

**2004 ANNUAL REPORT
NEMATODE TESTING SERVICE
DEPARTMENT OF BOTANY AND PLANT PATHOLOGY
OREGON STATE UNIVERSITY**

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Short version. The ONLY version.

TABLE 1. TOTAL NEMATODE SAMPLES BY YEAR

<u>Year</u>	<u>Samples</u>	<u>Year</u>	<u>Samples</u>
1993	669	1999	976
1994	803	2000	1014
1995	812	2001	1367
1996	657	2002	1547
1997	599	2003	985
1998	402	2004	1144

TABLE 2. 2004 SAMPLES RECEIVED BY MONTH

<u>Month</u>	<u>Samples</u>	<u>Month</u>	<u>Samples</u>
Jan	6	Jul	38
Feb	11	Aug	100
Mar	89	Sep	220
Apr	98	Oct	121
May	266	Nov	52
Jun	111	Dec	32

TABLE 3. 2004 SAMPLES BY CROP

FRUITS

Grape	12
Blackberry	4
Marionberry	2
Blackcap	18
Cherry	2
Peach	0
Pear	1
Apple	13
Strawberry	2
Blueberry	1
TOTAL	55

ORNAMENTALS

Pine	10
Hosta	1
Peony	1
Miniature roses	8
Unspecified Nursery	15
TOTAL	35

TURF

Golf greens	25
Unspecified turf	1
TOTAL	26

VEGETABLES

Onion	19
Garlic	1
Carrot	13
Lettuce	1
Cabbage	1
TOTAL	35

LOGS

4

WEEDS

1

SPRINGWATER

1

UNKNOWN

25

POTATO

13

**POTATO-GRAIN
ROTATION**

608

GRAIN

Wheat	38
Unspecified	1
TOTAL	39

**GRAND TOTAL:
1144**

FIELD

Peppermint	87
Alfalfa	7
Peas	6
Sudan	4
Perennial ryegrass	169
Tall fescue	4
Grass for seed	5
Grass, unspecified	10
TOTAL	302

TABLE 4. 2004 SAMPLES BY SUBMITTER

<u>Submitter</u>	<u>Samples</u>
Agricultural service field representatives (sell ag chemicals)	359
Private consultants (do not sell ag chemicals)	650
Extension and research	69
Growers	58
Government agencies	5
Private exporter	1
Public Health Agencies	<u>1</u>
TOTAL	1144

TABLE 5. 2004 SAMPLES BY LOCATION

OREGON		WASHINGTON	
Benton	27	Benton	0
Clackamas	15	Douglas	3
Crook	16	Franklin	2
Douglas	2	Grant	2
Hood River	6	Klikitat	3
Jackson	2	Kittitas	2
Jefferson	20	Washougal	10
Klamath	1	<u>Yakima</u>	<u>5</u>
Lane	18	TOTAL	27
Linn	36		
Marion	30	ALASKA	3
Morrow	0	CALIFORNIA	34
Multnomah	20	COLORADO	27
Polk	159	KANSAS	4
Umatilla	6	MONTANA	2
Union	5	UTAH	8
Wasco	2	<u>ANOTHER STATE*</u>	<u>606</u>
Washington	30	TOTAL	674
<u>Yamhill</u>	<u>29</u>		
TOTAL	425		

*Submitter requires complete confidentiality

GRAND TOTAL 1144

TABLE 6: 2004 MATERIALS SUBMITTED

Some submissions contained two numbers worth of samples, such as soil and roots, but they were given only one number.

<u>Material</u>	<u>Samples</u>
Soil for standard soil extraction	1022
Roots	105
Leaves or bulbs (the scales of which, as you know, are modified leaves)	9
Tubers	4
Wood chips or increment cores	3
Whole organism	1
TOTAL	1144

TABLE 7: 2004 SPECIES IDENTIFICATIONS

<i>Pratylenchus</i>	
Oregon	48
Washington	22
California	1
Colorado	<u>4</u>
TOTAL	75
<i>Meloidogyne</i> from second-stage juveniles	
Oregon	10
Washington	3
Colorado	16
Another state*	<u>176</u>
TOTAL	205
<i>Meloidogyne</i> from perineal patterns	
Colorado	<u>3</u>
TOTAL	3
<i>Xiphinema</i>	
Oregon	1
Washington	6
Colorado	<u>1</u>
TOTAL	8
<i>Helicotylenchus</i>	
Washington	<u>4</u>
TOTAL	4

