Issue 12 – July 25, 2025

Manitoba Potato Report

[Seasonal Reports] [Weekly Weather Maps] [Potato Production]

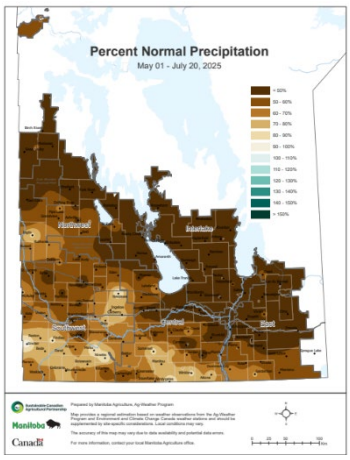
Provincial Summary

- Potato crops are doing well, and the crops are in rapid tuber bulking stage. Most fields are row closed or nearly so, with moist under-canopy.
- The week (July 14-21) was slightly cooler, with daytime highs around 25ºC while the overnight lows ranged from 4.5ºC to 8.9ºC in selected potato growing areas.
- There was scattered and inconsistent rainfall in the potato areas, ranging from 2.6 to 13.7 mm. Irrigation is in full swing due to low soil moisture. Light and scattered showers occurred on July 14/15 and 19 to 22.
- Late blight spores were detected again after a gap of one week in the fifth week of spore monitoring in Manitoba. No late blight disease has been reported yet.

Ag Weather Data

Precipitation and Soil Moisture

- There was inconsistent rainfall across the province on July 14, with amounts ranging from 2.6 mm (Portage) to 13.7 mm (Glenboro) across the potato growing areas (Table 1). The week's rainfall fell short of meeting the crop water demand in all potato site weather stations. Cumulative rainfall May 1 to July 20 was much below normal in all potato growing areas, from low of 39% of the normal in Carman to around 82% in Winkler (Table 1, Fig. 1). *https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf*. There were scattered showers from July 20 to 22 in some potato areas.
- Due to lack of sufficient rainfall, the 30cm soil depth moisture (relative to field capacity) became even drier by July 20 compared to last week, and larger areas are now generally dry to optimal (Fig. 2). Shilo and Treherne continue to be the driest (by % moisture content by volume) of the selected potato areas at 5 cm and 20 cm depths. *https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf*.



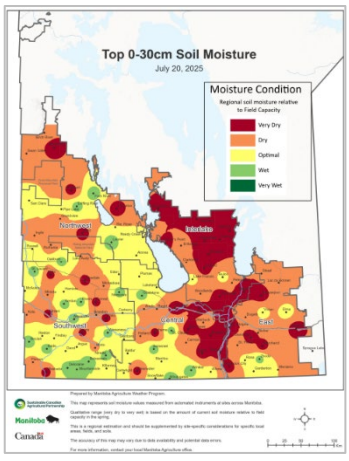


Fig.1 (left). *There was scattered rainfall in the week, and the cumulative rainfall from May 1 to June 20 was still much below normal ranging from 39% to 82% of the normal in the potato growing areas.*

Fig.2 (right). *Soil moisture (relative to field capacity) at 0-30cm depths (up to July 20) indicates that many potato growing areas have become drier compared to last week. Many potato areas now have dry to very dry conditions, without supplementary irrigation.*

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Manitoba

Table 1. Manitoba Ag Weather Data – **July 14 to July 20**, 2025

Region	Max Temp (ºC)	Min Temp (ºC)	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	24.3	5.7	8.8	18.7	165	75	392	109
Austin	24.4	7.7	5.3	25.8	85	44	398	106
Bagot	24.9	6.7	7.0	24.6	**89**	44	380	105
Carberry EC	24.0	5.2	5.4	17.5	**151**	73	378	104
Carman	25.8	4.7	6.4	18.4	85	39	378	111
Glenboro	23.5	5.0	**13.7**	18.5	121	62	377	107
Holland	23.8	5.2	11.4	24.1	131	60	383	106
Portage EC	24.8	8.9	**2.6**	29.1	99	49	397	110
Rivers	23.4	5.2	8.4	21.8	102	48	364	108
Shilo	24.2	6.1	8.5	26.7	155	80	377	105
St. Claude	23.4	8.1	4.5	24.9	119	53	**405**	108
Treherne	24.0	5.0	9.6	21.2	106	48	373	105
Wawanesa	24.6	**4.5**	12.2	20.7	113	57	370	104
Winkler	**28.1**	6.5	11.5	17.3	187	82	389	**115**

Crop Water Demand (CWD) mm: www.mbpotatoes.ca/cwd.cfm. P-Days: www.mbpotatoes.ca/pday.cfm
For more Manitoba weather information, visit: *www.gov.mb.ca/agriculture/weather*

