Canola Insect Thresholds Update Summer 2008

This year, in light of higher canola prices, insect control thresholds have been lowered. Here is a list of insects that you may see this year, with the updated economic thresholds.

Cabbage Seedpod Weevil

This year, cabbage seedpod weevil thresholds have been lowered to 20 cabbage seedpod weevils in 10 sweeps, or 2 per sweep. Last year, the threshold used was 2-3 weevils per sweep, so this year is not radically different. Western Canadian entomologists do not feel dropping the threshold below 2 weevils per sweep is warranted at this time.

Bertha Armyworm

Bertha armyworm thresholds can vary based on the average canola price expected and the cost of insect control (chemical and application). Manitoba Agriculture, Food and Rural Initiatives (MAFRI) has updated the bertha armyworm threshold chart to look like this:

	Expected Seed Value - $/bushel										
Spraying Cost - $/acre	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
	Number of Larvae/metre²										
7	20	17	15	13	12	11	10	9	9	8	8
8	23	20	17	15	14	13	11	11	10	9	9
9	26	22	19	17	16	14	13	12	11	10	10
10	29	25	22	19	17	16	14	13	12	11	11
11	32	27	24	21	19	17	16	15	14	13	12
12	34	30	26	23	21	19	17	16	15	14	13
13	37	32	28	25	22	20	19	17	16	15	14
14	40	35	31	27	24	22	20	19	17	16	15
15	43	37	32	29	26	23	22	20	19	17	16

Table 1 - Bertha armyworm thresholds in canola, courtesy of MAFRI

Under drought conditions, where leaf drop is prevalent and bertha armyworm feeding is concentrated on canola pods, economic thresholds may be lower than indicated in Table 1. Under severe drought stress, dividing the economic thresholds above by 1.48 may give more appropriate economic thresholds.

Lygus Bug

Lygus bug thresholds depend on the average expected price of canola, the cost of control (chemical and application), and the number of lygus found in 10 sweeps. MAFRI has generated the following charts on lygus bug thresholds:

Application Cost		End of Flowering (Canola Crop Stages 4.4 - 5.1)					
$ / ha	$/ ac	Economic Injury Level					
22	8.00	11	8	7	5	5	4
25	10.00	13	10	8	7	6	5
27	12.00	16	12	10	8	7	6
30	14.00	19	14	11	9	8	7
32	16.00	22	16	13	11	9	8
35	18.00	24	18	15	12	10	9
Canola Price ($/bu)		6.00	8.00	10.00	12.00	14.00	16.00

At crop stages prior to end of flowering, feeding by lygus bugs on canola does not generally result in economic damage

Table 2 - Lygus bug thresholds in canola at end of flowering, courtesy of MAFRI

Application Cost		Pod Ripening (Canola Crop Stage 5.2)					
$ / ha	$/ ac	Economic Injury Level					
22	8.00	15	12	9	8	7	6
25	10.00	19	14	11	10	8	7
27	12.00	23	17	14	11	10	9
30	14.00	27	20	16	13	11	10
32	16.00	30	23	18	15	13	11
35	18.00	34	26	20	17	15	13
Canola Price ($/bu)		6.00	8.00	10.00	12.00	14.00	16.00

Table 3 - Lygus bug thresholds in canola at pod ripening, courtesy of MAFRI

Diamondback Moth Larvae

The thresholds for diamondback moth larvae have remained unchanged, and they are:

- 10 to 15 larvae / square foot at early flowering
- 20 to 30 larvae / square foot at pod ripening

If leaves are beginning to fall off, and diamondback larvae are moving up the plant to feed on pods, consider using a foliar insecticide at the lower end of the threshold range.

For more information on canola agronomics, please visit the Canola Council of Canada website at www.canolacouncil.org