

## POSTER ABSTRACT (2002)

### *Tobacco rattle virus* and its associated vector trichodorid nematodes in Portugal

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#### ABSTRACT

*Tobacco rattle virus* (TRV, genus *Tobravirus*), transmitted by trichodorid nematodes, occurs as a wide range of serologically distinguishable strains that cause diseases in various economically important crops. The virus and its associated vector nematodes occur world-wide, being particularly prevalent in Europe and North America. In Portugal, an investigation is being conducted to identify TRV strains occurring in association with their natural vector species. The project has focused on potato growing areas in northern and central Portugal, with soil sampling biased in favour of areas where TRV-like symptoms have been reported. Nematodes were extracted from soil and phenotypically identified. TRV was recovered from nematodes in virus transmission studies, and identification confirmed using sap transmission tests, a leaf squash method with EM, ELISA, ISEM, and RT-PCR. Trichodorids were recovered frequently from potato fields, and the species identified were: *Trichodorus lusitanicus*, *T. primitivus*, *Paratrichodorus anemones*, *P. hispanus*, *P. minor*, *P. pachydermus*, also three new undescribed species and an unidentified *Paratrichodorus* species. TRV occurred in 4 of 58 (7%) soil samples in association with trichodorids: one in the North and the others in the centre of the country. Molecular characterisation of the TRV isolates and their associated vector trichodorids is presently in process.

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