TOTAL SPECIES IDENTIFICATIONS: 295

*The submitter requires complete confidentiality

TABLE 8. 2004 NOTEWORTHY GENUS AND SPECIES RECOVERIES

Nematode Genus	Nematode Species	Host	Nem/100g soil or nem/g fresh tissue; PCN No.; County; STATE; Comments
<i>Ditylenchus</i>	<i>prob dipsaci</i>	Alfalfa	14,700 lvs, 734 sl; PCN 113, 115; Jefferson, OR
<i>Gracilicus</i>	sp.	Wine grapes	121 with <i>Paratylenchus</i> , soil; PCN 268; Polk, OR
<i>Helicotylenchus</i>	sp.	Onions	12-79 soil; PCN 262-267; CO
<i>Helicotylenchus</i>	sp.	P. ryegrass	0-252 soil; PCN 281-328; Polk, OR
<i>Helicotylenchus</i>	sp.	P. ryegrass	0-70 soil; PCN 351-371; Polk, OR
<i>Helicotylenchus</i>	sp.	Golf green	483 soil; PCN 407; Washougal, WA; + <i>M. naasi</i> , Trik
<i>Helicotylenchus</i>	sp.	Golf green	535 sl, PCN 471, Lane, OR; + <i>naasi</i> , Cric, Trik
<i>Helicotylenchus</i>	sp.	Golf green	20 soil; PCN 594; Washougal, WA; + <i>M. naasi</i>
<i>Helicotylenchus</i>	sp.	Golf green	300 sl; PCN 948; Douglas, OR; + others
<i>Helicotylenchus</i>	<i>digonicus</i>	Apples	17 sl, PCN 891; Yakima, WA; + others
<i>Hemicycliophora</i>	sp.	Apples	6-8 sl; PCN 892, 893, Yakima, WA; + others
<i>Hemicycliophora</i>	sp.	Golf green	16 soil; PCN 948; Douglas, OR; + others
<i>Longidorus</i>	sp.	Peppermint	1 sl; PCN 630; Polk, OR; + high pin
<i>Meloidogyne</i>	<i>hapla</i>	Hosta	58/g rts; PCN 17; Washington, OR
<i>Meloidogyne</i>	<i>hapla</i>	Peppermint	58 sl; PCN 150; Linn, OR
<i>Meloidogyne</i>	<i>hapla</i>	Peppermint	58 sl; PCN 150; Linn, OR
<i>Meloidogyne</i>	<i>hapla</i>	Potatoes	11 + 1 <i>chit</i> sl; PCN 835; Franklin, WA
<i>Meloidogyne</i>	<i>hapla</i>	Apples	56 sl; PCN 893; Yakima, WA; + <i>Prat</i>
<i>Meloidogyne</i>	<i>naasi</i>	Poaceae?	335 sl; PCN 84; Polk, OR; with 807 <i>P. crenatus</i>
<i>Meloidogyne</i>	<i>naasi</i> , probably	P. ryegrass	0-36 sl; PCN 321-350; Polk OR
<i>Meloidogyne</i>	<i>naasi</i> , probably	P. ryegrass	0-64 sl; PCN 372-405; Polk OR
<i>Meloidogyne</i>	<i>naasi</i>	Golf green	48-595, soil; PCN 415, 416; Crook, OR; + <i>Prat</i>
