

Section VII.  
Foliage & Seed Insects

REDUCED INSECTICIDE RATE EFFECTS ON CANOLA INSECTS 2001

D. E. Bragg

Washington State University Cooperative Extension

P. O. Box 190 Pomeroy WA 99347-0190

(509) 843-3701

[braggd@wsu.edu](mailto:braggd@wsu.edu)

A RCBD trial of 10 treatments of 4 10 x 20 meter replicates each was established on facultative (fall seeded, spring variety) Canola at Central Ferry, Garfield County, WA. The trial was carved out of a solid stand of Canola with a plot mower. All applications were made by backpack plot sprayer at 20psi/20gpa on 5-13. Only cabbage seedpod weevil and Lygus bugs were present in the trial. No cabbage aphid colonies were noted in 2001. Products under trial were: Warrior (Lambda-cyhalothrin) 1 CT at 0.24, 0.16, 0.12, and 0.08 pint per acre; Karate (Lambda-cyhalothrin) at 10 and 5 grams/Ha; Decis (Deltamethrin) at 10 and 5 grams/Ha; Fulfill at 2.6 grams/Ha; Capture 2E at 0.04 lb aia; and the UTC. Counts Lygus adults were made PrCt, 3-DAT, and 12-DAT. CSPW adults were counted PrCt, and 3-DAT; and by mean exit holes/100 pods per replicate before harvest. Yield data were taken as grams/meter square and converted to Kg/Ha. Other species present at 3-DAT were also noted by observation and consisted of Melyridae, Nabus sp., Staphylinidae, Geocorus sp., and cabbage looper. All but cabbage looper larvae are general predator insects. Warrior and Capture at the high rates are equal in CSPW control and yield. All treatments reduced adult flea beetles compared to the UTC. All products exhibited some CSPW control compared to the UTC. Lygus bug reduction varied SD at 3-DAT from UTC and lower rates.

Data analyzed by ANOVA;LSD t Test 0.05 rejection level are shown in the tables below:

Table 1. CSPW per Sweep, Mean Exit holes; and Yields

Treatments	PrCT	3-DAT	% Exit holes	Yield Kg/HA
UTC	2.6a	2.3a	33.3a	1075d
Fulfill	2.0a	1.3a	15.8b	1100d
Decis 10	2.0a	1.0b	0.0c	1390c
Decis 5	2.0a	1.0b	2.5c	1451b
Karate 10	2.0a	0.3c	0.0c	1638ab
Karate 5	2.0a	0.3c	2.5c	1480b
Warrior 0.24	2.0a	0.0c	0.0c	1760a
Warrior 0.16	2.0a	0.0c	0.0c	1646ab
Warrior 0.12	2.0a	0.0c	3.3c	1500b
Warrior 0.08	2.0a	0.0c	3.8c	1380c
Capture 0.04	2.0a	0.0c	0.0c	1760a

Numbers followed by same letter are NSD.



**Table 2. Adult flea beetles and Lygus/20 cm/raceme**

Treatment	FB		Lygus	
	PrCt	3-DAT	PrCt	3-DAT
UTC	3.5a	3.0a	3.3a	2.0a
Warrior 0.12	3.3a	0.8b	3.3a	0.3c
Warrior 0.8	3.3a	0.5bc	3.0a	1.3b
Warrior 0.24	3.3a	0.3c	3.0a	0.5c
Capture 0.04	3.3a	0.0c	3.0a	0.5c
Warrior 0.16	2.8a	0.0c	2.8a	0.8c
Karate 10	3.5a	0.0c	3.0a	0.3c
Karate 5	3.3a	0.0c	3.0a	1.3b
Decis 10	3.3a	0.0c	3.3a	0.3c
Decis 5	3.3a	0.0c	3.0a	1.8a
Fulfill 2.6	3.0a	0.0c	3.0a	2.0a

Numbers followed by same letter are NSD.