Temperatures – Air and Soil

- The week was just a bit cooler than last week, with daytime highs around 25ºC in most of the potato areas compared to around 30ºC last week. The overnight lows were also cooler than last week; and ranged from 4.5ºC (St. Claude) to 8.9ºC (Portage) in selected potato growing areas (Table 1). This day-night temperature differential supports good tuberization and rapid bulking.
- Cumulative heat as Growing Degree Days (GDD, base 5ºC) from May 1 to July 20 has come close to the normal, ranging from 4% (Wawanesa) to 15% (Winkler) above normal GDD (Table 1).
- P-Days (Cumulative potato heat units) from June 1 to July 20 ranged from 364 (Glenboro) to 405 (St. Claude) (Table 1), these heat units translate into near normal P-Days. All potato growing areas have >350 P-Day heat units, indicating crops will be in rapid bulking and heat conditions favourable for early blight.
- There is a forecast for showers from July 25 to 27 scattered across the province. Daytime temperatures are projected to reach 30ºC early in the week, and overnight temperatures to be in mid-teens.

Crop Progress

- Due to scant and variable rainfall in the week and high crop water demand, the soil moisture in the 0-30 cm profile continued to get drier across Manitoba. Irrigation and fertigation are in full swing across all potato growing regions.
- Crop canopy has closed-in or nearly so (Fig. 3a). Plants are starting to settle down on ground in some fields, making the under-canopy quite wet. Heat-runner and tuber formation on the heat runners are seen in some fields (Fig. 3b).
- Crops are in rapid tuber-bulking, and many over 4-inch size depending on planting dates.
- Crop water demand for the week ranging from 17 to 29 mm, was not met by the scant rainfall in the province, ranging from 2.6 to 13.7 mm across the potato areas (Table 1).
- In some fields, planted in mid-May, tubers formation directly on seed pieces were noticed (Fig. 4a). Such tuberization happens when seed pieces are physiologically very old; however, these seed pieces were

young. It is speculated and possible that cool 48-50ºF (9-10ºC) seed pieces were planted during the hot days (daytime temperatures ranging up to 97ºF (36ºC) in mid-May. Many such seed pieces could lead to poor emergence and insufficient stems per plant (Fig. 4b).

- Scattered showers on July 22, 23 and 24 were reported in many potato areas, leading to inconsistent rainfall (not included in July 14-20 crop weather report).

***Fig. 3 a**: Ground cover nearly 100% even in Ranger Russet.* ***b:** Heat-related tuber formation on heat-runner on Russet Burbank. Photos: a: Ethan Friesen (Summer student, Manitoba Agriculture), b: Riley Wolfe (Summer Intern, Simplot).*

***Fig. 4 a:** Tuber formation on the seed piece, may indicate physiological aged seed or some environmental shock.* ***b:** Single stem plant from delayed emergence. Photos: a: anonymous; b: Kurtis McKee (JPW Farms).*

Disease Monitoring

- After a week of negatives for spores, ***Phytophthora infestans*** **spores were again detected in a few Spornado trap sites** in the fifth week of monitoring from July 13 to 21 in the municipalities of Riverdale, Victoria, Glenboro-South Cypress, North Cypress-Langford, Norfolk Treherne, Portage La Prairie, Dufferin, and Stanley. The spore counts were low at all sites, except Stanley, where over 150,000 spore count per cassette was reported.
- **No late blight has yet been reported in Manitoba.**
- A few late blight look-alikes displaying similar symptoms were brought in for confirmation. (Fig. 5). Adaxial (upper leaf surface) and abaxial (underside of leaf surface) showed leaf spots crossing the main veins and halo around the spots; but no *Phytophthora* sporulation was produced under high humidity. Agdia test strip test on this sample (Fig 5) was negative for *Phytophthora*.
- Late blight cumulative disease risk values (DSVs) starting from June 1 to July 24 have crossed 18 at many sites across Manitoba, ranging from 9 to 40. **The last 7 days had accumulated 2 to 10 DSVs, suggesting low to high risk of late blight disease occurring in the week in the province** (Fig. 6)**.**

- The wind-protected areas of the potato fields could have a higher risk. Scouting in wind-protected areas around shelterbelt trees and close to hydropower lines is important. Also, it is important to have fungicide protection within the canopy. Ground application of fungicide(s) in areas not covered by aerial application is strongly recommended.
- Late blight disease risk remains high in many areas of the province. www.mbpotatoes.ca.
- "Late blight confirmed on July 17, 2025, on potatoes in Ontario's Dufferin County was identified as US-23 strain and is metalaxyl sensitive. No new incidence of late blight has been reported since" – Dennis VanDyk.
- **Late blight was also confirmed on tomato in Cattaraugus County, New York, on July 18.** https://extension.psu.edu/late-blight-update-july-23-2025

Fig. 5. *A single plant with late blight-like symptoms was received for confirmation. Left: adaxial (upper leaf surface) right: abaxial (underside of leaf surface) showed leaf spots crossing the main veins*

