

Table 1. Frequency of isolation of fungi from infected beet plants collected from a commercial field near Bellona, New York.

Sampling date (days after planting)	No. of fungi recovered/No. of ^a plants examined	Identity of fungi isolated ^b		
		<i>Pythium ultimum</i>	<i>Rhizoctonia solani</i>	<i>Fusarium spp.</i>
5	0/11	0	0	0
14	4/10	4	0	0
20	6/10	6	0	0
26	7/10	6	0	1
32	8/10	2	1	5
36	8/10	3	2	6
41	7/10	5	0	4
43	10/10	1	1	9
47	8/10	3	2	6
51	9/10	0	2	6
58	10/10	5	3	4
104 ^c	44/50	2	2	35
104 ^d	37/50	2	0	32
104 ^e	36/50	1	3	28
104 ^f	13/30	0	2	13

^aSamples were washed for 1 hour in running tap water prior to planting on the agar media.

^bOther fungi isolated occasionally included species of *Phoma*, *Alternaria*, *Mucor*, *Cephalosporium*, and *Mycelia sterilia*.

^{cdef}Samples were collected at harvest time with fleshy roots exhibiting rot, healed wound, superficial surface lesions, or growth cracks, respectively.

Table 2. Pathogenicity of several isolates of *Fusarium* to nongerminated Ruby Queen beet seedballs and 1-, 2-, or 3-week-old seedlings.

<i>Fusarium</i> isolates	No. seedlings killed/ No. tested				Avg. weight of surviving plants (grams)			
	Seedballs	1-wk	2-wk	3-wk	Seedballs	1-wk	2-wk	3-wk
None	1/37	0/10	0/10	0/10	21.6	22.3	19.5	16.0
<i>Fusarium</i> #1	0/16	0/5	0/5	0/5	15.6	19.1	17.1	21.9
<i>Fusarium</i> #2	0/19	0/5	0/5	0/5	16.3	15.6	15.4	18.2
<i>Fusarium</i> #5	0/14	0/5	0/5	0/5	15.9	16.2	15.9	17.2
<i>Fusarium</i> #7	0/20	0/5	0/5	0/5	19.0	16.6	19.8	22.7
<i>Fusarium</i> #8	0/33	0/10	0/10	0/10	15.5	16.8	14.8	14.9
<i>Fusarium</i> #9	0/13	0/5	0/5	0/5	20.4	16.4	18.5	22.1
<i>Fusarium</i> #10	0/19	0/5	0/5	0/5	20.8	16.0	20.3	22.1
LSD 0.05					5.1	5.1	5.4	5.9

Table 3. Pathogenicity of one isolate each of *Pythium ultimum*, *Rhizoctonia solani* and *Fusarium oxysporum* isolated from field-grown beet plants to 1-, 3-, or 5-week-old Ruby Queen seedlings.

Pathogen(s)	No. seedlings killed/No. tested			Avg. plant wt. (gm)/age group		
	1-wk	3-wk	5-wk	1-wk	3-wk	5-wk
<i>P. ultimum</i>	9/10	3/10	0/10	4.3	25.2	37.4
<i>R. solani</i>	3/10	5/10	4/10	29.5	26.5	16.0
<i>F. oxysporum</i>	0/10	0/10	0/10	36.5	40.7	44.1
<i>P. ultimum</i> + <i>F. oxysporum</i>	9/10	0/10	0/10	0.6	34.8	41.8
<i>R. solani</i> + <i>F. oxysporum</i>	3/10	8/10	5/10	25.2	7.6	21.0
<i>P. ultimum</i> + <i>R. solani</i>	10/10	9/10	9/10	0.0	6.8	4.9
<i>P. ultimum</i> + <i>R. solani</i> + <i>F. oxysporum</i>	9/10	5/10	4/10	2.8	22.4	17.1
None	0/10	0/10	0/10	36.2	36.7	47.4
LSD 0.05				10.4	18.5	13.9