

Flea Beetle Management in Canola with Insecticides
Venkat R Chapara, Area Extension Specialist/Crop Protection

Objective: To evaluate the efficacy of contemporary insecticides to manage flea beetle damage in canola.

Methodology:

Location: NCREC, Minot, ND

GPS Coordinates: N: 48.17178 W: -101.28726

Previous Crop: Hard Red Spring Wheat

Tillage: No-Till

Design: Randomized Complete Block Design with 4 replications

Plot Dimensions: 10*25 sq. ft.

Cultivar: RG662 (NDSU)

Seed Rate: 685000 PLS/ac

Planting Date: May 16, 2014

Date of Emergence: May 21, 2014

Insect Pests to Evaluate: Flea beetles, army worms, aphids, diamond back moth and weevils.

Insect Pests observed: Only flea beetle incidence was observed above Economic Threshold level (ETL >25%) no other insect pests made their appearance in the entire crop season.

Insecticide application Date: June 6, 2014

Other Practices: All the agronomic practices such as fertilizers, weedicides were applied at recommended timings of the crop season as per the crop production recommended practices.

Date of Harvest: September 26, 2014

Results:

Table 1: Efficacy of various insecticides in controlling flea beetles leaf defoliation on reaching ETL (>25%) at 1, 2, and 3 weeks after application and their impact on yield of canola.

Treatments	Dosage@ Fl. oz/ac	At Application*	Week after Application*	2 weeks after Application*	3 weeks after Application*	Yield (lbs/ac)
Non-Treated	--	32.98	24.58	23.32	25.34	681.89
Endigo ZCX	4	33.75	16.46	18.13	8.54	719.39
Besiege	9	32.08	18.75	17.71	7.25	794.67
Warrior II	1.92	31.25	14.48	17.29	6.29	753.35
Baythroid XL	2.8	33.49	19.37	12.56	5.89	736.59
Capture	2.6	33.96	21.56	20.01	10.81	655.31
LSD (P=.05)	--	3.55	5.98	8.14	3.55	139.80
CV%	--	7.15	20.7	29.71	7.24	2.16

* Leaf defoliation