Issue 5 – June 7, 2024 Manitoba Potato Report



Seasonal Reports Weekly Weather Maps Potato Production

Provincial Summary

- Potato planting in Manitoba is almost finished, with over 98% planted.
- Rains, so far, are 200 to nearly 300% of normal in potato growing areas; and rain on June 2 & 3 interrupted planting again in some of the heavier soil fields.
- There are more reports of seed rot incidences being reported, especially in wet areas of the fields.
- Emergence in 50% of potato fields is expected in a day or two (June 7 or 8).
- Regular weekly reports and other features will be provided, including late blight risk forecasts, updates on disease and insect pests on potatoes, and control recommendations. All reports and additional information will also be available at <u>http://www.mbpotatoes.ca/index.cfm</u>.

Ag Weather Data

Precipitation and Soil Moisture

- The top 30 cm by June 2 was generally wet, with fewer of the potato growing areas being very wet (*Fig.1*), than the previous week. The 0-120 cm depths also showed wet soils, and much reduced very wet conditions (*Fig. 2*). <u>https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf</u> and <u>https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-120cm.pdf</u>.
- Precipitation (mm) in May and up to June 2 was above normal in almost all of the province, ranging from 199% (Altona) to 279% (Bagot) in the selected sites (*Table 1*). <u>https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf.</u> After May 27, scattered rains on June 2 & 3 created many wet spots in potato fields in many areas (Fig. 3), with Carman recording 25.7 mm of rainfall (Fig. 4).

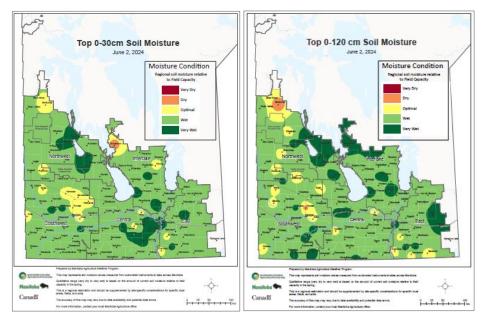


Fig. 1 (left): 0-30 cm depth and Fig. 2 (right): 0-120 cm depths: show generally wet conditions, with patches of optimal and very wet (June 2) soil moisture conditions relative to field capacity. Soils are not very wet and drier compared to last week at both depth profiles.

Province of Manitoba | agriculture - Weather Conditions and Reports (gov.mb.ca)

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





Fig. 3. Frequent rains in many parts of Manitoba have caused many wet spots in fields; also leading to interrupted planting. Photo courtesy: Janelle Lavich (Choice Ag).

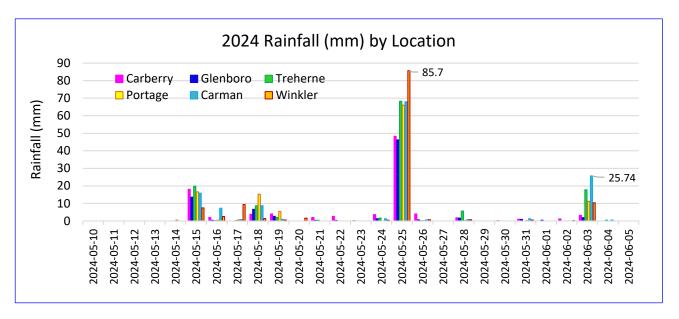


Fig. 4. Heavy and widespread rain on May 25 were followed by scattered rains on June 2 / 3 leading to many wet fields across Manitoba. Precipitation in May and up to June 2 & 3 was 199 to 279% above normal in selected potato sites.

Temperatures – Air and Soil

- The heat accumulation in the last week (May 27 to June 2) has been low, resulting in GDD ranging from 85 to 100% of normal for May 1 to June 2 (*Fig. 5*). <u>https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-gdd.pdf.</u>
- The daytime high temperatures (May 27 to June 2) ranged from 22.7 (Rivers) to 26.1°C (Carman) (*Table 1*) and overnight lows ranged from temperatures 3.3 (Winkler) to 5.3 °C, (Austin).
- Soil temperatures have warmed up to 14-18 °C at 5 cm depths, but were cooler (12-15 °C) at 20 cm depths.



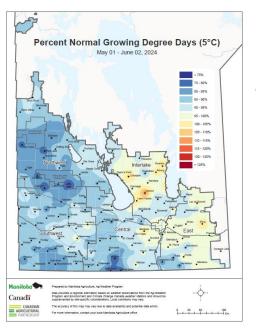


Fig. 5. Growing Degree Days (GDD base 5) from May 1 to June 2, has gone generally below normal, ranging from 85 to 100% of normal in potato growing areas.

