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ANALYSIS OF PHYTONEMATODES OF PEACH TREE ROOT AND SOIL AROUND THE ROOT

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ANNOTATION: Peach is a family of trees belonging to the family of rhododendrons, a fruit tree. It ranks 3rd among fruit trees in terms of cultivated area in Uzbekistan. His homeland is China, he came to Uzbekistan from China. Currently, 28 varieties of peaches are grown in almost all regions of our country (less in the northern regions).This article provides information on nematodes found in peaches.

Keywords: Peach,Mylonchulus solus, Eudorylaimus monohystera, Aporcelaimellus obtusicaudatus, Plectus parietinus, Proteroplectus longicaudatus, Panagrolaimus armatus, Panagrolaimus rigidus, Cephalobus persegnis, Heterocephalobus elongates, Acrobeloedes tricornis, Chilloplacus symmetricus, Chilloplacus lentus.

Peach (Persica) is a fruit tree belonging to the family of rhododendrons; Its homeland is Central Asia. It is widely distributed in the USA, southern Europe, Japan, China, Turkey, Central Asia, and the Caucasus. It was cultivated 2 thousand years ago. There are about 5000 varieties. Currently, it is grown in all subtropical and tropical countries of the Northern and Southern Hemispheres.

In horticulture, mainly ordinary peach varieties are grown (other types are used as decorative plants or grafts). It is 3-9 m tall, the leaves are arranged in a row, lanceolate, the flowers are bisexual. The fruit is juicy (up to 50-600 g), granular, flat-round, ovoid, green to dark red, hairy and hairless (lucchak). The flesh is bluish, light pink, yellow, dark red, it separates from the grain (there are non-separating varieties), the taste is sour and sweet. Contains 80-90% water, 10-14% sugar, 0.081-02% apple, wine, citric acid, 0.56-1.26% pectin, as well as flavoring and nitrogenous substances; vitamins A, C, V; The kernel contains 20-60% fat, amygdalin, proteins, etc. It is eaten fresh, dried, preserved (jam, jam, compote), decoction of leaves and flowers is used in folk medicine to treat headaches, rheumatism, and gastrointestinal diseases. Peach is a good honey tree.

Peaches are propagated from seed and grafting. Seedlings of ordinary peaches and other species, almonds, plums, sometimes apricots are used as grafts. Productivity is 200-400 s/ha. After planting, it is harvested in 3-4 years. 12-15 years gives a good harvest (1 tree up to 100-150 kg). In Uzbekistan, it blooms in April, and the fruit ripens in May-October, depending on the variety. Peach is relatively heat-loving, light-loving and tolerates short frosts of -15, -20°C, it dies at -25°C, especially when it is blooming, it is heavily damaged by spring frosts. Seedlings are planted in 5x4, 5x5, 6x3 m scheme on plowed ground in autumn and spring at a depth of 25-30 cm. Young trees are watered 15-16 times during the growing season, 4-5 times during the growing season, and 10-12 times in rocky areas. Shari is given a cup-shaped shape and is bushed every year in early spring. About 50 varieties are grown in Uzbekistan. Early morning peaches - figs, peaches, Lola, Morettini; intermediate - Zafar, Start, Malinovy, Elberta, Shirinmagiz, White peach; Late - Salvey, Farhad varieties are planted a lot.

203 representatives of phytonematodes belonging to 22 species were found from peach roots and the soil around the roots (Table 2). 10 phytonematodes belonging to 8 species were detected from the upper layer of the peach plant root (0-30 cm), and 53 phytonematodes belonging to 16 species from the deeper layer of the root (30-60 cm).

Soil samples from the soil around the roots were taken from the top and bottom soil (0-30, 30-60 cm) as mentioned above. In the upper layer

(0-30cm) 64 phytonematodes belonging to 15 species, and 76 phytonematodes belonging to 16 species were identified in the lower layer (30-60cm). More devisaprobionts were found from ecological groups.

Nematodes are not uniformly distributed in soil layers. 10 phytonematodes belonging to 8 species at 0-30 cm in the roots, 53 belonging to 16 species at 30-60 cm, 15 species at 0-30 cm in the soil around peach roots, 64 individuals, 16 species at 30-60 cm, 76 found in phytonematoda.

