Issue 9 – July 4, 2025 Manitoba Potato Report



Seasonal Reports Weekly Weather Maps Potato Production

Provincial Summary

- Potato fields are in various stages of tuberization, from pinheads to over 2-inch tubers.
- The week (June 23 29) has been generally warmer with daytime highs around 30°C while the overnight lows ranged from 3.0 to 6.5°C in selected potato growing areas; and very little rainfall ranging from 0 to 1.7 mm. Irrigation is in full swing due to low soil moisture.
- Late blight spores were detected for the second consecutive week in a few spore traps in Manitoba. No late blight disease has been reported. There were thunderstorms on June 22 / 23 in parts of Manitoba

Ag Weather Data

Precipitation and Soil Moisture

- Minimal rainfall was recorded across Manitoba's potato growing regions during the week of June 23 to 29, ranging from 0 mm at many sites to a maximum of 1.7 mm in Rivers (Table 1). Cumulative rainfall May 1 to June 29 was below normal, from low of 29% of the normal in Bagot to 91% (Carberry) (Table 1, Fig. 1). <u>https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf</u>.
- Due to lack of rainfall, the 30cm soil depth moisture (relative to field capacity) became drier by June 29 compared to last week, and larger areas are now generally dry to optimal (Fig. 2). Shilo was the driest of the selected sites <u>https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf</u>



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 29 to 91% of the normal in the potato growing areas.

Fig.2 (right). Soil moisture (relative to field capacity) at 0-30cm depths (up to June 29) indicates that many potato growing areas have become drier compared to last week. Many areas now have dry to very dry conditions.

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	Rainfall (mm) (Since May 1)	2025 Rainfall (% of normal) Since May 1	P-Days (Cumulative since June 1)	GDD base 5C (% of normal)
Altona	31.2	3.8	0.0	83	51		116
Austin	30.7	4.9	0.0	69	49	216	112
Bagot	31.6	44	0.1	43	29	211	111
Carberry EC	29.9	5.5	0.0	132	91	200	112
Carman	32.3	3.6	0.0	68	42	212	118
Glenboro	31.1	4.2	0.6	91	64	211	114
Holland	30.9	4.9	0.8	106	66	214	112
Portage EC	31.5	4.1	0.0	81	54	216	117
Rivers	27.9	6.5	1.7	85	56	205	115
Shilo	30.5	3.0	0.7	87	56	210	111
St. Claude	31.5	5.1	1.0	86	52	224	115
Treherne	30.3	3.0	0.7	87	56	206	111
Wawanesa	30.6	4.1	0.9	90	61	206	110
Winkler	31.1	4.7	0.2	108	65	221	122

Table 1. Manitoba Ag Weather Data – June 23 – 29, 2025

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



Fig.3. Soil moisture % by volumetric basis in the top 5 cm. Shilo was the driest while Winkler soils appear to have higher moisture.

Temperatures – Air and Soil

- The week (Jun 23 29) was generally warmer than last week, with daytime highs over 30°C (range 27.9 in Rivers to 32.3°C in Carman), while the overnight lows ranged from 3.0 (Shilo and Treherne) to 6.5°C (Rivers) in selected potato growing areas (Table 1). This day-night temperature differential supports good tuberization.
- Cumulative heat as Growing Degree Days (GDD, base 5°C) from May 1 to Jun 29 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 29 ranged from 200 to 224, these heat units translate into near normal P-Days.
- Hot weather is expected on July 3/4, with risk of thunderstorms or showers. Additional Rainfall is forecast for July 7. Daytime high temperatures are projected to reach around 30°C on both July 4 and 9.



Crop Progress

- Due to minimal rainfall in the week, soil moisture in the 0-30 cm profile continues to get drier across all
 potato growing regions. Where possible, irrigation is being used to maintain adequate moisture levels in
 the fields.
- Heat runners are being reported in many more fields, especially those which have not row-closed.
- Crop canopy is closing between rows; ground cover ranges from 50% to 100%. Plants are 24-inch or taller in many fields (Fig. 4a). Tubers are pin-head to 3-inch size depending on planting dates (Fig. 4b, c).
- Thunderstorms on June 22 /23 were reported in many areas. After reports of detection of late blight spores at a few sites, protective fungicide applications were made throughout the province.
- Volunteer potato plants have been reported in some corn and wheat fields. Such plants usually will remain
 without late blight fungicide protection and could serve as unprotected hosts for late blight disease,
 Colorado potato beetles and even PVY vectoring aphids.
- Plants with group 4 herbicide injury symptoms from affected seed were reported in a couple of fields (Fig 5). Such seed would have resulted from group 4 herbicide exposure in 2024 crops.



Fig.4. a: Early planted fields are closing in between rows. b, c: Tubers over 2- inch size. Photos: a: Vikram Bisht (Manitoba Agriculture), b: George Moir (Marginet Farms, c: Orla Sheridan (Shilo Farms).



Fig.5. Group 4 herbicide affected seed has resulted in scattered plants showing symptoms of fern-leaf development. Photo: Scott Graham (Simplot Canada).



Disease Monitoring

- In the second week of Spornado traps monitoring from June 23 to 30, *Phytophthora infestans* spores were again detected in a few traps in the rural municipalities of Dufferin, Glenboro-South Cypress, North Norfolk, North Cypress-Langford and Victoria.
- No late blight has been reported in Manitoba.
- Late blight cumulative disease risk values (DSVs) starting from June 1 to July 2 are still low, ranging from 2 to 11 (Fig. 6), suggesting generally a low risk for late blight. 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.
- 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 26 suggests generally a low risk of late disease occurring. However, wind-protected microclimate and within 100% closed in crop canopies could provide conditions favourable to late blight.

- Low incidence of early blight spots was observed in a few more fields, with symptoms observed on the lower canopy. 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.
- PVY infected plants were noted in a few more fields.
- P-Days, and SprayCast maps will be 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". Low number of
 aphids were trapped in the week (June 23 30); Potato Aphid (PA) was recorded in one site (Table 2), PA
 is an efficient vector for potato mosaic viruses.
- 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 (Fig 7).



Table, 2,	Weekly Aphid Report –	- Week 2 (<u>June 23– June 30</u>) 2025
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Field #	Town	RM	Green Peach Aphid	Potato Aphid	Other Aphids	Total *	ALH	PLH	Comments
Southern Region									
Field 1-H	Winker	Stanley	0	0	1	1	0	0	
Field 2-K	Stephenfield	Dufferin	0	1	3	4	0	0	
Field 3-S	Winkler	Rhineland	0	0	0	0	0	0	
Central Region									
Field 4-S	Swan Lake	Victoria	0	0	0	0	0	0	
Field 5-S	Glenora	Argyle	0	0	0	0	0	0	
Field 6-S	Westbourne	Portage La Prairie	0	0	0	0	0	0	
Western Region									
Field 7-A	Wellwood	North Cypress- Langford	0	0	0	0	0	0	
Field 8-S	Carberry	North Cypress- Langford	0	0	0	0	0	0	

* The aphid counts are a summation from a suction trap and two pan traps in a field. ALH = Aster leafhopper, PLH = Potato leafhopper



Fig.7. *a, b, c:* Young instars of CPB larvae are voracious feeders. In many fields all stages of CPBs can be found. CPBs caused severe damage on young potato plants in southern Manitoba. Photos: Vikram Bisht, (Manitoba Agriculture).

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>

