

NOTE BREVI - SHORT COMMUNICATIONS

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ROOT-LESION NEMATODES (*PRATYLENCHUS* SPP.)
IN PORTUGAL

by

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Little is known about the occurrence and distribution of *Pratylenchus* Filipjev in Portugal. The first record is of *P. penetrans* (Cobb) Filipjev *et* Schuurmans Stekhoven intercepted in *Begonia* sp. by the Bureau of Entomology and Plant Quarantine of the U.S.A. (Anon, 1958). The only other record is that of *P. penetrans* and *P. thornei* Sher *et* Allen associated with the roots of olive trees in the Coimbra district (Abrantes, 1980). A survey started in 1983 (Abrantes and Santos, 1984) revealed the presence of *P. penetrans*, *P. crenatus* Loof and *P. thornei* in the roots of several kinds of hosts. The data from the survey are considered further here.

Soil and root samples were collected in many localities (Table I). Nematodes were extracted from 300 ml soil samples in open trays (Abrantes *et al.*, 1976) and from 1 cm root sections by the mistifier (Seinhorst, 1950) and root-incubation (Young, 1954) techniques. Nematodes were heat killed and fixed in TAF. Some were mounted in glycerin by Seinhorst's (1959) glycerol-ethanol method and others were stained and mounted by the rapid lactophenol method (Franklin and Goodey, 1949). Roots were also stained using the technique of Byrd *et al.* (1983).

Pratylenchus nematodes were found in 42 of the 52 soil samples and in all 15 root samples (Table I). Ten samples contained *P. penetrans* alone, three *P. crenatus* alone, four were mixed populations of both species, three contained *P. thornei* and one *P. neglectus* (Rensh) Filipjev *et* Schuurmans

Table I - Occurrence of *Pratylenchus* spp. in Portugal.

Locality	Species	Source	
		Roots (R) and/or	Soil (S)
Pregal, Póvoa de Lanhoso	<i>P. crenatus</i>	R,S	<i>Poa annua</i> L.
Coruche	<i>P. crenatus</i>	S	—
Paul de Magos, Salvaterra de Magos	<i>P. crenatus</i>	S	—
Areias, Barcelos	<i>P. crenatus</i> + <i>P. penetrans</i>	R,S	Hop (<i>Humulus lupulus</i> L.)
Areias de Vilar, Barcelos	<i>P. crenatus</i> + <i>P. penetrans</i>	R,S	Hop
Pregal, Póvoa de Lanhoso	<i>P. crenatus</i> + <i>P. penetrans</i>	R,S	<i>Aira caryophylla</i> L., Oat (<i>Avena sativa</i> L.), Barley (<i>Hordeum distichum</i> L.), Hop, <i>Raphanus raphanistrum</i> L., <i>Spergula arvensis</i> L.
Espinheiro, Celorico da Beira	<i>P. crenatus</i> + <i>P. penetrans</i>	R,S	Rye grass (<i>Lolium multiflorum</i> Lam.), Rye (<i>Secale cereale</i> L.), Maize (<i>Zea mays</i> L.)
Alpiarça	<i>P. neglectus</i>	S	—
Cadaixo, Miranda do Corvo	<i>P. penetrans</i>	R,S	<i>Ammi majus</i> L., Animated oat (<i>Avena sterilis</i> L.), <i>Holcus lanatus</i> L., <i>Lapsana communis</i> L., <i>Phalaris paradoxa</i> L., <i>Polygonum aviculare</i> L., <i>Polygonum persicaria</i> L., <i>Sonchus oleraceus</i> L., Maize

Table I - (Continued)

Locality	Species	Source Roots (R) and/or Soil (S)	Host
Barranco do Banho, Monchique	<i>P. penetrans</i>	R,S	Cabbage (<i>Brassica oleracea</i> L.), <i>Calendula suffruticosa</i> Vahl, Tomato (<i>Lycopersicon esculentum</i> Mill.), <i>Raphanus raphanistrum</i>
Bencanta, Coimbra	<i>P. penetrans</i>	R,S	<i>Medicago nigra</i> (L.) Krockner
Espinho, Celorico da Beira	<i>P. penetrans</i>	R,S	<i>Spergula arvensis</i>
Merelim, Braga	<i>P. penetrans</i>	S	—
Côrte Pereiro, Monchique	<i>P. penetrans</i>	R,S	<i>Avena barbata</i> Pott ex Link, <i>Carduus carpetanus</i> Boiss. et Reuter, <i>Galactites tomentosa</i> Moench, <i>Lavatera cretica</i> L., <i>Raphanus raphanistrum</i> , <i>Rapistrum rugosum</i> (L.) All., Potato (<i>Solanum tuberosum</i> L.)
Olhos de Água, Palmela	<i>P. penetrans</i>	R,S	Tomato
Pregal, Póvoa de Lanhoso	<i>P. penetrans</i>	R,S	<i>Vicia sativa</i> L.
Arzila, Coimbra	<i>P. penetrans</i>	R,S	<i>Setaria pumila</i> (Poiret) Schultes, <i>Vigna unguiculata</i> (L.) Walp., Maize
Ceira, Coimbra	<i>P. penetrans</i>	R,S	Maize
Azambuja	<i>P. thornei</i>	S	—
Évora	<i>P. thornei</i>	S	—
Bencanta, Coimbra	<i>P. thornei</i>	R,S	<i>Medicago nigra</i> , <i>Vicia sativa</i>

Stekhoven. This is the first record of *P. neglectus* from Portugal. The specimens were obtained from fallow soil which had previously grown a crop of wheat in Alpiarça.

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