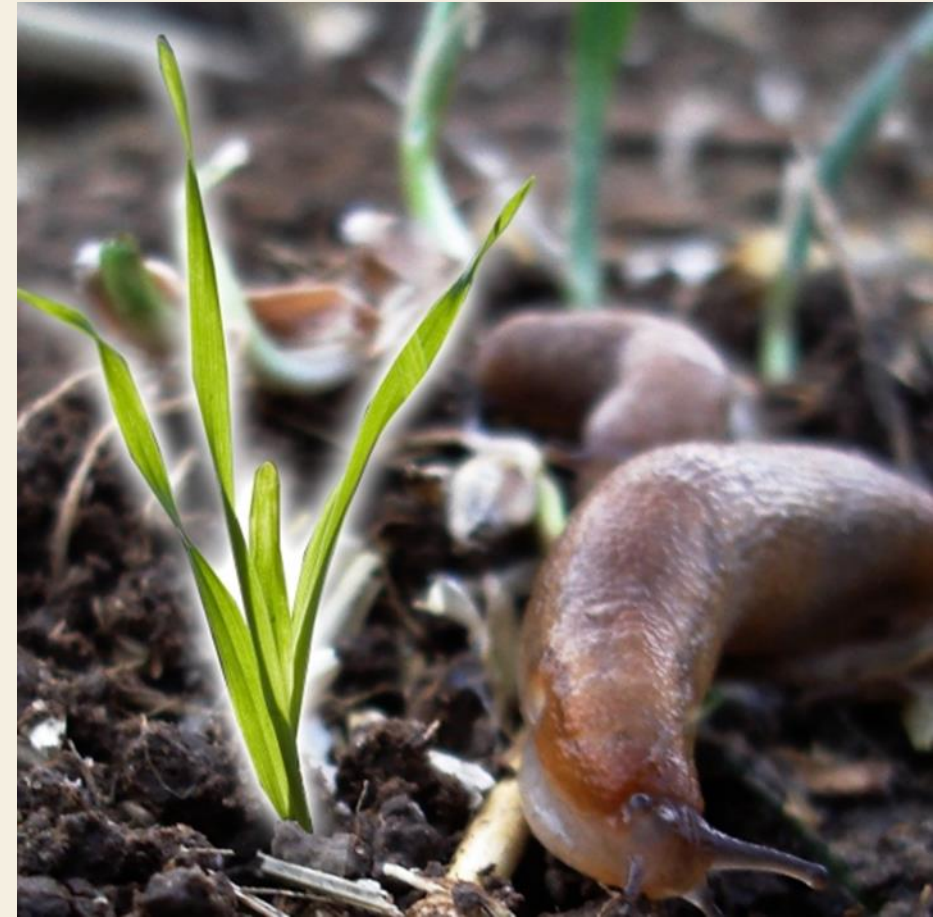
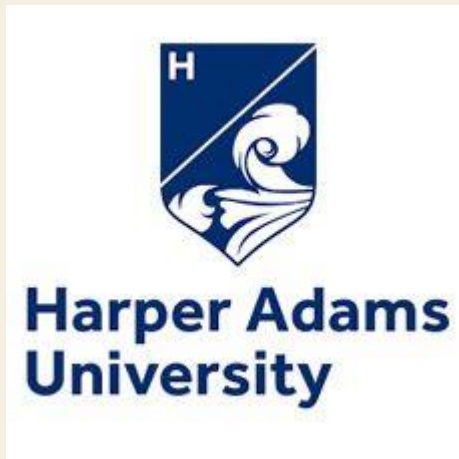
- The time-lag issue
- Multiplying up seed for an on-farm trial
- BYDV-resistant wheat
- New technologies
- Plant-breeding captures farmer interest
- Farming Innovation Pathways – collaborative bids







