

Table 1. The survival of *Fusarium solani*, *Pythium aphanidermatum*, *Phytophthora capsici*, and *Rhizoctonia solani* infested beet seeds at two distances from the drip tape on raised plastic-mulched bed after drip application of Vapam prior to transplanting of 'BHN 444' tomato and 'Prelude' squash.

Treatment	Mulch type <sup>a</sup>	Isolation frequency (%)								
		<i>R. solani</i>		<i>F. solani</i>		<i>P. aphanidermatum</i>		<i>P. capsici</i>		
		10 cm	20 cm	10 cm	20 cm	10 cm	20 cm	10 cm	20 cm	
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25 GPA	LDPE	48 a	53 a	82 a	97 a	77 a	89 a	1 a	25 a	VIF
50 GPA	LDPE	11 a	64 a	25 a	71 a	99 a	87 a	0 a	10 a	
	VIF	19 a	83 a	0 a	96 a	32 a	72 a	0.4 a	9 a	
75 GPA	LDPE	53 a	77 a	35 a	80 a	91 a	78 a	5 a	19 a	
	VIF	3 b	55 b	14 a	95 a	22 b	84 a	8 a	10 a	
Untreated	LDPE	67 a	68 a	100 a	100 a	100 a	96 a	27 a	30 a	
	VIF	70 b	60 a	87 a	99 a	91 a	100 a	23 a	40 a	

Data are means of five replications. Means in a column (within the same rate of Vapam application) followed by a common letter are not significantly different by LSD at  $P \leq 0.05$ .

<sup>a</sup>LDPE = low-density polyethylene, VIF = virtually impermeable film.

Table 2. The effect of mulch type and rates of Vapam application on root gall indices and yield of 'BHN 444' tomato and 'Prelude' squash.

Treatment	Mulch type <sup>a</sup>	Root gall index <sup>b</sup>		Root rot severity index <sup>c</sup>		Yield (tons/a)	
		Squash	Tomato	Squash	Tomato	Squash	Tomato
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25 GPA	LDPE	0.2 a	5 a	1	2	12 a	19 a
	VIF	0.2 a	5 a	1	2	11 a	14 a
50 GPA	LDPE	0.3 a	4 a	1	2	12 a	16 a
	VIF	0.2 a	4 a	1	2	10 a	14 a
75 GPA	LDPE	0.2 a	2 a	1	2	12 a	15 a
	VIF	0.4 a	3 a	1	2	12 a	13 a
Untreated	LDPE	0.3 a	5 a	1	2	11 a	20 a
	VIF	0.2 a	6 a	1	2	13 a	17 a

Data are means of five replications. Means in a column (within the same rate of Vapam application) without letter(s) or those that are followed by a common letter are not significantly different by LSD at  $P \leq 0.05$ .

<sup>a</sup>LDPE = low-density polyethylene, VIF = virtually impermeable film.

<sup>b</sup> Root gall index scale: 0 = no galls, 1 = very few small galls, 2 = numerous small galls, 3 = numerous small galls of which some are grown together, 4 = numerous small and some big galls, 5 = 25% of roots severely galled, 6 = 50% of roots severely galled, 7 = 75% of roots severely galled, 8 = no healthy roots but plant is still green, 9 = roots rotting and plant dying, 10 = plant and roots dead.

<sup>c</sup> Root rot severity index scale: 1 = no symptoms, 2 = 1-25% of root discolored, 3 = 26-50% of root discolored, 4 = >50% of root discolored, 5 = dead root or dead plant.