

CURRICULUM VITAE

THOMAS JAMES PRIOR BSc (Hons) SPHPS MRSB

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Date of birth: 9 August 1979

Nationality: British

EDUCATION

1998-2000 School of Chemistry, University of Leeds
BSc (Hons) Chemistry

PROFESSIONAL EXPERIENCE

2000 - Present Fera Science Ltd, York, UK

Principal Plant Nematologist

- Lead nematology diagnostician with responsibility for delivering a high-quality nematology diagnostic service to Defra plant health division (NPPO).
- Managing the use of both novel and traditional diagnostic techniques to provide a comprehensive range of nematode testing.
- Consultancy regarding the importance of a range of plant nematodes as plant health pests to UK agriculture and horticulture.
- Morphological descriptions of new nematode species and production of taxonomic keys for the identification of economically important nematode genera.
- Generating project ideas and obtaining research funding for applied research programmes.
- Member of the EPPO 'Diagnostics in Nematology' panel, developing diagnostic protocols of quarantine nematode species.

CURRENT PROJECT GRANTS

- **Defra**
 - NepoDetect: Direct detection of plant viruses from nematode vector species (2022)
- **Euphresco**
 - FAGUSTAT: Status of Beech Leaf Disease (BLD) in Europe (2021-2023)
 - XIPHIVIR: Improving detection of *Xiphinema americanum*-group species (2019-2021)
 - *Pratylenchus*: Improving identification of root-knot nematode species intercepted in trade (2020-2022)
 - PCN: Molecular characterisation of European PCN populations (2021-2023)

KEY SKILLS AND EXPERIENCE

- 20+ years' experience of managing and delivering diagnostics and research for terrestrial nematodes in a National Plant Protection Organisation laboratory
- Provision of plant nematode diagnostics to meet statutory and industry requirements
- Lead nematologist on multidisciplinary research projects covering diagnostics of both native and quarantine plant nematodes
- The evaluation and validation of novel nematode diagnostic techniques

- Successful Co-supervision of 2 PhD students
- Author or co-author of over 30 publications including publications in peer reviewed journals, new disease reports, book chapter, conference papers and technical research reports.

MEMBERSHIP OF PROFESSIONAL BODIES AND MEASURES OF ESTEEM

- Registered Senior Plant Health Professional (SPHP), Royal Society of Biology
- Member of the British Society for Plant Pathology (BSPP), Systematics Association (SA), Royal Society of Biology (RSB), European Society of Nematology (ESN) and Society of Nematologists (SON)
- Former panel member of the nematology group of the Association of Applied Biology (AAB)
- Editor of *New Disease Reports*. Regularly review for *Nematology*, *Plant Pathology* and *European Journal of Plant Pathology*

PUBLICATION RECORD

Sellers, G.S., Jeffares, D., Lawson, R., Prior, T., Lunt, D.H. (2021). Metagenomic analysis of root-knot nematodes. bioRxiv 2021.03.18.435936.

Viaene, N., N. Ebrahimi, A. Haegeman, A. van Bruggen, N. Ogris, S. Širca, B. Gerič Stare, T. Prior, A. Pérez Sierra, M. Groza, M. Coman, M. J. Hurley, D. Lanterbecq, S. Van Kerkhove and Q. Leroy, (2021). FAGUSTAT: investigating the threat of beech leaf disease in Europe. *Journal of Nematology*, 53, p 37.

Cai, R., Prior, T., Lawson, R., Cantalapiedra-Navarrete, C., Palomares-Rius, J.E., Castillo, P., Archidona-Yuste, A. (2020) An integrative taxonomic study of the needle nematode complex *Longidorus goodeyi* Hooper, 1961 (Nematoda: Longidoridae) with description of a new species. *European Journal of Plant Pathology*; 158(1):59-81.

Orlando, V., Edwards, S.G., Neilson, R., Prior, T., Roberts, D., Back, M. (2020). Comparing the efficiency of six common methods for DNA extraction from root-lesion nematodes (*Pratylenchus* spp.). *Nematology*, 1, 1-9.

Orlando, V., Grove, I.G., Edwards, S.G., Prior, T., Roberts, D., Neilson, R., Back, M. (2020). Root-lesion nematodes of potato: current status of diagnostics, pathogenicity and management. *Plant Pathology*, 69(3), 405-417.

Prior, T., Širca, S., Groza, M., Karssen, G. (2020). A supplementary description of *Longidorus diadecturus* (Nematoda: Longidoridae) based on paratype specimens. *EPPO Bulletin* 2020 50 (2), 327–329. ISSN 0250-8052. DOI: 10.1111/epp.12656

Prior, T., Tozer, H., Yale, R., Jones, E.P., Lawson, R., Jutson, L., Correia, M., Stubbs, J., Hockland, S., Karssen, G. (2019). First report of *Meloidogyne mali* causing root galling to elm trees in the UK. *New Disease Reports* 39, 10. [http://dx.doi.org/10.5197/j.2044-0588.2019.039.010]

Lazarova, S., Oliveira, CMG., Prior, T., Peneva, V., & Kumari, S. (2018) An integrative approach to the study of *Xiphinema brevicolle* Lordello and Da Costa 1961, supports its limited distribution worldwide (Nematoda: Longidoridae). *European Journal of Plant Pathology*, 1-24.

