Issue 10 – July 11, 2025 Manitoba Potato Report



Seasonal Reports Weekly Weather Maps Potato Production

Provincial Summary

- Potato crops are doing well with tuber bulking to around 3-inches. Most fields are row closed or nearly so.
- The week (June 30 July 6) has been generally warmer with daytime highs around 31°C while the overnight lows ranged from 7°C to 12°C in selected potato growing areas. Other than south-east potato areas (67 mm to 48 mm) most other areas had very little rainfall ranging from 0.2 mm to 12 mm. Irrigation is in full swing due to low soil moisture. There were thunderstorms on July 3 in southern parts of Manitoba.
- Late blight spores were detected for the third consecutive week in a few spore traps in Manitoba. However, no late blight disease has been reported yet.

Ag Weather Data

Precipitation and Soil Moisture

- There were thunderstorms on July 3 in the southern parts of Manitoba, covering potato growing areas in Holland, Portage La Prairie, Carman, Winkler and Altona, resulting in 48 mm in Winkler and nearly 67 mm rainfall in Altona (Table 1). In other potato areas lower rainfall was recorded during the week (June 30 to July 6) ranging from 0.2 mm at Rivers to 7 mm at Glenboro. Cumulative rainfall May 1 to July 6 was much below normal, from low of 27% of the normal in Bagot to around 85% in Carberry and Winkler (Table 1, Fig. 1). <u>https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf</u>.
- Due to lack of sufficient rainfall, the 30cm soil depth moisture (relative to field capacity) became even drier by July 6 compared to last week, and larger areas are now generally dry to optimal (Fig. 2). Shilo and Treherne continue to be driest at 5 cm and 20 cm depths.

https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf



Fig.1 (left). There was scattered rainfall in the week, and the cumulative rainfall from May 1 to June 29 was much below normal ranging from 27<u>%</u> to 85% of the normal in the potato growing areas.

Fig.2 (right). Soil moisture (relative to field capacity) at 0-30cm depths (up to July 6) indicates that many potato growing areas have become drier compared to last week. Many potato areas now have dry to very dry conditions.

Manitoba 🐆

Report compiled by Dr. Vikram Bisht Potato and Horticulture Crop Pathologist, Manitoba Agriculture <u>Subscribe</u> to the weekly Potato Report

Region	Max Temp (°C)	Min Temp (°C)	Rainfall (mm) for the week	Crop Water Demand (mm) - week	Rainfall (mm) (Since May 1)	2025 Rainfall (% of normal) Since May 1	P-Days (Cumulative from Jun 1)	GDD (% of normal)
Altona	30.3	10.8	66.6	N/A	150	81	N/A	116
Austin	31.8	8.9	3.3	36.8	73	45	274	112
Bagot	31.0	8.0	1.7	36.4	44	27	268	111
Carberry EC	31.0	8.9	7.7	27.1	140	84	259	112
Carman	32.4	10.4	6.8	28.5	75	42	268	118
Glenboro	31.7	8.1	5.9	32.7	97	61	267	115
Holland	31.2	8.2	12.0	36.6	118	66	271	113
Portage EC	31.3	11.8	11.6	37.9	92	55	276	117
Rivers	31.6	9.8	0.2	36.1	85	49	261	115
Shilo	31.3	8.9	3.2	38.4	115	72	266	112
St. Claude	31.0	11.1	6.5	36.5	92	51	283	115
Treherne	31.6	6.9	3.7	31.0	91	42	264	112
Wawanesa	31.4	7.3	1.8	33.8	92	56	262	111
Winkler	33.9	10.9	48.1	32.1	156	85	276	122

Table 1. Manitoba Ag Weather Data – June 30 – July 6, 2025

Crop Water Demand (CWD) mm: <u>www.mbpotatoes.ca/cwd.cfm</u>. N/A= Data Not Available P-Days: <u>www.mbpotatoes.ca/pday.cfm</u>

For more Manitoba weather information, visit: <u>www.gov.mb.ca/agriculture/weather</u>