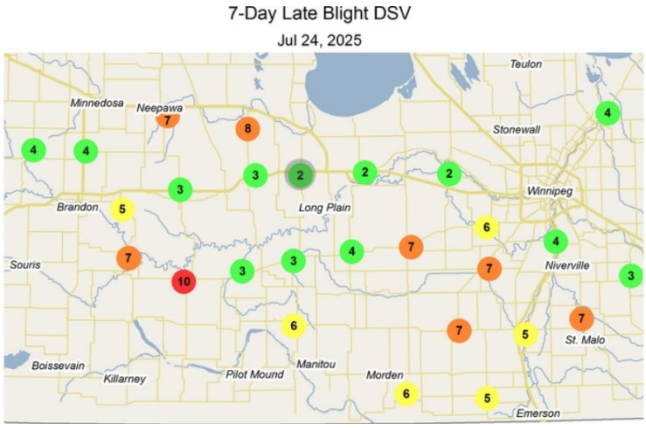

Fig. 6. *The last 7 days had accumulated 2 to 10 DSVs, suggesting low to high risk of late blight disease occurring.in the across the province. The total DSVs from June 1 to July 24 ranged from 9- 40, crossing the critical value of 18 DSV.*

Fig. 7. *Common scab has been reported in a few fields. Photo: Anonymous.*

- Common scab on tubers has been reported in a few fields (Fig 7). Warm and dry soil conditions during tuber initiation favour the disease occurrence.
- The incidence of early blight has increased in Ranger Russets and is being observed in more fields, with symptoms observed in the lower canopy. The cumulative P-Day values have now crossed 350 all over Manitoba and reached over 400 at a few sites. Protective fungicides sprays are recommended.

- If you find plants or leaves which may be suspected late blight - please bring in the sample for confirmation.
- P-Days, and SprayCast maps are available at [http://www.mbpotatoes.ca/index.cfm.](http://www.mbpotatoes.ca/index.cfm)

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".
  - The aphid numbers trapped in the 5th week (July 14-21) (Table 2) were close to last week's numbers.
  - Potato Aphid (PA) was recorded in two out of eight sites. PA is an efficient vector for potato mosaic viruses.
  - No green peach aphid was trapped at any site.
- Multiple stages of the CPB lifecycle, from egg-masses to adults can be seen in many fields, making it difficult to correctly time the insecticide applications. After foliar insecticide applications, often in the outer rows and headlands, the CPB numbers appear to have reduced.
  - In many areas of the province foliar insecticide applications are now becoming a necessity.
- Aster leafhoppers trapped tripled over last week's numbers (Table 2). and potato leafhoppers are starting to show up in the aphid traps.
- European corn borer monitoring has been done for four weeks. From July 13 to 21, only in three of eleven sites (Carberry, Douglas and Melbourne, all in the western Manitoba) the number stayed high; there was a decline in other areas in general (Table 3). From 179 last week, the total numbers trapped this week were only 79, probably indicating the time for egg laying and stem borer damage could arrive soon.
  - **It is time to start scouting for the egg-masses, followed by top leaves or branches showing wilting due to ECB boring.**

*Table. 2. Weekly Aphid Report – **Week 5** (July 13 to July 21) 2025*

Field #	Town	RM	Green Peach Aphid	Potato Aphid	Other Aphids	Total *	ALH	PLH	Comments
Southern Region									
Field 1-H	**Winker**	Stanley	0	0	12	42	0	0	Low thrips numbers
Field 2-K	**Stephenfield**	Dufferin	0	0	4	4	1	0	Some thrips
Field 3-S	**Winkler**	Rhineland	0	1	8	9	4	1	Some thrips
Central Region									
Field 4-S	**Holland**	Victoria	0	1	3	4	8	1	Some thrips
Field 5-S	**Glenora**	Argyle	0	0	3	3	6	1	Low thrips numbers
Field 6-S	**Westbourne**	Portage La Prairie	0	0	2	2	1	0	Some thrips
Western Region									
Field 7-A	**Wellwood**	North Cypress-Langford	0	0	1	1	1	0	Some thrips
Field 8-S	**Carberry**	North Cypress-Langford	0	0	4	4	1	0	Some thrips
	TOTAL		**0**	**2**	**37**	**39**	**34**	**3**	

** The aphid counts are a summation from a suction trap and two pan traps in a field. ** No sample received.*
ALH = Aster leafhopper, PLH = Potato leafhopper

Table 3: European corn borer adults in Iowa strain pheromone Delta traps:

	Week 1	Week 2	Week 3	Week 4
Location	**June 23 -30**	**June 30-July 7**	**July 7 - 13**	**July 13-21**
Shilo-MW	2	6	10	3
Douglas-MW	30	23	12	18
Rivers-SP	x	1	0	0
Shilo-SP 90	x	2	0	0
Shilo-SP 112	x	0	0	2
Carberry, #5 47C	x	23	20	10
Hallboro	x	7	11	5
Carman-1	0	0	29	3
Portage	0	0	1	0
Melbourne	1	6	26	38
MacGregor	1	1	8	0
Total	**34**	**69**	**117**	**79**

x = not started monitoring in week 1.

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 vikram.bisht@gov.mb.ca

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