

CHEMICAL CONTROL OF *HETERODERA CAROTAE* ON CARROT

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Two trails of nematode control were carried out in the years 1999-2001 in a field infested by *Heterodera carotae* in Sicily. Metam sodium, 1,3 D 97 and sulfur (90%) were applied four weeks and fenamiphos G one week before sowing carrot, cv. Navarrino, in September 1999. Tap roots were harvested in April 2000 (Table 1). Of all the treatments, only, 1,3 D 97, at the rates of 100 to 300 l/ha, increased significantly the marketable yield. Fenamiphos and 1,3 D 97 were tested again in the year 2000-2001, applying the latter by a soil fumigator. Both chemicals confirmed the results of the previous year (Table 2).

Table 1. Effect of chemical treatments on yield of carrot (year 1999-2000)

Treatments	Dose (l or Kg/ha)	Yield (Kg tap roots/m ²)			% of marketable yield		
Control	---	2,24	ab	A	0,0	a	A
1,3 D 97	100	13,64	cd	B	39,8	b	B
1,3 D 97	150	14,94	cd	B	41,7	b	B
1,3 D 97	200	13,89	cd	B	54,5	bc	BC
1,3 D 97	300	14,73	d	B	64,1	c	C
Metam sodium	1.000	3,92	ab	A	4,7	a	A
Metam sodium	2.000	5,30	b	A	10,8	a	A
1,3 D 97 + Metam sodium	100 + 1.000	11,73	c	B	43,2	b	BC
1,3 D 97 + fenamiphos	100 + 150	12,86	cd	B	43,0	b	BC
Metam sodium + fenamiphos	1.000 + 150	2,95	ab	A	0,0	a	A
Fenamiphos	300	1,79	a	A	2,3	a	A
Sulfur (90%)	1.000	1,95	a	A	0,0	a	A
Sulfur (90%)	1.500	1,77	a	A	0,0	a	A
Sulfur (90%)	2.000	1,96	a	A	5,9	a	A

Means followed by the same letters on the same column are not statistically different according to Duncan's Multiple Range Test (small letters for $P = 0.05$; capital letters for $P = 0.01$).

Table 2. Effect of chemical treatments on yield of carrot (year 2000-2001)

Treatment	Dose (l or Kg/ha)	Yield (Kg tap roots/m ²)			% marketable yield		
Control	---	4,2	a	A	8,1	a	A
1,3 D 97	300	16,1	c	C	79,1	c	C
Fenamiphos	300	5,5	ab	AB	27,3	ab	AB

Means followed by the same letters on the same column are not statistically different according to Duncan's Multiple Range Test (small letters for $P = 0.05$; capital letters for $P = 0.01$).