



DSW
DELIVERING
SUSTAINABLE
WHEAT

History



WISP

Wheat Institute Strategic Programme
2012 - 2017



DSW

Delivering Sustainable Wheat
2023 - 2028



DFW

Designing Future Wheat
2017 - 2023

The Partners



The Partners





Aim

To address critical challenges in wheat health, yield, nutritional value and production, to safeguard the future of this vital crop.



Key Research Questions



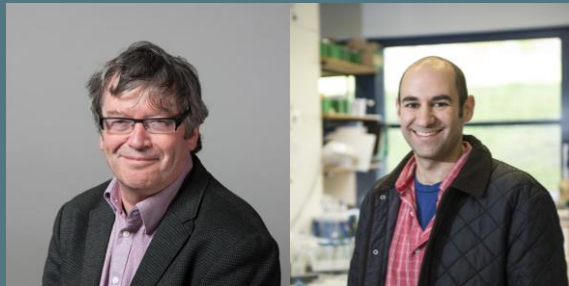
- Increased yield with the same nutrient input
- Adaptation to changing agricultural systems
- Integrated pest management
- Increased wheat nutrient density
- FAIR Data

Sustainable Wheat Production

Work Package Leads



Simon Griffiths
Programme Lead



Malcolm Hawkesford
Cristobal Uauy

Work Package 1
Targeted sustainability-
trait discovery



Kim Hammond **Kosack**
Paul Nicholson

Work Package 2
Delivering resilience to
biotic stress



Cathrina Edwards
Fred Warren

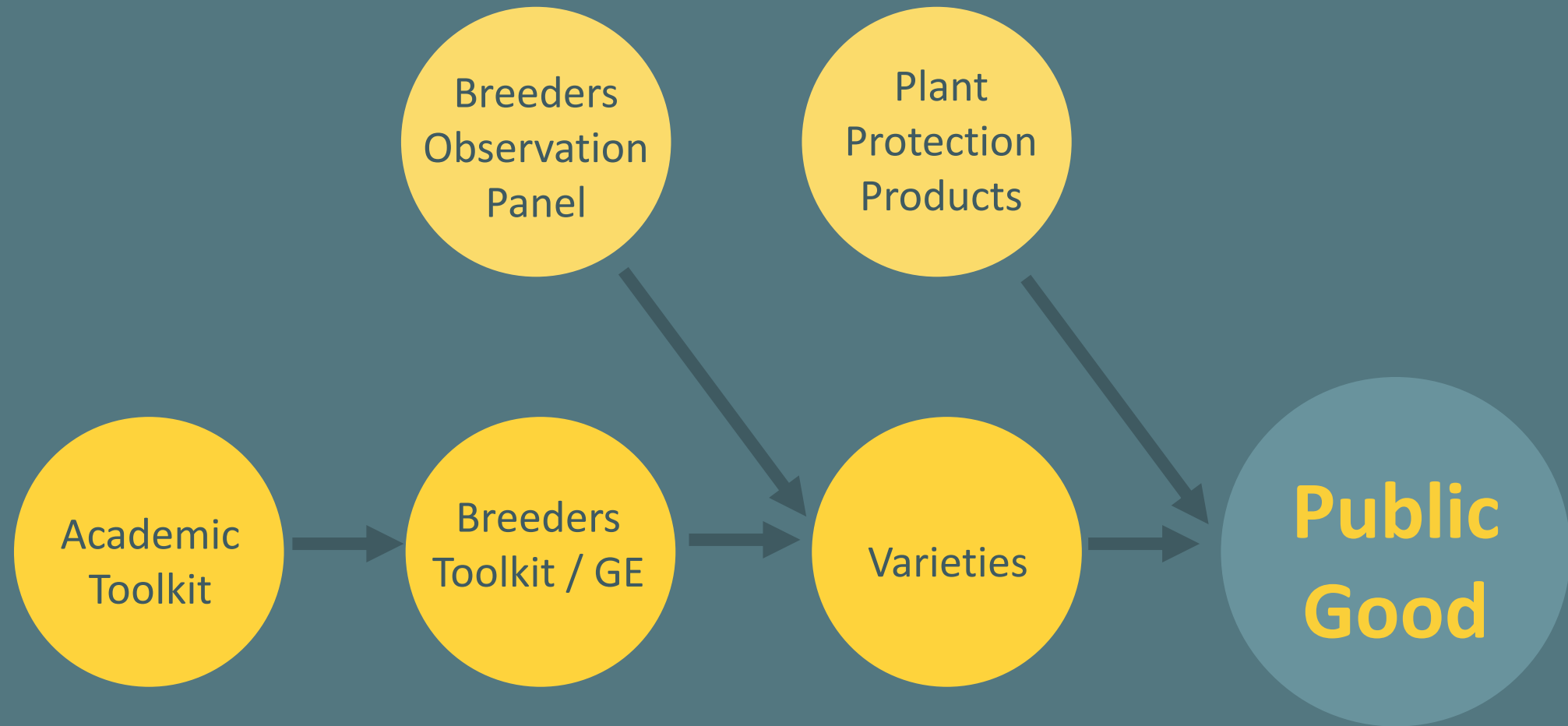
Work Package 3
Nutritional traits



Richard Leggett
Diane Saunders

Work Package 4
Sustainable data
frameworks for wheat

Delivering genetics for new varieties



Research Highlights

WP1: First direct drill trials established at Rothamsted.