Slug Resistant Wheat



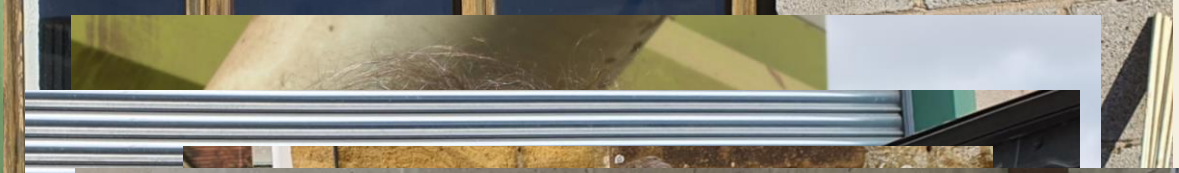


John Blackman



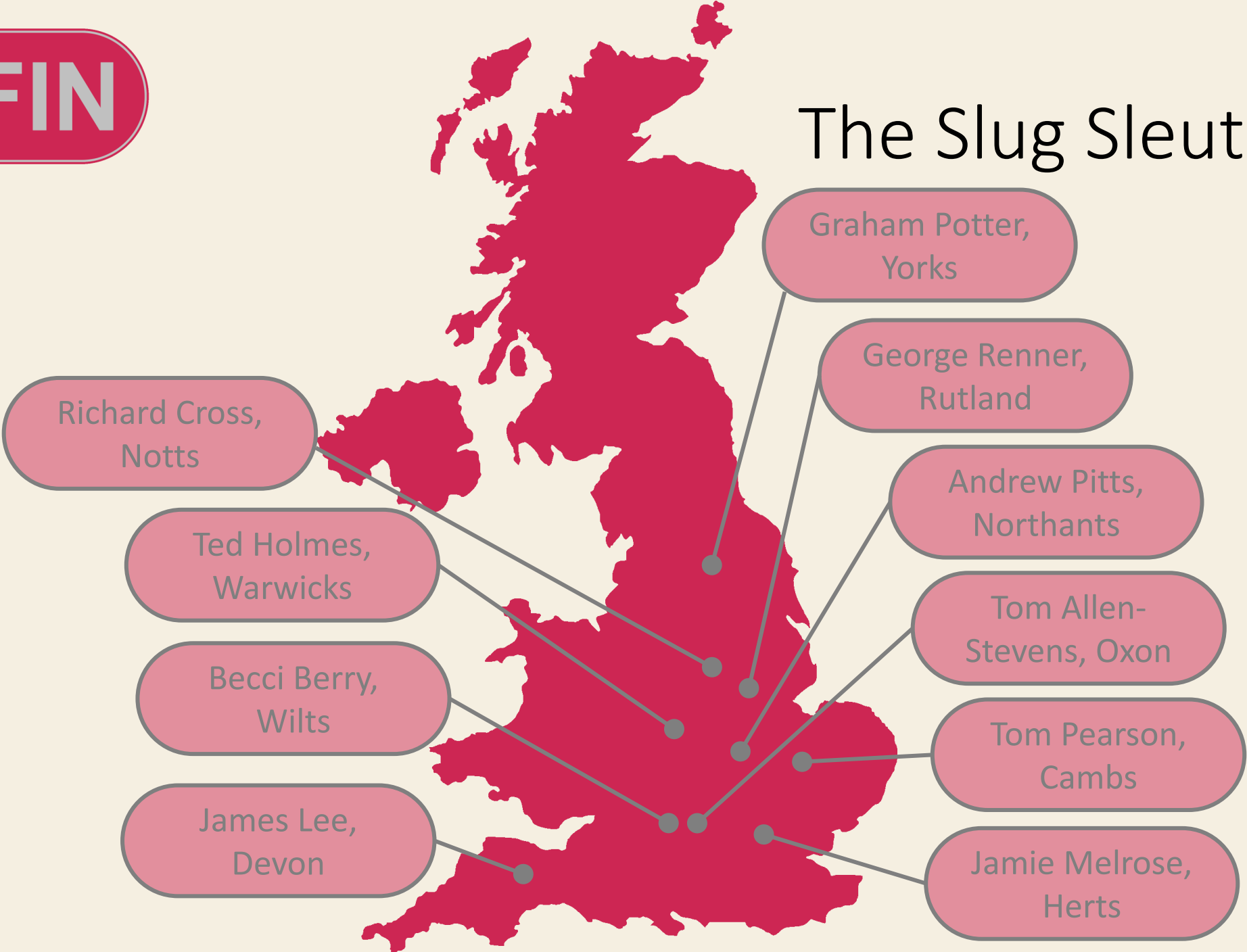


g Sleuths

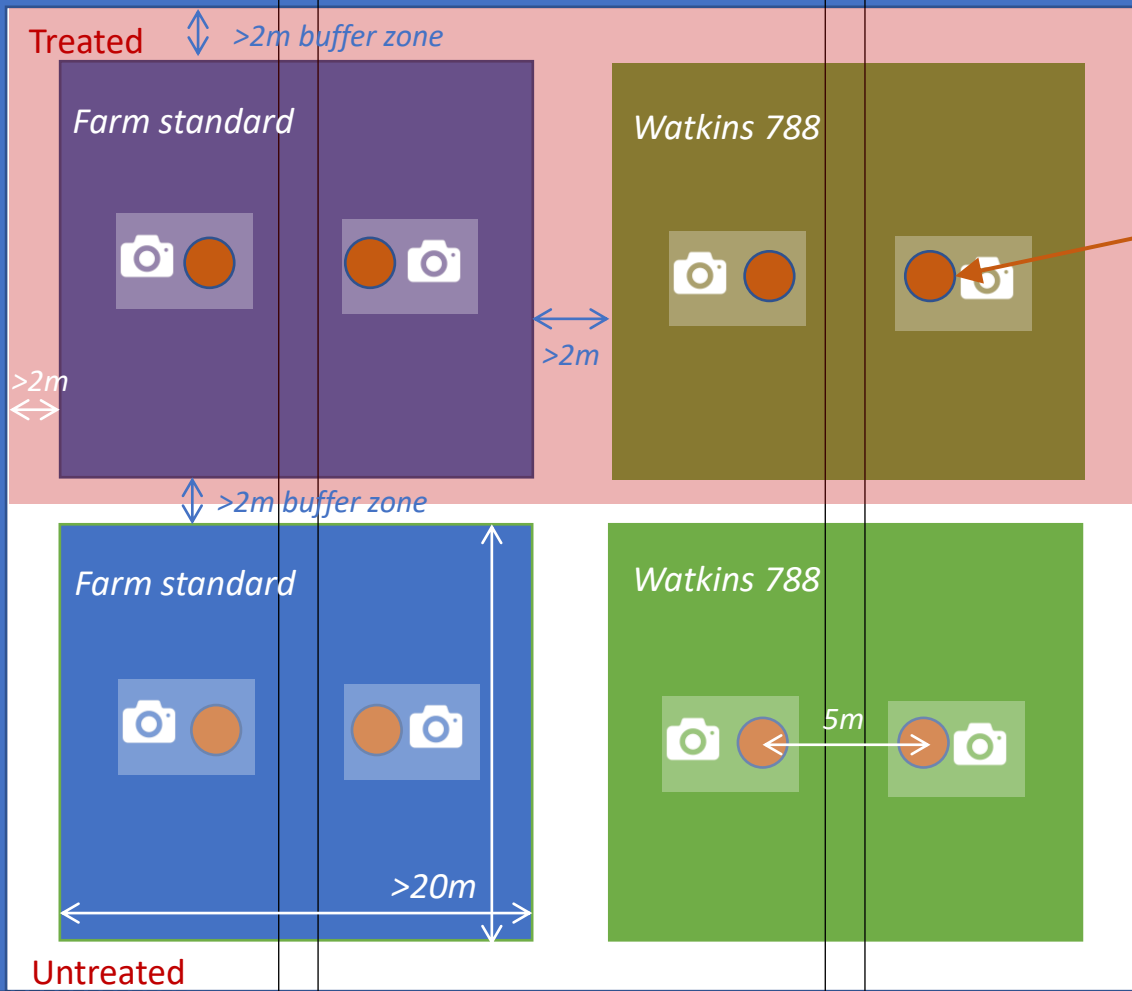




