

# Diamondback Moth Monitoring Program in Manitoba - 2023



Diamondback moth does not overwinter well in the Canadian prairie provinces, but large numbers can potentially blow in. If conditions are favorable for their survival and reproduction when they arrive, and if natural enemies do not limit population establishment, populations can increase.

Pheromone-baited traps (Fig. 1), which attract the male moths, are established for a 6-8 week period from early-May until late-June to detect the arrival of populations of diamondback moth early in the season. The cumulative counts from the traps, and how early larger numbers of moths arrive, can not predict what levels of larvae will be, but can be used to determine regions of the province where increased attention for diamondback moth is recommended when scouting fields.



Figure 1. Trap for diamondback moth



Figure 2. Diamondback moth on insert of trap

## Summary (as of July 5, 2023)

Pheromone-baited traps for adult moths are currently providing data from 84 locations in Manitoba.

- Trap counts were low until the week of May 21-27<sup>th</sup>, when some moderate counts occurred in traps in the Eastern region. The following week (May 28-June 3<sup>rd</sup>) higher counts occurred in some traps in the Eastern and Central region, with counts in 4 traps approaching or exceeding 100. The week of June 4-10<sup>th</sup> there were 3 traps with counts exceeding 100, two in the Eastern and one in the Central region. One of the traps

in the Eastern region (near Beausejour) continued to have a high moth count the week of June 11 – 17, although many traps had lower numbers that week. A trap near Whitemouth exceeded 100 diamondback moth the week of June 18-24.

- Larvae of diamondback moth have been found in some areas, although not at economic levels. Look for diamondback moth larvae when doing crop scouting in canola or other cruciferous crops.
- Diamondback moths have been caught in 75 of the 84 traps reporting.
- The highest cumulative trap count is currently 513 from a trap near Beausejour in the Eastern region.

**Table 1. Highest cumulative trap counts per agricultural region in Manitoba as of July 5, 2023**

Lower Risk: 0-25

Elevated Risk: 26-200

Higher level of moth catch: 200+

Location	Count	Location	Count	Location	Count
<b>Northwest</b>					
Durban	33	Grandview	21	Grandview	7
Minitonas	33	Russell	17	The Pas	7
Makaroff	25	Shell Valley	17	Dropmore	6
Birch River	23	Grandview	15	Roblin North	4
Grandview	23	Roblin	8	Bield	3
<b>Southwest</b>					
First week with a weekly trap count greater than 25: June 18-24					
Lauder	103	Minto	17	Rosburn	4
Tilston	72	Belmont	14	Shoal Lake	3
Miniota	29	Rapid City	12	Stockton	1
Minnedosa	19	Whitehead	7		
Russell	19	Brandon	6		

**Central**

First week with a weekly trap count greater than 25: May 28 – June 3.

Weekly trap counts greater than 100 occurred at the Brunkild and Altona traps for the week of June 4 – 10.

Altona	294	Culross	82	Purves	18
Horndean	177	Layland	76	Gnadenthal	17
Rosenfeld	165	Fannystelle	57	Deerwood	12
Brunkild	162	Elm Creek	65	Pilot Mound	13
Gretna	91	Barnsley	38	Graysville	9
Barnsley	90	Altona	27	Rosebank	8

**Eastern**

First week with a weekly trap count greater than 25: May 21 – 27.

Weekly trap counts greater than 100 occurred at the Beausejour trap for the weeks of May 28 - June 3, June 4-10, and June 11-17, and the Whitemouth trap the week of June 18-24.

Beausejour	513	Hadashville	74	Ste. Anne	44
Whitemouth	278	Stead	60	Tourond	33

**Interlake**

First week with a weekly trap count greater than 25: June 4-10

Arborg	101	Teulon	46	Grosse Isle	31
Rosser	60	Poplarfield	42	Vidir	26
East Selkirk	53	Lundar	39	Steepprock	23
Ashern	52	Stonewall	39	Grosse Isle	19
Selkirk	50	Winnipeg Beach	34	Hodgson	17

Guidelines for monitoring larvae of diamondback moth can be found at: <https://www.gov.mb.ca/agriculture/crops/insects/pubs/diamondback-moth-factsheet-revised-may2023.pdf>



**Figure 3. Diamondback moth pupa (left) and larva (right).**