WP2: New wheat blast resistance gene identified.

WP3: Major field trial assessing mineral content of the Watkins collection completed.

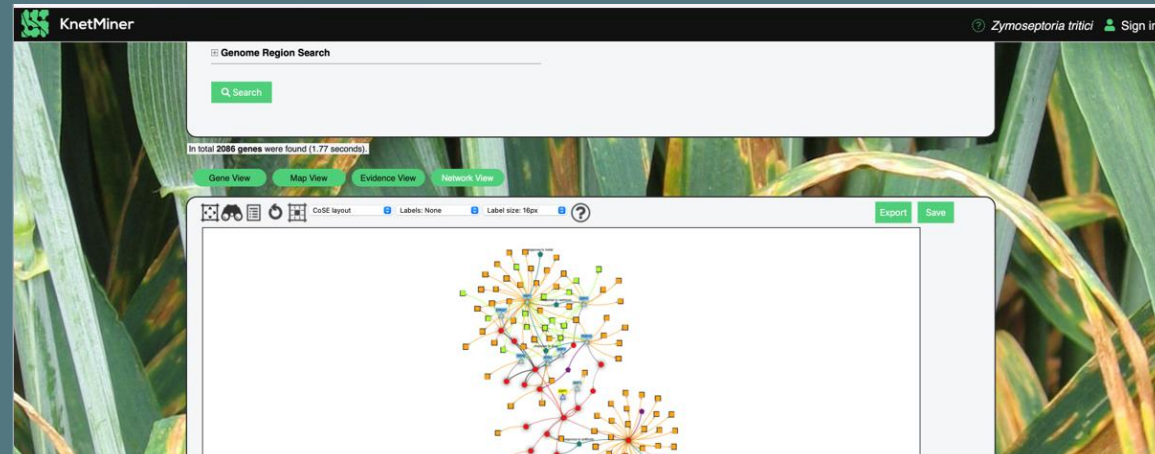
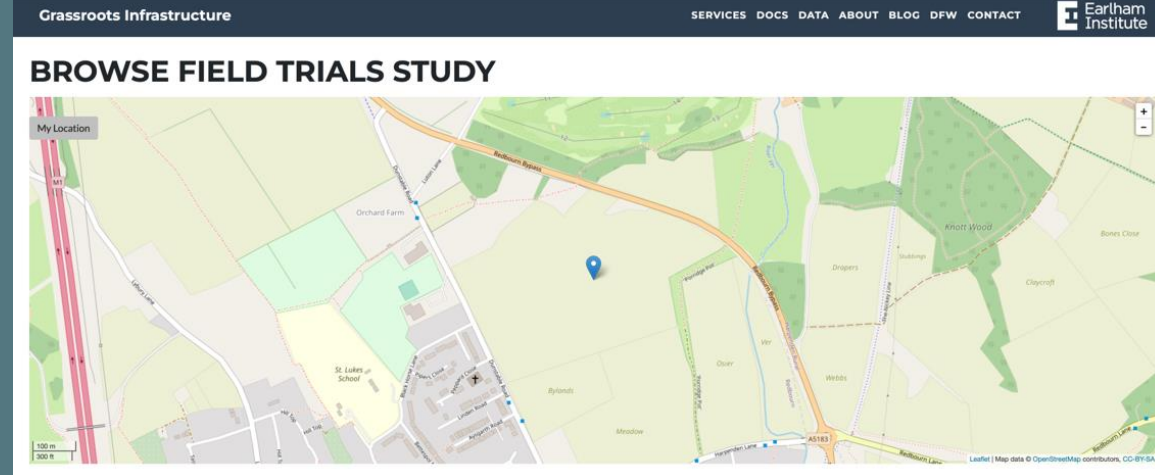
WP4: Generation of a wheat pan-transcriptome with *de novo* annotation.



Societal and Economic Impact

Data

Deliver an accessible and open toolkit of richly described data, data processing tools and user-facing web services.



Societal and Economic Impact

Training

Strengthen the wheat workforce for the future by providing training and workshops.



Thank you