<i>Meloidogyne</i>	<i>naasi</i>	Golf green	73 + M, sl; PCN 471; Lane, OR; + spiral, Cric, Trik
<i>Meloidogyne</i>	<i>naasi</i> , probably	P. ryegrass	0-89 sl; PCN 518-543; Polk, OR
<i>Meloidogyne</i>	<i>naasi</i>	Poaceae > peas	3-419 sl; PCN 565-567; Linn, OR; + <i>P. crenatus</i>
<i>Meloidogyne</i>	<i>naasi</i> , probably	Golf green	3-83 sl; PCN 594, 596; Washougal, WA; + spiral, Cric
<i>Meloidogyne</i>	<i>naasi</i> , probably	Golf green	20-34 sl; PCN 604, 605; Multnomah, OR; + Cric, Trik
<i>Meloidogyne</i>	<i>naasi</i> , probably	Turf	346 sl; PCN 611; Multnomah, OR; + Cric
<i>Meloidogyne</i>	<i>naasi</i>	Grass > p-rmint	2 sl; PCN 628; Polk, OR
<i>Meloidogyne</i>	<i>naasi</i> , probably	Golf green	47-59 sl; PCN 637, 638; Multnomah, OR
<i>Meloidogyne</i>	<i>naasi</i>	Golf green	337 sl, PCN 948; Douglas, OR; + others
<i>Meloidogyne</i>	<i>naasi</i> , probably	Golf green	55 sl; PCN 986; Washougal, WA; + <i>Cric</i>
<i>Mesocriconema</i>	sp.	Peppermint	118 sl; PCN 165; Linn, OR.
<i>Mesocriconema</i>	sp.	Golf green	81 sl, PCN 471; Lane, OR; + spiral, <i>naasi</i> , Trik
<i>Mesocriconema</i>	sp.	Golf green	1320 soil; PCN 594; Washougal, WA; + spiral
<i>Mesocriconema</i>	sp.	Golf green	1927-2681 soil; PCN 604, 605; Multnomah, OR; + <i>M. naasi</i> & Trik
<i>Mesocriconema</i>	sp.	Turf	5868 soil; PCN 611; Multnomah, OR; + <i>M. naasi</i>
<i>Mesocriconema</i>	sp.	Golf green	618 sl; PCN 948; Douglas, OR; + others
<i>Mesocriconema</i>	sp.	Golf green	119 sl; PCN 986; Washougal, WA; + <i>Mel</i>
<i>Mesocriconema</i>	sp.	Wine grapes	303 sl; PCN 1041; Lane, OR
<i>Paratylenchus</i>	sp.	P-mnt-grass r't'n	146-4332 sl; PCN 79-84; Union, OR
<i>Paratylenchus</i>	sp.	Peppermint	152-7766 sl; 0-214 rts; PCN 108-111; Lane, OR with <i>Paratylenchus</i> sp.
<i>Paratylenchus</i>	sp.	Peppermint	6-2014 sl; PCN 159-166; Linn, OR
<i>Paratylenchus</i>	sp.	Peppermint	102-1201 sl; PCN 178-183; Marion, OR
<i>Paratylenchus</i>	sp.	Peppermint	555 sl; PCN 194; Jefferson, OR
<i>Paratylenchus</i>	sp.	Peppermint	742 sl; PCN 200; Jefferson, OR