Temperatures – Air and Soil

- The week was just a bit warmer than last week, with daytime highs over 31°C in all potato areas, while the overnight lows ranged from 7.0°C (Wawanesa and Treherne) to 11.8°C (Portage) in selected potato growing areas (Table 1). This day-night temperature differential supports good tuberization and bulking.
- Cumulative heat as Growing Degree Days (GDD, base 5°C) from May 1 to July 6 continues to be warmer than normal, ranging from 11% (Wawanesa) to 22% (Winkler) above normal GDD (Table 1).
- P-Days (Cumulative potato heat units) from June 1 to July 6 ranged from 259 to 283, these heat units translate into near normal P-Days (95% to 105% of normal). By the weekend the P-Days may cross 300, a critical heat unit for early blight fungicide management applications.
- There is a forecasted risk of thunderstorms or showers on July 10 and 11; and showers on July 14 and 15. Daytime high temperatures are projected to remain under 27°C till July 16, while nighttime lows are projected to be in mid-teens.



Fig.3. Thunderstorms on July 3 went through southern part of the province, bringing heavy rainfall in some potato areas; 48 mm (Winkler) to 67mm (Altona).



Crop Progress

- Due to low and variable rainfall in the week, soil moisture in the 0-30 cm profile continued to get drier across all potato growing regions. Irrigation and fertigation are in full swing across Manitoba.
- Crop canopy is closing between rows; ground cover ranges from 75% to 100%. Plants are over 30-inch or taller in many fields. Tubers are over 3-inch size depending on planting dates (Fig. 4 b, c).
- Heat runners and chaining are being reported in many more fields, especially those which had not row closed. New sets produced by the heat runner plants may affect the harvest tuber profile (Fig 5).
- Thunderstorms on July 3 were reported in many southern Manitoba potato areas, leading to 2 to over 3inch rainfall. For the last three weeks, there have been thunderstorm showers at least once a week. After continued reports of detection of late blight spores at a few sites, protective fungicide applications were made throughout the province.
- Unprotected volunteer potato plants in rotation crops and on cull piles (though some have been cleared), will remain without late blight fungicide protection and are at risk of being infected by late blight disease and remain undetected.



Fig.4. a: Early planted fields are closing in between rows. b and c: Good tuber bulking, over 3-inch size. Photos: a: Ethan Friesen (Summer student, Manitoba Agriculture), b: George Moir (Marginet Farms), c: Janelle Lavich (Choice Agri).



Fig.5. Heat runners and tuber chaining seen in many fields. Photos: a to c: Vikram Bisht (Manitoba Agriculture).



Disease Monitoring

- In the third week of Spornado traps monitoring from June 30 to July 6, *Phytophthora infestans* spores were again detected in more traps in the rural municipalities of Riverdale, North Cypress, Cornwallis, Victoria, Glenboro-South Cypress, North Cypress-Langford, North Norfolk, Norfolk Treherne, Portage La Prairie, Dufferin, and Stanley. The spore counts are low, but positives for 3-weeks in a row are a concern.
 - At five sites positives were found in weeks 2 and 3; and one site was positive in all three weeks.
- No late blight has yet been reported in Manitoba.
- Late blight cumulative disease risk values (DSVs) starting from June 1 to July 10 are getting higher, ranging from 2 to 16 (Fig. 6), suggesting low to medium risk for late blight across the province. However, the wind-protected areas of the potato fields could still have a higher risk. Also, it is important to have fungicide protection if the crop canopies are closing between rows, so there is protection within the canopy. Ground application of fungicide(s) in areas not covered by aerial application is strongly recommended.
- Scouting in wind-protected areas around shelterbelt trees and close to hydropower line is important. There
 are many late blight look-alikes: wind damage, sunscald and botrytis infection (Fig 7). Late blight infections
 often show yellow halo around the leaf spot (Fig. 8), and sporulation in high humidity.
- A DSV of 18 is the initial threshold for disease occurrence if the inoculum is present in the area. Late blight
 risk forecasting is provided on a regional basis at <u>www.mbpotatoes.ca.</u>



Fig.6. The cumulative DSVs from June 1 to July 10 suggests low to medium risk of late disease occurring. Wind-protected micro-climate and within 100% closed in crop canopies could provide additional favourable conditions for the disease.