Weather Data Summary for Selected Potato Site Stations

- The week (May 27-June 2) has been a bit warmer than last week (Table 1).
- The week's rainfall ranged from 4.4 (Glenboro) to 27.7 mm (Carman). Due to frequent rains in the last few days, the cumulative rainfall reached 200 to 279% of normal.
- According to the Environment and Climate Change Canada (ECCC) weather forecast more scattered rain is expected on Friday (June 7) and Monday (10th) across Manitoba.

Region	Max Temp (°C)	Min Temp (°C)	Rain (mm) for the week	Rain (mm) (Since May 1)	2024 Rainfall (% of normal) since May 1	2023 Rainfall (% of normal) May 1 – Jun 4	2022 Rainfall (% of normal) May 1 – Jun 5
Altona	24.5	3.4	23.1	121	199	20	172
Austin	22.9	5.3	7.1	139	253	26	225
Bagot	23.8	3.5	12.9	153	279	35	232
Carberry EC	23.1	4.7	4.8	128	237	32	177
Carman	26.1	4.0	27.7	155	262	28	176
Cypress River	24.8	4.6	10.6	150	239	25	174
Glenboro	23.2	4.4	4.4	116	205	22	172
Holland	24.6	4.3	8.4	130	207	23	178
Morden	24.6	4.5	12.3	157	242	32	197
Portage EC	25.4	4.6	15.7	134	243	33	221
Rivers	22.7	4.5	7.9	107	246	34	
Shilo	23.4	4.8	5.5	128	237	71	163
St. Claude	25.3	5.2	17.2	141	232	34	162
Treherne	25.1	3.9	22.6	146	240	31	174
Wawanesa	23.3	3.7	6.3	137	253	43	160
Winkler	24.0	3.3	11.5	156	241	28	150

Table 1. Manitoba Ag Weather Data – May 27 - June 2



Crop Progress

- Manitoba's potato planting is about 98% complete.
- The frequent rains, even though not heavy, have resulted in wet fields and have continued to disrupt planting. In 2023, June 18 was the last planting date, so planting may be ahead this year.
- Potato planting in the western side of the province is nearly complete. Central potato growing areas are also nearly complete. The southern part of the province is 80 to 100% planted.
- The percentage of fields with emergence is varying widely with region or farm and ranging from near 100% emerged (in western Manitoba) to 20-50% in other areas. It appears that emergence of 50% of fields may be around June 7, much later that the June 1 that we normally see.
- Hilling operations and other ground operations including dam / diking and herbicide applications have started in a few fields (Fig. 6. a, b).
- Scattered but not heavy rains across Manitoba on June 2 & 3 prevented previously wet fields from drying out enough, and interrupted planting and other field operations. In general, most fields are drying well due to strong winds in the last few days.



Fig. 6. Hilling and other field operations including dam & dike and herbicide applications have started. Photo courtesy: a: Mitch Wright (McCain Foods), b: Derek McIntosh (McIntosh Farm Ventures)



Disease & Insect Pests Monitoring

- Field monitoring has shown some wet spots with reduced emergence due to seed soft rotting. No blackleg symptoms on emerged plants have been reported yet. Fields will be monitored for diseases throughout the season.
- More incidences of poor emergence due to soft rot are being reported from some wet fields (Fig. 3). There appears to be varietal differences in incidence of rotting within the same field.



• Suction and pan traps for aphid monitoring have been set up in a few seed potato fields (Fig. 7 a, b). More traps will be set up in the next few days. Aphids are vectors of potato virus diseases and can affect the seed quality.



Fig. 7. (a): Suction trap being set up near a seed potato field; (b): Pan traps are also placed in the field for aphid monitoring. Photos: Vikram Bisht (Manitoba Agriculture).

Late Blight Monitoring

Information

- Late blight risk forecasting will be provided on a regional basis. Please refer to the risk maps on <u>www.mbpotatoes.ca</u>. The late blight Disease Severity Index Values (DSVs) represent the potential risk of late blight occurring when the inoculum is present.
- Late Blight Monitoring will occur again this year with weekly updates when plant stage and conditions are optimum for disease transmission.
- As in earlier years, there will be <u>a network of 15-17 passive Spornado traps for late blight spores</u>, across Manitoba. <u>Spore trapping is another tool-in-the-box of late blight management</u>. <u>Spore trapping does not replace in-field scouting</u>.</u>
- Anyone interested in joining the spore trap network is quite welcome, especially those who make fungicide recommendations for late blight management on the farms. To place new orders for <u>Sporonado spore trap</u> <u>cassettes please contact Vikram Bisht or Sporometrics</u>.
- Late blight risk maps, P-Days, and SprayCast maps will be available at <u>http://www.mbpotatoes.ca/index.cfm.</u>

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>, <u>204-745-0260</u>