The Slug Sleuths



Farm standard



W1T

**18cm trap
Marked up
as follows:**

Watkins 788

Treated – W1T & W2T

Untreated – W1X & W2X

Farm standard

Treated – F1T & F2T

Untreated – F1X & F2X

Headland

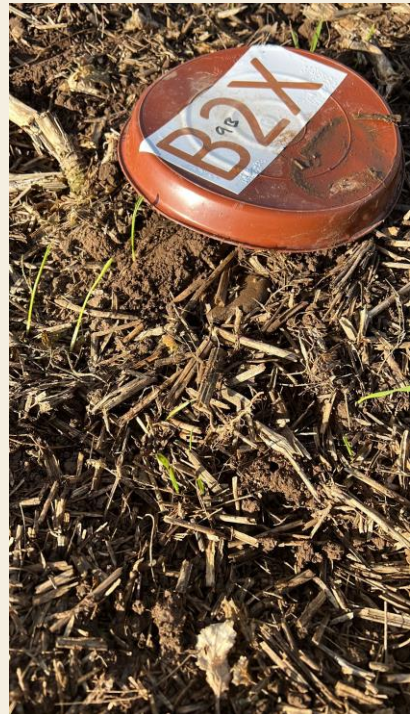
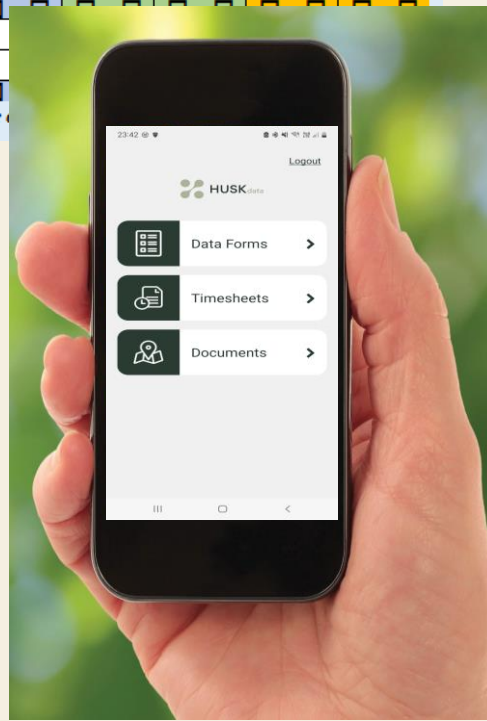


Slug monitoring

Autumn monitoring
(x2 per week up to tillering)

