



**EIPWALES**

Cydweithio er ffyniant gwledig  
Collaborating for rural success



*menter*  
a busnes

# Control of docks through electrical weeding

## THE ISSUE:

There is increasing interest within the agricultural sector in moving away from chemical methods of weed control or finding alternative methods that can be integrated with chemicals as an integrated pest management (IPM) strategy.

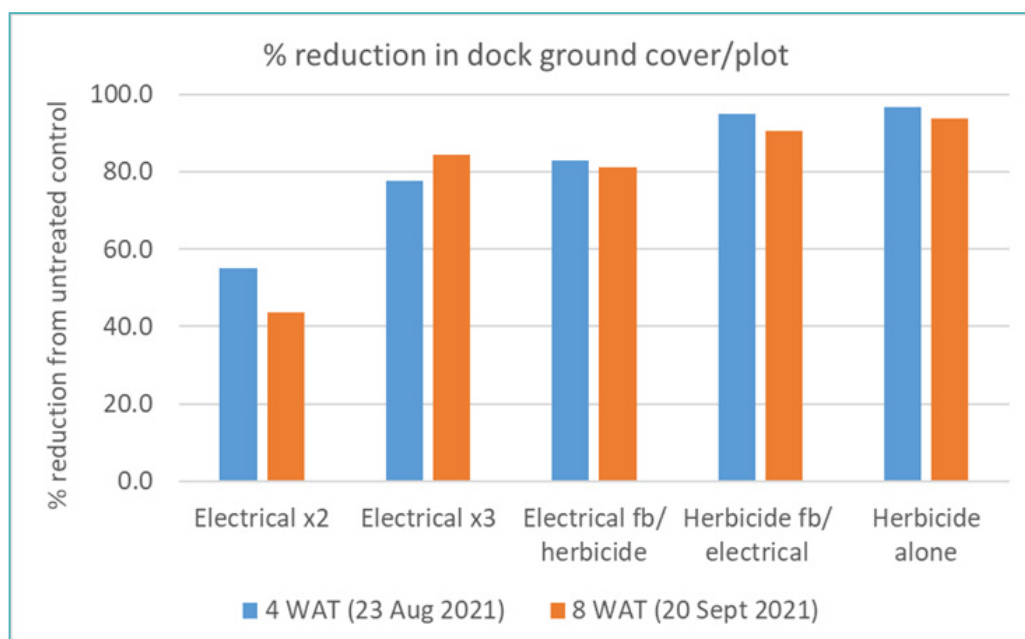
## PROJECT AIM:

To trial the use of electrical weeding on two dairy farms to investigate whether it can reduce the dependency on herbicides when controlling docks.

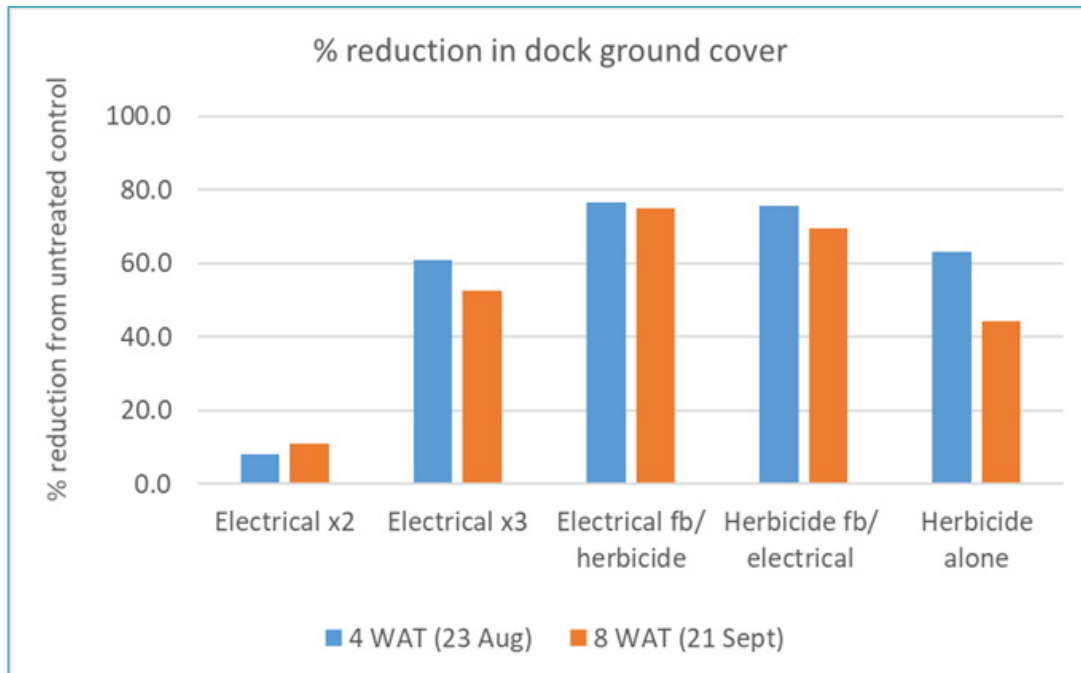
## How does it work?

The RootWave Pro electrical weeder system was used in these trials, which sends a high voltage current through the plant effectively boiling all plant cells. For the small trial plots in the project a hand-held lance with a 20m cable powered by a petrol generator was used, with a probe that touched individual dock plants.

## RESULTS



The mean percentage reduction from the untreated control for % dock ground cover per plot at farm 1 for the final two assessment timings in 2021, at four and eight weeks after treatments (WAT). (fb= followed by)



The mean % reduction from the untreated control for % dock ground cover at farm 2 for the final two assessment timings in 2021, at four and eight weeks after treatments (WAT).

Trial results over two seasons have shown that electrically treating dock plants at three treatment timings is very effective and can be equivalent to a herbicide application alone. Electrical control is extremely promising as an additional tool for dock management in grassland, that would benefit organic farmers or those seeking to reduce herbicide inputs.

Chemical treatments need to be applied at specific growth stages of the dock plant for optimum efficacy whereas the electrophysical technique is more flexible enabling wider treatment windows that can fit better with grazing or cutting regimes.

The limitations with the Rootwave Pro kit in this grassland field situation is lack of mobility and effective control requires three treatments compared to one herbicide treatment. Farmers require a tractor-mounted system that can travel at a reasonable speed before they will use this system on farm, and this is what the companies in this sector are working towards.

For further information on this EIP project, please visit the Farming Connect website: [gov.wales/farmingconnect](http://gov.wales/farmingconnect)