Fig.7. Winddamage and sunscald can sometimes lead to late blight look-alike symptoms. Photos: a and b: Kyle Froese (Corduroy Farms) c: Janelle Lavich (Choice Agri).





Fig. 8. 2017 Late blight symptoms on the upperside of the leaves. Photos: a: Euginia Banks (OMAFRA) b: Vikram Bisht (Manitoba Agriculture).

Fig.9 (left). Increasing incidence of early blight in the lower canopy is being reported from more fields. Photo: Janelle Lavich (Choice Agri).

Fig.10 (right). Potato mosaic infected plants reported from some more fields. Photo: Riley Francis (Under The Hill Farms).

- The incidence of early blight has increased and is being observed in more fields, with symptoms observed on the lower canopy (Fig 9). In a few days Cumulative P-Day values will be nearing 300, a stage when protective fungicides sprays are recommended. Spornado spore traps are detecting *Alternaria solani* spores.
- A very low incidence of mosaic infected plants was reported from processing Russet Burbank crop (Fig 10).
- P-Days, and SprayCast maps are available at <u>http://www.mbpotatoes.ca/index.cfm.</u>

Insect Pest Monitoring

- Aphid traps (suction and pans) set up in eight seed potato fields were checked for aphids. We are monitoring for PVY-efficient vectors Green peach aphid and Potato aphid, and "others".
 - More aphids were trapped in the week (June 30 July 6) (Table 2).
 - Potato Aphid (PA) was recorded in three out of eight sites, PA is an efficient vector for potato mosaic viruses, so aphid-oil (mineral oil) with insecticide could be considered.
- There have been more reports of Colorado potato beetle (CPB) adults and egg masses from different areas of the province, but the most severe CPB damage has been reported from southern Manitoba. Multiple stages of the CPB lifecycle can be seen in many fields. In many areas foliar applications of Entrust are becoming less effective. Cyclaniliprole (Harvanta, Exirel), Spinetoram (Delegate), Tetraniliprole (Vayego),



Broflanilide (Cimegra), are some of the effective foliar insecticides being used in various parts of the province for resistance management.

- European corn borer monitoring has been done for two weeks. In the western part of the province, especially Carberry and Douglas areas appear to have higher counts in the traps for the week (June 30 to July 6).
 - In a few days there could be egg masses on the potato foliage. It is time to start scouting for the egg-masses.

Field #	Town	RM	Green Peach Aphid	Potato Aphid	Other Aphids	Total *	ALH	PLH	Comments
Southern Region									
Field 1-H	Winker	Stanley	0	1	8	9	0	0	Lots of thrips
Field 2-K	Stephenfield	Dufferin	0	6	7	13	0	0	Lots of thrips
Field 3-S	Winkler	Rhineland	0	3	2	5	0	0	Lots of thrips
Central Region									
Field 4-S	Swan Lake	Victoria	0	0	4	4	0	0	Some thrips
Field 5-S	Glenora	Argyle	0	0	3	3	0	0	Low thrips number
Field 6-S	Westbourne	Portage La Prairie	0	0	0	0**	0	0	Pan traps – no sample
Western Region									
Field 7-A	Wellwood	North Cypress- Langford	0	0	3	3	0	0	Lots of thrips
Field 8-S	Carberry	North Cypress- Langford	0	0	5	5	0	0	Very few thrips

Table. 2. Weekly Aphid Report –	Week 3 (June 30 to July 6) 2025
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* The aphid counts are a summation from a suction trap and two pan traps in a field. ** No sample from Pan trap ALH = Aster leafhopper, PLH = Potato leafhopper

Regular weekly reports and other features will be provided, including late blight risk forecasting, updates on disease and insect pests on potatoes, and control recommendations. All reports and information will also be available at http://www.mbpotatoes.ca/index.cfm and archived at Manitoba Potato Reports

Growers and industry stakeholders, please report or submit for diagnosis, any disease or insect observations of importance. If you suspect late blight in your area, please contact <u>vikram.bisht@gov.mb.ca</u>

