DISCOVER INNOVATION

March - May 2017

RAG Status

■ Red: Behind with target ■ Amber: Nearly achieved target ■ Green: Target on track















Knowledge Exchange (KE) Hub ■

Key outputs during the quarter:





Technical articles published



THE IMPORTANCE OF BIODIVERSITY AND WILDLIFE ON FARMLAND



THE IMPACT OF CLIMATE CHANGE ON GRASS-BASED AGRICULTURAL SYSTEMS



CLIMATE CHANGE IN GRASS-BASED AGRICULTURAL SYSTEMS: APPROACHES FOR ADAPTATION



CLIMATE CHANGE IN GRASS-BASED AGRICULTURAL SYSTEMS: APPROACHES FOR MITIGATION



TWINNING IN SUCKLER HERDS -COULD IT BE A USEFUL SYSTEM FOR INCREASING PROFITABILITY



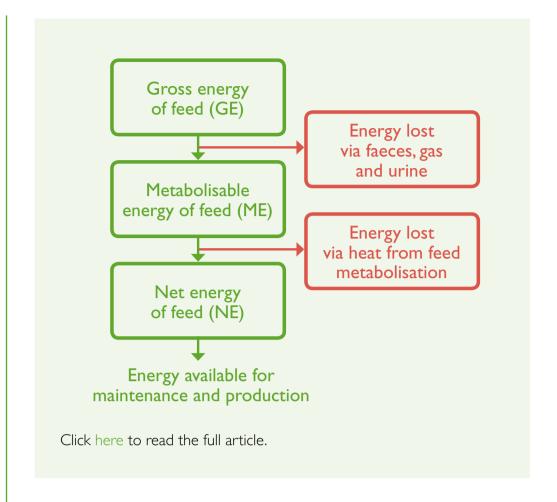
FEED EFFICIENCY IN RUMINANTS: IMPACTS ON PRODUCTION AND THE ENVIRONMENT

- Attendance at British Society of Animal Science Annual Meeting
- Review of project proposals for Demonstration Network farm projects

Feed efficiency in ruminants

Feed efficiency in ruminants is an important current area of research with much interest focused on breeding from animals that are the most feed efficient to reduce the inputs needed to produce a kilogramme of meat or milk. The knock-on benefits of this are the production of less waste products, particularly those which are damaging to the environment. Researchers at IBERS, Aberystwyth University have discovered that there is huge variation between the microbial populations of ruminants with some being able to convert feed far more effectively than others. Being able to identify which animals are the best feed converters without requiring complex scientific tests is the next stage of the research. Scientists are looking at phenotypic measurements (i.e. measurements you can observe) such as liveweight gain or feeding behaviour to see if there are any patterns which will allow measurements to be recoded on farm enabling farmers to make selection decisions based on feed efficiency.



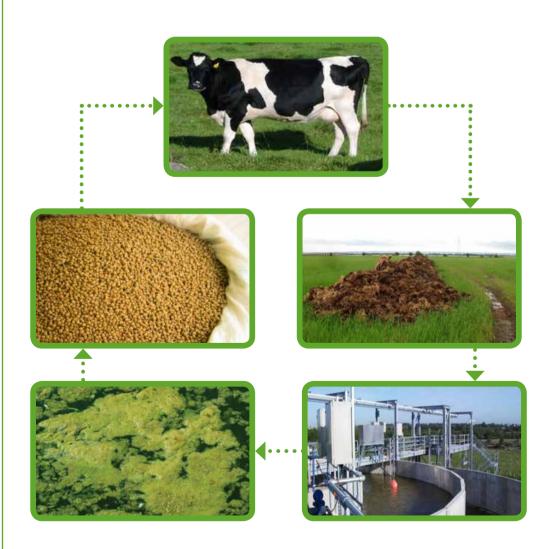


Circular economy solutions for agricultural waste

The burden of organic waste production is a major problem for UK agriculture. However, by-products, such as food waste or slurry, can be used for energy generation and may contain valuable resources such as nutrients, which can be recycled.

The circular economy is a concept whereby waste burdens are managed and resources are re-claimed to extract the maximum benefit or value from these waste materials.

Bio-recycling can allow value to be extracted from organic waste products, through organisms such as algae or invertebrates, which in turn can be used as a protein source for livestock feed.



European Innovation Partnership













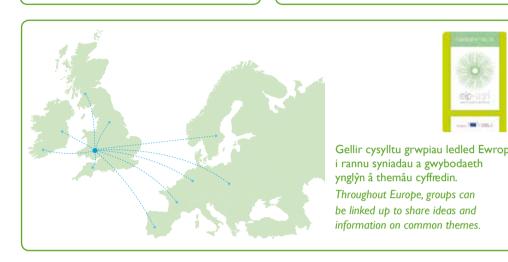


Gall gweithio'n unigol ei gwneud hi'n anodd i ganfod datrysiadau. Working in isolation can make finding solutions difficult.



Mae EIP Amaeth Cymru yn cyllido grwpiau o unigolion sydd yn edrych am ddatrysiadau arloesol i sialensiau cyffredin.

EIP Agri Wales funds groups of individuals seeking innovative solutions to similar challenges.



MARCH	APRIL	MAY
2 projects referred to Welsh Government 3 literature reviews completed by KE Hub	2 literature reviews completed by KE Hub	Discussions on potential projects with several groups I literature review completed by KE Hub

Agri Lab

The Agri Lab is considering a wide range of Precision Agriculture tools for the industry including the horticulture sector. A wide range of exhibits will feature at the Royal Welsh show.

The Farming Connect Agri-Lab members recently identified their 'Top 5 Innovations' for Welsh farmers and foresters to watch out for. On the list is 'Vertical Farming,' a high-tech efficient growing system based on the latest hydroponic technology.



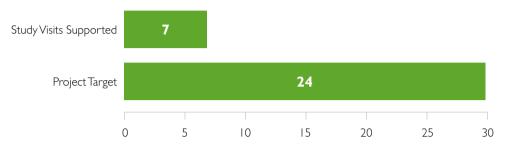
As part of the preparations for the 2017 exhibition at the Royal Welsh Show visits have been undertaken to Harper Adams University to view their work on precision farming.

The AgriLab team had a positive meeting with the RWAS Youth Forum and it was agreed to appoint an Innovation Steward role for one of its young members. They will investigate innovation during the show week and highlight what is up and coming in the industry.

Study Visits

Spending time visiting other businesses can be a valuable way to discover improved methods of working, see best practice in action and bring home new ideas to innovate the enterprise.

Groups of eligible farmers and foresters can apply for a maximum of £3,000 per group to fund a study visit within the UK for a period of up to 4 days.



Clwyd NFU — Ayrshire & Isle of Arran

7 – 10 May



"We visited Gledpark Venison to learn about the day to day running of a deer farm. As a group we are generally beef and sheep producers as well as dairy farmers and arable growers. Little diversification is practiced within the group so this visit to Scotland gave us an insight as to what could be developed in North Wales, rather than the normal or traditional types of farming practiced by the group at present"