<i>Paratylenchus</i>	sp.	Peppermint	1637 sl; PCN 247; Lane, OR
<i>Paratylenchus</i>	sp.	Cherry	109 sl; PCN 546; Wasco, OR; + <i>P. vulnus</i> ; <i>Zif</i>
<i>Paratylenchus</i>	sp.	Peppermint	2-1410 soil; PCN 613-616; Linn, OR; + <i>Prat</i> sp.
<i>Paratylenchus</i>	sp.	Grass > p-rmint	2350 soil; PCN 630; Polk, OR
<i>Paratylenchus</i>	sp.	Apples	364 sl; PCN 920; Yakima, WA
<i>Pratylenchus</i>	<i>crenatus</i>	Grapes	169; 86% <i>cren</i> ; 14% <i>neg</i> ; PCN 6; Polk, OR
<i>Pratylenchus</i>	<i>crenatus</i>	Some kinda grass?	807 sl, PCN 84; Polk, OR; with 335 <i>M. naasi</i>
<i>Pratylenchus</i>	<i>crenatus</i>	Pears	22 soil; PCN 480; Kittitas, WA
<i>Pratylenchus</i>	<i>crenatus</i>	Winter wheat	34 soil; PCN 481; Kittitas, WA
<i>Pratylenchus</i>	<i>crenatus</i>	Poaceae > peas	1-191 sl; PCN 565-567; Linn, OR; + <i>M. naasi</i>
<i>Pratylenchus</i>	<i>crenatus</i>	Poaceae>p-mnt	25-65 sl, PCN631-635, Polk, OR, + <i>neg, pen</i>
<i>Pratylenchus</i>	<i>crenatus</i>	P-ryegrass	144 rts, 1 sl; PCN 663, 664; Yamhill, OR.
<i>Pratylenchus</i>	<i>crenatus</i>	Poaceae	546 "good" sl, PCN 817; Linn, OR; see <i>P. pen</i> for "poor" 818
<i>Pratylenchus</i>	<i>crenatus</i>	Blueberries	99 sl; PCN 890; Marion, OR
<i>Pratylenchus</i>	<i>neglectus</i>	P-mnt/grass rtn	6-662; PCN 82, 83; Union, OR; with few <i>thornei</i>
<i>Pratylenchus</i>	<i>neglectus</i>	Wine grapes	46-80 soil; PCN 513-515; Klikitat, WA; + <i>Xiphinema</i>
<i>Pratylenchus</i>	<i>penetrans</i>	Apples	79-199, soil, with <i>neg, vulnus</i> ; PCN 231, 232; Douglas, WA
<i>Pratylenchus</i>	<i>penetrans</i>	Poaceae	1982 "poor" sl, w/ <i>cren, neg</i> ; PCN 818; Linn, OR See <i>P. crenatus</i> for "good" 817
<i>Pratylenchus</i>	<i>penetrans</i>	Apples	43 sl; PCN 972; unknown Co., WA; + <i>neg?</i> , <i>vulnus</i>
<i>Pratylenchus</i>	<i>thornei</i>	P-mnt/grass rtn	11-42 sl; PCN 79-81; Union, OR
<i>Pratylenchus</i>	<i>thornei</i>	Ryegrass	39 sl; PCN 87; Polk, OR; with <i>P. crenatus</i>
<i>Pratylenchus</i>	<i>thornei</i>	<i>Poa</i> >onion	37 <i>th/neg</i> soil; PCN 581; Jefferson, OR
<i>Pratylenchus</i>	<i>thornei</i>	Lettuce/fallow >onion	202 soil; PCN 582; Jefferson, OR
<i>Pratylenchus</i>	<i>thornei</i>	Poaceae >carrot	240-1022 soil; PCN 621-615; Jefferson, OR
<i>Pratylenchus</i>	<i>thornei</i>	Grass > p-mint	837 soil; PCN 628; Polk, OR
<i>Pratylenchus</i>	<i>thornei</i>	Apples	486 soil; PCN 1040; Jefferson, OR
<i>Pratylenchus</i>	<i>thornei</i>	Poaceae	224 sl; PCN 1047; Jefferson, OR; 1/2 other sp.
<i>Pratylenchus</i>	<i>thornei/crenatus/neglectus</i>	wheat >potatoes	287 sl, PCN 1090; Jefferson, OR.
<i>Pratylenchus</i>	<i>vulnus</i>	Apples	79, soil, with <i>pen</i> ; PCN 232; Douglas, WA
<i>Pratylenchus</i>	<i>vulnus</i>	Cherries	12-19 <i>neg/vulnus</i> sl; PCN 546, 546; Wasco, OR; + <i>Zif</i>
<i>Pratylenchus</i>	<i>vulnus</i>	Apples	44-47 sl; PCN 973, 974; unknown Co., WA; + <i>pen, neg?</i>
<i>Trichodorus</i>	sp.	Peppermint	4-5; PCN 163, 165; Linn, OR
<i>Trichodorus</i>	sp.	Golf green	8-31 soil; PCN 407, 408; Washougal, WA; + <i>M. naasi, Helicotylenchus</i> sp.
<i>Trichodorus</i>	sp.	Golf green	290 sl; PCN 471; Lane, OR; + spiral, <i>Cric, naasi</i>
<i>Trichodorus</i>	sp.	Golf green	18-70 sl; PCN 604, 604; Multnomah, OR; + <i>Cric, naasi</i>
<i>Trichodorus</i>	sp.	Golf green	174 sl; PCN 949; Douglas, OR; + others
<i>Xiphinema</i>	<i>american sensu lato</i>	Wine grapes	25-50 sl; PCN 513-515; Klikitat, WA; + <i>P. neg</i>
<i>Xiphinema</i>	<i>american sensu lato</i>	Onions	4-8 sl; PCN 516, 516; CO
<i>Xiphinema</i>	<i>american sensu lato</i>	Cherries	5-289 soil; PCN 546, 547; Wasco, OR; + pin, <i>Prat</i>
<i>Xiphinema</i>	<i>american sensu lato</i>	Wine grapes	9 sl; PCN 577; Marions, OR