Pest Alert: Columbia root-knot nematode (Meloidogyne chitwoodi)



Figures 1-3 (left to right), Potato tuber infested with *M. chitwoodi*. Infested potato tuber exhibiting skin galling and dimpling. A potato field infested with *M. chitwoodi*. (Figs 1-2 © Crown copyright, courtesy of Fera Science Ltd, Fig 3 courtesy of ILVO).

- **Meloidogyne chitwoodi** is a root-knot nematode, commonly known as the 'Columbia root-knot nematode'. This species was first found and described from roots and tubers of potatoes in Washington State, USA and is present, but not widely distributed, in parts of Europe, including GB; as well as in parts of Africa, and North and South America.
- *Meloidogyne chitwoodi* is a regulated quarantine pest in GB, NI and the EU as an economically important pest of potato.
- The symptoms on tubers and roots are similar to those caused by other root-knot nematodes, typically causing small galls (Fig. 1). The surface of infested potato tubers usually exhibits numerous pimple-like raised areas; however, this can be host variety dependent.
- The nematode has been reported to infest a wide range of hosts. **Major hosts** include **potato** and **tomato**. Other hosts include **oat**, **beet**, **carrot**, **barley**, **beans**, **peas**, **wheat** and **maize**.
- The natural rate of spread of *Meloidogyne chitwoodi* is slow, but the pest can, however, be spread through soil on harvested potatoes, farm equipment, and footwear. **To prevent its movement between planting sites or to new production areas**, it is important to **maintain good biosecurity practices** like cleaning farming implements, machinery, and footwear.

If you suspect the presence of the pest, please inform the relevant authority (see over for details).



Department for Environment, Food & Rural Affairs



Llywodraeth Cymru Welsh Government





For finds in England and Wales, contact your local APHA Plant Health and Seeds Inspector, or the PHSI headquarters, in York: Tel: 0300 1000 313

Email: planthealth.info@apha.gov.uk

For Scotland, contact your local RPID officer: Web site: <u>http://www.gov.scot/Topics/farmingrural/Agriculture/AOcontacts/contacts</u>

Email: potatoexports@sasa.gov.scot

For Northern Ireland, contact the DAERA Plant Health Inspection Branch:

Tel: 0300 200 7847 Email: planthealth@daera-ni.gov.uk

Web: <u>daera-ni.gov.uk/topics/plant-and-tree-health</u>

For additional information on UK Plant Health please see:

planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/ planthealthportal.defra.gov.uk/

www.gov.uk/plant-health-controls

www.gov.scot/Topics/farmingrural/Agriculture/plant/PlantHealth/PlantDiseases

www.daera-ni.gov.uk