

CABBAGE INSECT CONTROL, 2008

Ghidiu, G. M.

Rutgers New Jersey Agricultural Experiment Station Cooperative Extension
Rutgers Agricultural Research and Extension Center
Bridgeton, NJ 08302

CABBAGE (FALL)

'Platinum Dynasty' cv. cabbages were seeded into a Sassafras sandy loam field on 6 Aug. Plots consisted of a single row, 25-ft long and 5-ft wide, replicated four times in a randomized complete block design; a guard row buffered each treated row. In-furrow treatments of Coragen 1.67SC (5 oz/a) and HGW 1.67SC (13.33 oz/a) were applied just after planting as a drench application using an Agway hand-held 2 gal watering can in a 4" band at a rate of 45 gal/acre, then lightly covered with soil. Foliar treatments were applied with a self-propelled, tractor-mounted boom sprayer with a drop nozzle on either side of the row and one over the center of the row calibrated to deliver 80 gal/acre at 40 psi operated at 2 mph.; sprays were applied on 17 and 24 Sep. All larvae were identified and counted on 10 plants consecutive plants in the center of the row on 23 and 30 Sep, foliage injury ratings (expressed as percentage defoliation) were recorded on 23 and 30 Sep, and percentages marketable heads (clean heads with at least two undamaged wrapper leaves) were record on 10 Oct.

All treatments resulted in significantly fewer ICW, DBML and total worms on 23 Sep, and significantly fewer CL, ICW, DBML and total worms on 30 Sep, as compared with the untreated. All treatments resulted in significantly less defoliation on 23 and 30 Sep, and a significantly greater percentage marketable heads on 10 Oct, as compared with the untreated. No phytotoxicity was observed

Treatment & rate oz/A	No. worms /10 plants ¹ , 23 Sep				
	CL	ICW	DBML	Other	Total
Coragen 1.67SC IF 5.0	0 ns	0 a	0.3 a	0 a	0.3 a
HGW200 1.67 IF 13.3	0	0 a	0 a	0 a	0 a
Synapse 24WG + DyneAmic 2.0 + 0.25%	0	1.0 a	0 a	0.8 a	2.0 a
Synapse 24WG + MSO 2.0 + 0.25%	0.5	0.3 a	0.8 a	0.5 a	2.0 a
Avaunt 30WDG	0	0.3 a	1.0 a	0.5 a	1.8 a
Untreated	0.8	3.8 b	4.3 b	1.0 b	10.8 b

Numbers in a column with a letter in common are not significantly different (Tukey's HSD 0.05)
¹Worms = cabbage looper (CL), imported cabbageworm (ICW), diamondback moth larvae (DBML), other (cabbage webworm, cross-striped cabbageworm, saltmarsh caterpillar, beet armyworms corn earworm).

Treatment & rate oz/A	No. worms /10 plants ¹ , 30 Sep				
	CL	ICW	DBML	Other	Total
Coragen 1.67SC IF 5.0	0 a	0 a	0 a	0 a	0 a
HGW200 1.67 IF 13.3	0 a	0 a	0 a	0.3 a	0.3 a
Synapse 24WG + DyneAmic 2.0 + 0.25%	0 a	0 a	0 a	0.3 a	0.3 a
Synapse 24WG + MSO 2.0 + 0.25%	0 a	0.3 a	0 a	0.3 a	0.5 a
Avaunt 30WDG	0 a	0.3 a	0 a	0.3 a	0.5 a
Untreated	1.0 b	2.5 b	2.5 b	2.5 b	8.5 b

Numbers in a column with a letter in common are not significantly different (Tukey's HSD 0.05)
¹Worms = cabbage looper (CL), imported cabbageworm (ICW), diamondback moth larvae (DBML), other (cabbage webworm, cross-striped cabbageworm, saltmarsh caterpillar, beet armyworms corn earworm).

Treatment & rate oz/A	% defoliation		%Mkt Heads
	23 Sep	30 Sep	10 Oct
Coragen 1.67SC IF 5.0	0.8	0.3 a	100 a
HGW200 1.67 IF 13.3	0.3	0.3 a	98 a
Synapse 24WG + DyneAmic 2.0 + 0.25%	3.8	1.5 a	98 a
Synapse 24WG + MSO 2.0 + 0.25%	4.3	1.8 a	95 a
Avaunt 30WDG	5.5	3.0 a	95 a
Untreated	9.8	22.0 b	25 b

Numbers in a column with a letter in common are not significantly different (Tukey's HSD 0.05).