Smith, RM., Baker, RHA., Collins, DW., Korycinska, A., Malumphy, CP., Ostojka-Starzewski, JC., Prior, T., Pye, D. & Reid, S. (2018) Recent trends in non-native, invertebrate, plant pest establishments in Great Britain, accounting for time lags in reporting. *Agricultural and Forest Entomology*. DOI: 10.1111/afe.12282.

Ahmed M, Sapp M, Prior T, Karssen G, Back MA. (2016) Technological advancements and their importance for nematode identification, *SOIL*, 2, 257-270, doi:10.5194/soil-2-257-2016.

- de Jesus, D. S., Oliveira, C. M. G., Roberts, D., Blok, V., Neilson, R., Prior, T., Balbino, H. M., Mackenzie, K. M., de Lima Oliveira R. D. (2016) Morphological & molecular characterisation of *Aphelenchoides besseyi* & *A. fujianensis* (Nematoda: Aphelenchoidinae) from rice and forage grass seeds in Brazil. *Nematology* DOI 10.1163/15685411-00002962.
- Hodgetts J, Hall J, Ostojka-Starzewski J, Prior T, Lawson R & Boonham N (2015) The application of DNA barcoding for biosecurity: a perspective from the UK. *Genome* 58(5):228-228.
- Meressa, B., Prior, T., Mekete, T. & Hallmann, J. (2015) Descriptions of four new records of plant-parasitic nematode species from commercial cut-flowers in Ethiopia. *Nematoda*, <http://dx.doi.org/10.4322/nematoda.01115>.
- Hockland, S., Karssen, G. and Prior, T. (2015) The increasing importance of root-knot nematode species (*Meloidogyne* spp.) in international trade, with particular emphasis on *M. enterolobii* and *M. mali* in Europe. Proceedings of the 47th Annual Meeting of the Organisation of Nematologists of Tropical America, *Nematropica*.
- Hockland, S. & Prior, T. (2014) Plant-parasitic nematodes. *The Plantsman*, 13(4), 247-251.
- Anthoine G., Niere B., den Nijs L., Prior T., Pylypenko L. & Viaene N. (2014) Nematode interceptions in international trade of plants for planting. *Journal of Nematology*, 46(2), 130-260.
- Pacheco, H., Moreno, I., Yangari, B., Prior, T., Karssen, G., Peña, G., Illesca, M. & Saavedra, I. (2013) First report of *Meloidogyne chitwoodi* and *M. fallax* in Chile, identification based on traditional taxonomy and molecular markers. XLV Congreso de la Organización de Nematólogos de los Trópicos Americanos (ONTA), *Nematropica* 42: 2.
- Gutiérrez-Gutiérrez, C., Cantalapiedra-Navarrete, C., Decraemer, W., Vovlas, N., Prior, T., Palomares Rius, J. E. & Castillo, P. (2012) Phylogeny, diversity, and species delimitation in some species of the *Xiphinema americanum*-group complex (Nematoda: Longidoridae), as inferred from nuclear and mitochondrial DNA sequences and morphology. *Eur J Plant Pathol.* 134: 561–597.
- Decraemer, W., Prior, T. & Hockland, S. (2011) New Integrative approaches in Diagnostics and Nematode Identification: Virus-vector nematodes. *Nematropica* 42: 1.
- Prior, T., Hockland, S. & Decraemer, W. (2010) A new approach to identify species of *Xiphinema americanum sensu lato*. Communications in Agricultural & Applied Biological Sciences 75(3), 459-461.
- Prior, T., Hockland, S. & Lawson, R. (2010) First reports of *Sphaeronema alni* parasitizing downy birch and *Hemicycliophora aquatica* in the UK. *Plant Pathology*, 59(2), 410-410.
- Prior, T., Hockland, S., Lawson, R. & Karssen, G. (2010) First report of *Hirschmanniella gracilis* in the UK causing necrosis to roots of tall fescue. New Disease Reports 22, Article 23.
- Karnkowski, W. & Prior, T. J. (2009) Biology, ecology, infestation symptoms and morphology of *Xiphinema dentatum* Sturhan, 1978 (Nematoda: Longidoridae) - a new population from Poland. *Progress in Plant Protection* 49(2), 539-542.
- Karnkowski, W. & Prior, T. (2008) Preliminary observations on morphology of *Paralongidorus maximus* (Butschli) (Dorylaimida: Longidoridae). *Progress in Plant Protection* 48(1), 118-121.
- Prior, T. J., Karnkowski, W. & Hockland, S. (2008) First record of *Xiphinema dentatum* Sturhan, 1978 (Nematoda: Longidoridae) from Poland. *Nematol. mediterr.* 36, 141-143.
- Hockland, S., Glover, R., Boonham, N. and Prior, T. (2007) The use of molecular tools for the identification of quarantine pests of potato - a review. *Nematropica* 37(2), 165.
- Hockland, S., Prior, T., Moran, H., Cannon, R. and Eyre, D. (2007) A review of the plant-parasitic nematodes intercepted on consignments imported into the UK with special reference to those from tropical zones. *Nematropica* 37(2), 165.

Prior T. & Hockland, S. (2007) A new record of *Tylenchus stachys* Brzeski, 1996 (Nematoda:Tylenchidae) from China. Journal of Nematode Morphology and Systematics, 9(2), 147-151.