Date + time

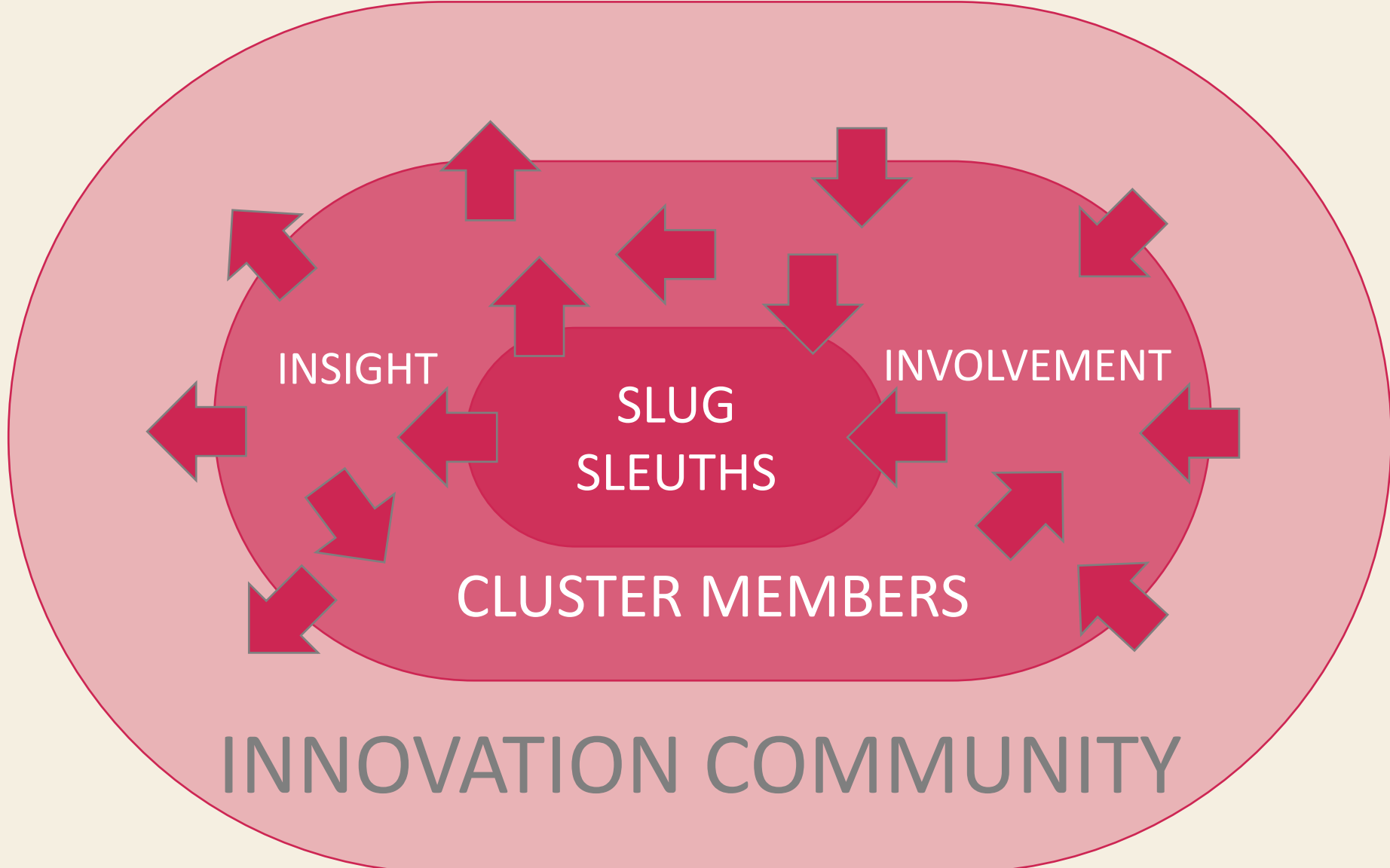
		Farm standard		Watkins 788				Blackman					
		Treated	Untreated	Treated	Untreated	Treated	Untreated	Treated	Untreated				
		F1T	F2T	F1X	F2X	W1T	W2T	W1X	W2X	B1T	B2T	B1X	B2X
1.	Crop growth*												
	Slug count												
	Photo (✓)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Crop growth*												
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3.	Crop growth*												
	Slug count												
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4.	Crop growth*												
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5.	Crop growth*												
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	Crop growth*												
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	Crop growth*												
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re: 1=write off; 10 = Absolute



