



Control of docks through electrophysical destruction

THE ISSUE:

There is increasing interest within the agricultural sector in moving away from chemical methods of weed control.

PROJECT AIM:

To investigate how electrophysical weeding can reduce our dependency on herbicides when controlling docks. This technique will be of interest to organic farmers where dock control can be a significant challenge.

THE PROJECT SITES:

Two dairy farms in Raglan, Monmouthshire: Argoed Farm and Llwyn Celyn.

PROJECT TIMEFRAME: January 2018 - November 2021

The results from the first growing season show electrical

treatment has been effective at killing the docks, however, it was found that repeated treatments are needed to be as effective as herbicide. More tests will follow in 2021.

How does it work?

The RootWave Pro electrical weeder sends a high voltage current through the plant which boils it inside out from the root upwards. For the small trial plots in the project a hand-held lance with a 20m cable powered by a petrol generator is being used. Each dock plant in a plot is touched with the charged lance for approximately 5-10 seconds before moving on to the next plant.

"It is early days for this technology and as with anything new, developments will lead to greater effectiveness and a reduction in price. This unique method of dock control has great potential for both organic and conventional farmers. The technology is scalable and larger tractor based electrical weeders could be used in a variety of different farm situations" says Will John, ADAS, the Innovation Broker for the project.









