

Fera Science launches new nematode in-field diagnostic tool

Fera Science Senior Nematologist Tom Prior held a briefing at British Potato 2017, where he presented new in-field diagnostic tools developed by Fera which are able to rapidly identify plant-parasitic nematodes, insects, fungal, bacterial and viral pathogens, from plant material.

Accurate and simple to use, these tools have been integrated into the Genie II diagnostic machine, and can be used in the field as a service conducted by Fera or purchased and used by agronomy firms, Fera announced at the event.

The portable device, scheduled to be released in 2018, can distinguish between different species of root knot nematode in minutes, analysing DNA samples and matching these to DNA sequences of known pathogens. This allows for rapid detection; current lab-testing is expensive and currently takes a week to identify the pest, preventing a swift response to issues.

Mr Prior said: "As nematodes have been estimated to cost the worldwide food and farming industry around £48 billion of damage world-wide, and causes losses of up to ten per cent of annual food production, being aware of what is in your field and adopting appropriate strategies is key to enhancing long-term production."

At the briefing, Tom Prior talked about the risk of root-knot nematodes to potato crops, the importance of accurately identifying nematode populations to species and how Fera is developing innovative methods for rapid identification in the field:

The new testing kit was also demonstrated on Fera's stand during British Potato, where Tom Prior showcased Fera's expertise in nematode identification and management and highlighted that Fera offers a unique free-living nematode analysis service that provides identification to species level, as part of the UK's largest Plant Clinic.