Cephalobus persegnis, Ditylenchus dipsaci were mostly found in the upper horizons of the soil layer, and these were considered eudominant species. Cephalobus persegnis was considered a eudominant species in the deep layers of the soil around the roots. The species Aphelenchus avenae was considered to be the dominant species in this layer. Eudominate and dominant species were not detected in the upper layer of the root. One or two of the 8 dominant species were found in this horizon, and all of these were considered to be resedent and subresedent species. Cephalobus persegnis eudominant, Chilloplacus symmetricus dominant species in the deep layer of the root (30-60 cm) were considered as subdominant, recedent, subrecedent species.

The composition of phytonematodes species in the upper horizon (0-30 cm) and lower layer (30-60 cm) of the soil around the peach root was found to be close to each other.

Devisaprobionts from ecological groups (Table 3): Plectus parietinus, Proteroplectus longicaudatus, Panagrolaimus armatus, Panagrolaimus rigidus, Cephalobus persegnis, Heterocephalobus elongates, Acrobeloedes tricornis, Chilloplacus symmetricus, Chilloplacus lentus are mainly in the deep layer of plant roots, the soil around the roots is deep diversity was observed in the layers.

Mylonchulus solus, Eudorylaimus monohystera, Aporcelaimellus obtusicaudatus were found at a depth of 30-60 cm of the root, at a depth of 30-60 cm in the soil around the root, Enchodellus macrodorus was found in the lower layer of the soil around the root, and Fylenchus filiformis was found in the root and around the root of peach.

Among eusaprobionts, three species of representatives of the genus Rhabditis were found. Two cases of Rhabditis filiformis were found in the lower layer of the peach root, and one in the upper layer of the soil around the root. Rhabditis intermedius was found only in the subsoil layer of the root zone, Rhabditis brevispina in the subsoil layer, in the subsoil layer of the root zone.

Ditylenchus dipsaci, Helicotylenchus multicinctus, Paratylenchus hamatus, true parasites of phytohelminths, Aphelenchus avenae, Aphelenchus cylindricaudatus, which do not cause special diseases, were found.

Table 2

List of phytonematodes from peach root and peri-root soil

№	Types of phytonematodes	Number of phytonematodes found				Total
		Root, cm.		Soil, cm.		
		0-30	30-60	0-30	30-60	
1	2	3	4	5	6	7
1	Plectus parietinus			3		3
2	Proteroplect.longicaudatus	1		3		4
3	Mylonchulus solus			2	4	6
4	Eudorylaimus monohystera		2		2	4
5	Enchodellus macrodorus				3	3
6	Aporcelaimell.obtusicaudat.		3		5	8
7	Rhabditis filiformis		2	1		3
8	Rhabditis intermedius				3	3
9	Rhabditis brevispina		1		5	6
10	Panagrolaimus armatus		3		4	7
11	Panagrolaimus rigidus	1	5	1	5	12
12	Cephalobus persegnis	1	7	12	18	38
13	Heterocephalobus elongate.		2	3		5
14	Acrobeloedes tricornis	1	2			3
15	Chiloplacus lentus		5	1	4	10
16	Chil. Symmetricus		6	2	5	13
17	Aphelenchus avenae	1	4	2	7	14
18	Aph. Cylindricaudatus		2	1	3	6
19	Filenchus filiformis	1	3	1	2	7
20	Ditylenchus dipsaci	2		28		30
21	Helicotylenchus multicinctus	2	1	3	4	10
22	Paratylenchus hamatus		5	1	2	8
	Number of species:	**8**	**16**	**15**	**16**	**22**
Total nematodes:		**10**	**53**	**64**	**76**	**203**

Table 3

Distribution of phytonematodes of peach root and soil around the root by ecological groups

№	Ecological groups	Root, cm.		Soil, cm.	
		0-30	30-60	0-30	30-60
1	Pararizobiontlar	1/1	3/8	2/3	5/16
2	Eusaprobiontlar	-	2/3	1/1	2/8
3	Devisaproobiontlar	4/4	7/30	7/25	5/36
4	Fitogelmintlar: a)spets. b)nospets.	3/5 2/4 1/1	4/12 2/6 2/6	5/35 3/32 2/3	4/16 2/6 2/10

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