

Section II
Foliage & Seed-feeding & Mining Insects

CONTROL OF BROCCOLI AND CHINESE CABBAGE PESTS

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CONTROL OF BROCCOLI AND CHINESE CABBAGE PESTS, 1989. Italian Geen Sprouting variety broccoli and 'Treasure Island' Chinese cabbage were direct seeded in two separate adjacent plots in early May at the Oregon State University vegetable farm, Linn Co., Oregon. Both plots consisted of one 18' row on 36" centers with an approximate 16" plant spacing. Treatments were replicated four times in a randomized complete block design. A CO₂ pressurized backpack sprayer with a single nozzle boom containing 8002 nozzle flat-fan delivering the equivalent of 40 gals. of water per acre at 24 psi was used to apply the first three sprays. The final spray was applied with a CO₂ powered backpack sprayer using a three nozzle, flat-fan boom with 8002 tips delivering the equivalent of 162 gals. per acre of water. The first treatment was applied on 6/23/89; the second treatment followed only four days later because of rainfall; the third treatment was applied on 7/7/89; and the fourth and final treatment was applied on 7/21/89 with post treatment evaluation being done on 7/27/89. Post treatment evaluation was done by randomly selecting five plants per plot and removing all leaves and heads and counting larvae present.

All Bt treatments were applied in water plus the equivalent of 35 oz. of feed grade molasses per treated acre.

All treatments significantly reduced Lepidopterous larvae at harvest. Javelin appears to have better activity than Dipel in controlling Diamondback moth.

CHINESE CABBAGE

Total Larvae and Pupae/5 Plants

Treatment 1/	Rate/A	ICW					T ^{2/} 1/	DBM					T	CL					T
		I	II	III	IV			I	II	III	IV			I	II	III	IV		
1. Javelin WG 100	1. lb.	1	1	0	0		2a	1	3	0	0		4a	1	2	1	0		4a
2. Javelin WG 100	1.25 lb.	2	1	0	1		4a	0	2	0	2		4a	0	0	0	1		1a
3. Javelin WG 100	1. lb.																		
plus																			
Ambush 2E	.03 pt.	1	0	0	0		1a	0	0	0	0		0a	0	0	0	0		0a
4. Dipel 2x	1. lb.	0	1	0	0		1a	2	10	3	5		20a	0	0	1	0		1a
5. Ambush 2E	.3 pt.	0	0	0	0		0a	0	0	0	0		0a	0	1	0	0		1a
6. UTC		2	5	1	3		11 b	42	32	22	43		139 b	1	0	2	3		6a

1/ The equivalent of 35 mls of feed grade molasses per acre was added to treatments 1-4.

2/ Numbers in each column followed by the same letter are not significantly different (P=0.05; LSD)

3/ Numbers transformed $\sqrt{x + 0.5}$ for analysis.

BROCCOLI

Total Larvae and Pupae/5 Plants

Treatment 1/	Rate/A	ICW					T ^{2/} 1/	DBM					T	CL					T
		I	II	III	IV			I	II	III	IV			I	II	III	IV		
1. Javelin WG 100	1. lb.	6	2	2	3		13a	0	0	2	0		2a	1	2	0	0		3a
2. Javelin WG 100	1.25 lb.	2	4	1	3		10a	0	3	2	1		6ab	1	1	0	0		2a
3. Javelin WG 100	1. lb.																		
plus																			
Ambush 2E	.03 pt.	1	0	0	2		3a	0	0	0	0		0a	0	0	0	1		1a
4. Dipel 2x	1. lb.	2	0	4	8		14a	7	2	1	9		19 bc	0	0	1	0		1a
5. Ambush 2E	.3 pt.	0	2	0	0		2a	0	0	0	0		0a	1	0	0	1		2a
6. UTC		35	48	14	19		116 b	15	4	5	7		31 c	4	0	0	0		4a

1/ The equivalent of 35 mls of feed grade molasses per acre was added to treatments 1-4.

2/ Numbers in each column followed by the same letter are not significantly different (P=0.05; LSD)

3/ Numbers transformed $\sqrt{x + 0.5}$ for analysis.