# ARABLE DASHBOARD

October 2018 - September 2019

**BUSINESSES REGISTERED** with Farming Connect are from the Arable sector.

% of activity relevant to the Arable sector:

20% **ARABLE** ACTIVITY



#### **Demonstration Network**

#### **Under-sowing maize at Pant Farm Focus Site**

Soil run-off is a significant problem with maize due to the bare stubbles being left post harvest. Pant Farm investigated whether drilling grass between the rows of maize would help alleviate this problem and provide a potential source of grazing during the late autumn.





Grass (a mixture of IRG and PRG) was sown on 30 June 2018 into a maize crop that stood 50cm high.

Unfortunately, germination and establishment of the grass was severely affected by the dry conditions during summer 2018, and there was not enough grass to monitor and graze. Further work on this project would be useful to assess its potential in a more favourable growing season.

# **Embracing technology to reduce cost and inputs**

A project focusing on using cutting edge technology and its uses in precision farming to drive efficiency and production in a grass and arable system was undertaken on Plas Farm on Anglesey.

The project involved mapping 40 hectares of mixed arable and grassland with a scanner that measures the electrical conductivity of the soil at depths of 30cm and 90cm to create a map showing the variation of the soils within a field. The field was then split into management zones according to soil variation, where inputs were applied variably in each zone, to achieve optimum yields for each field.

The project also included the use of the N-min test on fields sown with cereal crops and forage maize. This allowed Arwyn, the host farmer, to accurately calculate how much inorganic nitrogen was required throughout the growing season for individual fields.

# **Outcomes:**

The project is ongoing but nutrient and texture results have allowed Arwyn to apply nutrients at variable rates using GPS software to achieve optimum yields and maximum efficiency.

The variability within a field was quite surprising, despite fertilisers being applied uniformly in the past.



A reduction in purchased inorganic nitrogen achieved a saving of £72.13/Ha which included the cost of the N-min test.



The use of this new technology allows crops to be grown as cost effectively as possible, allowing a further reduction to feed costs.



#### **EIP WALES**

Potato blight control using plant extracts



**FARMING** 

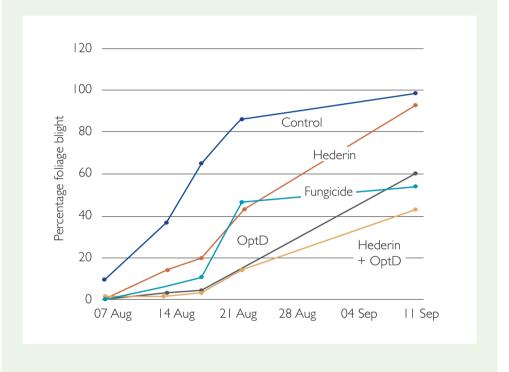
**FFERMIO** 

connect cyswllt

This project assessed the effectiveness of a new biopesticide made from an extract

from ivy called Hederin. In addition, another plant stimulant was used called OptD to assess whether it also has a role in blight control. Field trials were undertaken during 2017 and 2018, and the project came to an end during 2019.

The results of the project showed that on its own, the ivy extract did not give comparable control to standard fungicides in conventional systems and copper in organic systems. However, when combined with OptD the control was much greater, and this may mean it has a role to play in integrated disease management programmes.



#### An organic ancient cereal supply chain



There is an increasing demand from artisan bakers who are interested in ancient grain varieties for making bread. They reportedly have richer flavours and there is also potential to grow them on less fertile soils. This project is investigating the agronomy and economic

potential of these varieties including whether under-sowing them with legumes can help with issues of fertility and lodging.

The first crops were harvested in September 2019 and results are being collated prior to publishing.

# **KE Hub**

The following technical articles have been produced by the KE Hub:



BIODEGRADABLE PLASTICS FOR AGRICULTURE



WAR OF THE WEEDS: THE RISE OF THE ROBOTS



CUTYOUR LOSSES: MAXIMISING THE BENEFITS OF A NUTRIENT MANAGEMENT PLAN

The following factsheets have been produced by the KE Hub:



DIGESTATE FROM GRASS



BRACKEN CONTROL



DOCK CONTROL



EARTHWORMS AND SOIL HEALTH

#### **Discussion Groups**



#### **Strategic Awareness Events**

#### 116 Events Held

Key topics included:









**WELSH GOVERNMENT CONSULTATION – FUTURE** LAND MANAGEMENT SUPPORT



\*Strategic Awareness Event themes are often cross-sectoral that tend to attract farmers from all sectors.

#### **Surgeries**

## 129 Surgeries Held

Key topics included:



**PLANNING SURGERIES** 

**MARKETING AND DIVERSIFICATION SURGERIES** 

**FINANCIAL MANAGEMENT SURGERIES** 

DIGITAL BUSINESS **REVIEW SURGERIES**  SUCCESSION

An Arable business attended one of our Marketing and Diversification surgeries, looking to diversify the farm and put in a Malt Plant. The business was keen to gain all the knowledge it could on what was possible before starting its diversification project.

# **Mentoring**























Field scale vegetables 2 mentors

# Agrisgôp

MEETINGS HAVE BEEN RELATED TO THE ARABLE SECTOR

Some examples of group themes:





360 degree farming: food, environment and people



#### **V**enture



## **Training**

There have been four application windows between October 2018 and September 2019 with **808** instances of training delivered during this period.

Of this number, 64 instances were from businesses that include Arable as a primary or sub-sector.







# E-learning

Some of the e-learning courses completed within this period relating to the Arable sector:







You Tube

For more information on e-learning, please visit the website.

# Some key highlights on our Website and Social Media platforms...





Soil mapping techniques has been under the spotlight at one of our Focus sites – Dudwell, Camrose, Haverfordwest. Take a look at this video to establish how this aims to improve the financial and environmental performance of the business.



Click here or the TV screen to watch the video.

People reached: 2,648 Video views: 848

Likes, comments & shares: 10

