Innovate UK funds wireworm control project

Emerald Research and a leading potato grower in south-west England have been given funding for an Innovate UK project to tackle the ever-growing problem of wireworm damage in potatoes.

The project will evaluate several soil improvers and other naturally occurring, environmentally safe biochemicals that have initially shown positive results in stimulating the reproduction and development of normal soil microflora, as well as providing antagonism or deterrence to wireworms.

Wireworms are the larvae stage of the click beetle and can remain in the soil for up to five years. A field can be home to all stages of the wireworm lifecycle, all feasting on roots, tubers and organic matter in the soil.

Potato losses

The AHDB estimates that potato losses to wireworm can range from 15% to 35%, with infected fields also affecting the production of other crops, including maize, cereals and root crops.

Since Mocap (ethoprophos) was withdrawn from the market, growers have been left with only cultural means of control and using products based on specific botanical extracts with biocide activity to mitigate damage. This has had inconsistent results.

Southern England is known to have an increasing wireworm issue, which is also thought to be spreading north. The project will look to document a post-treatment level of wireworms in the fields, while also recording the effects on soil health, tuber damage and marketable crop yield.

PHOTOGRAPHY: TIM SCRIVENER, ADOBE STOCK

Flood defence gets £2.65bn funding boost

As part of the Plan for Change, the government is committing a record two-year investment of £2.65bn to flood defence measures. According to Defra, farmers, businesses and more than 66,000 properties will benefit from the programme.

In addition, the government has committed £50m to internal drainage boards, and the Environment Agency has also confirmed 34 natural flood management projects will move ahead to delivery.

The government claims it inherited flood assets that are in the poorest condition on record, as years of underinvestment and damaging storms left 3,000 of the Environment Agency's 38,000 high-consequence assets at below the required condition.

Up to 1,000 projects are set to receive a share of the funding. Environment Agency chairman Alan Lovell said: "The effect of flooding on our communities will only become greater as climate change brings more extreme weather. With this new funding, we will work closely with the government to deliver the vital projects that are needed across the country, ensuring our investment goes to those communities that need it the most."

Kuhn adds Starliner to mechanical weeding range

Kuhn Farm Machinery has increased its mechanical weeding range with the Starliner rotary hoe for removing weeds in young crops and aerating the soil surface.

Central to the design of the 6.3 machine are 63 rotary stars, each mounted and suspended individually to follow ground contours and avoid crop damage.

Each arm dispenses 28kg of constant ground pressure through individual torsion springs to help break up soil surfaces and uproot weeds.

Hardened 180mm-wide spoon tips are fixed around the edge of each star and face rearwards to lift the top few centimetres of soil to improve aeration. The tips are individually replaceable and easily displace the smaller weed plants, which then remain on the surface once the machine has passed through.

"The Starliner can be adapted to winter and spring crops, including wheat, barley, oats and maize, as well as direct-drill

or no-till systems, allowing growers an alternative weed control method.

"It can work in crops at varying growth stages, but weeding timing is essential to avoid excessive crop damage. The aggressivity of the machine can be altered by increasing forward speed, between 12kph and 25kph, or adjusting the height of the gauge wheels," said Kuhn arable product specialist Edd Fanshawe.