

***Meloidogyne chitwoodi* pest report¹**

Field	Detail
Pest species name	<i>Meloidogyne chitwoodi</i>
Pest species name Taxon (order, family)	Order: Rhabditida Family: Meloidogynidae
Pest common name	Columbia root-knot nematode
Country	UK (England)
Report status (<i>first, update number or final. Include date.</i>)	Final
Host(s) present on	Soil / growing medium – highly polyphagous, attacks many host plant species.
Host range (indicate if the host is major, wild-weed, alternate, experimental, or doubtful, if known)	Major host
Pest status (as per ISPM 8)²	Present: not widely distributed and under official control
Geographical distribution	Eastern England
Official control in place	Eradication
Summary (nature of the finding and phytosanitary measures taken)	The pest has been detected in one field in eastern England which was pre-emptively tested for free-living nematodes by the grower, prior to any crop being planted.

¹ International Standard for Phytosanitary Measures (ISPM) 17 Pest reporting

² International Standard for Phytosanitary Measures (ISPM) 8 Determination of pest status in an area

	<p>Subsequent official sampling and testing has confirmed the presence of <i>M. chitwoodi</i>. Eradication measures are being applied, including the removal and destruction of infested plant material - comprised in part of the field of unharvested strawberry plants and weeds, prohibition of planting hosts in the infested field, cleaning machinery and vehicles leaving the infested field, and enhancement of biosecurity procedures.</p> <p>Following the investigation of all credible lines of the source, including sampling and testing, the finding of the pest is currently limited to one field.</p> <p>Over the next two years, further monitoring and sampling will be carried out in the infested field and margins, to verify the effectiveness of the eradication measures. The results of monitoring will inform the continuing monitoring and eradication measures.</p>
<p>Danger/risk posed</p>	<p><i>Meloidogyne chitwoodi</i> is a root-knot nematode which is an important pest of <i>Solanum tuberosum</i> (potato) and <i>S. lycopersicum</i> (tomato). The area of origin of <i>M. chitwoodi</i> is unknown, although it was first described in 1980 from the Pacific Northwest of the USA, gaining its common name, Columbia root-knot nematode, from the Columbia River in this region (Holden et al., 1980).</p> <p>The internal necrosis and external swelling of potato tubers infested with <i>M. chitwoodi</i> can result in the reduction in the market value of the crop. <i>Meloidogyne chitwoodi</i> infestation can reduce potato tuber yields and tubers can continue to develop symptoms during storage. (Hoyle et al., 2023)</p>

	<p>The most likely pathway for introducing <i>M. chitwoodi</i> is through the movement of infested planting material (e.g. seedling transplants, nursery stock). Non-host plant products (e.g. bulbs, tubers, corms and rhizomes), equipment and machinery which are contaminated with soil infested with <i>M. chitwoodi</i> could also result in spread (EPPO, 2013b). Soil as such is also a possible pathway.</p>
Report files	-
Website(s)	