Knowledge Cluster





New research

Harvest weed seed control



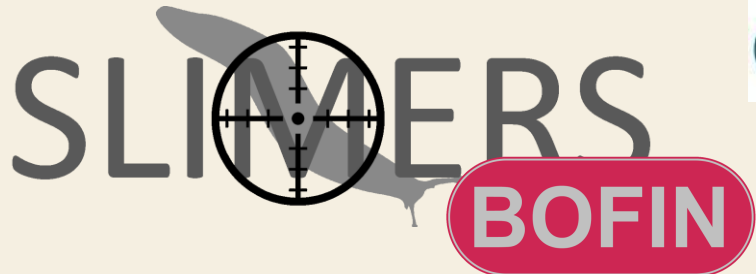
Slug Resistant Wheat



Nitrogen Climate Smart



Soil Fungal Communities

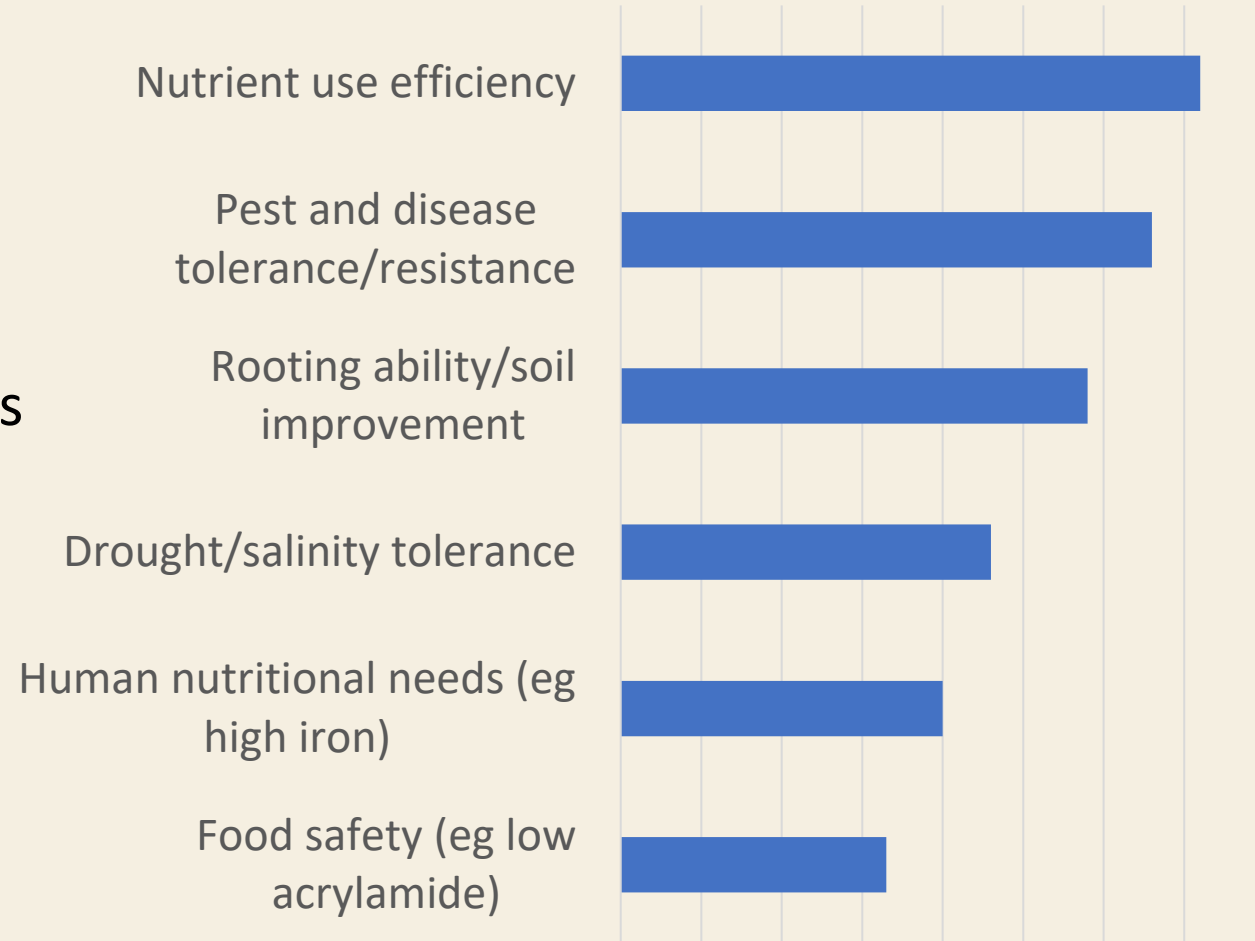




Where does this go?

- Developing Sustainable Wheats
- Demand-side taskforce
- The technologies that excite
 - Rooting and mycorrhizal interactions
 - Pest resistance – but disease?
 - Nutrient-use efficiency
 - Biological interactions
 - RNA interference
- Resilient crop management systems

Priority for trait discovery



BOFIN members 2023 (n=76)



Thank you



tom@bofin.org.uk

www.bofin.org.uk



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Bofin – British On-Farm Innovation Network

+44 7771 518475

