Issue 1 - May 10, 2024 **Manitoba Potato Report**



Seasonal Reports

Weekly Weather Maps

Potato Production

Provincial Summary

- Planting started on April 22, and is about 60% complete, ranging from 25 to 100% for various farms.
- 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...

Ag Weather Data

Precipitation and Soil Moisture

- Fall 2023 soil moisture (30 cm depth) was at 80-100% of available water holding capacity, with a few drier spots in the province (Fig. 1). By May 5, 2024 the top 30 cm was still generally wet in the potato growing areas (Fig. 2). https://www.gov.mb.ca/agriculture/weather/pubs/soil-moisture-30cm.pdf
- Precipitation (mm) in the first week of May was above normal in the potato growing areas of the province. (Fig. 3), ranging from 203% (Carberry) to 474% (Altona) (Table 1) http://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf

Moisture Condition

Three rain events on April 17, 27 and May 3, (Fig. 4) have kept the soils wet under the top crust.

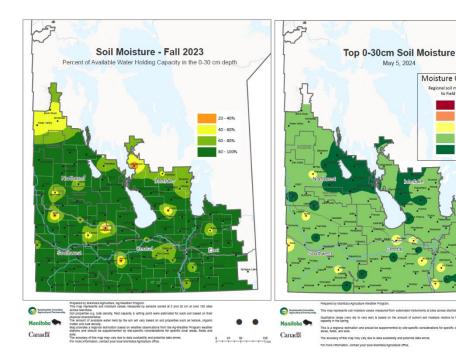


Fig. 1 (left). Soil moisture in the fall of 2023 was mostly wet.

Fig. 2 (right). Current soil moisture relative to field capacity at 0-30 cm depth, indicates the fields have wet conditions.



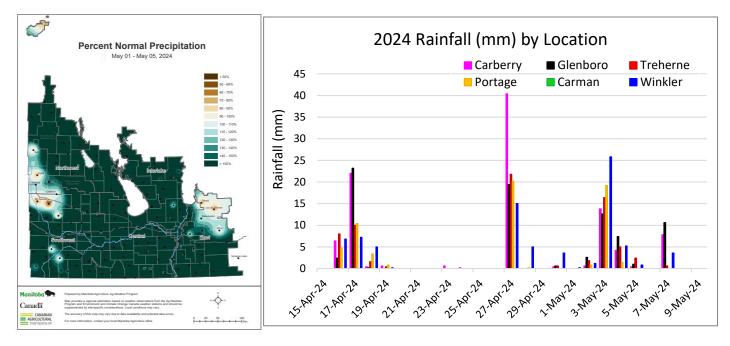


Fig. 3 (left). Precipitation (mm) in the first week of May was 203 to 474 % above normal. Fig. 4 (right). Substantial rainfall occurred on April 17, 27 and May 3.

Temperatures - Air and Soil

- Daytime high temperatures ranged from 18 to 19°C (*Table 1*). Overnight lows from -0.6 (Rivers) to -4.6°C, (Portage). Air temperatures are ideal for planting. GDD map, % of normal, for May 1-5 indicates the week has been cooler than normal, ranging from <75 to 90% of GDD (*Fig. 5*).
- Soil temperatures at 5 cm depths were 1 to 5°C and warmed up to 12 °C (Fig. 6). Temperatures were cooler in the 20 cm depth (*Fig. 6, 7*). The 2024 soil temperatures at 5 cm and 20 cm were warmer than at the same time in 2023, so a quicker emergence of potatoes could be expected.

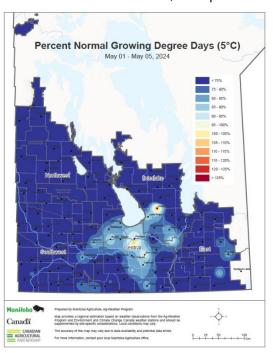


Fig. 5. Growing Degree Days (GDD base 5) in the first week of May has been below normal, ranging from <75% to nearly normal at different weather stations.



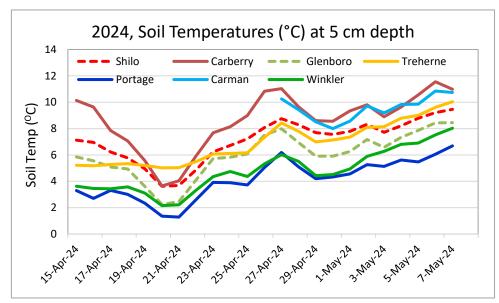


Fig. 6. Soil temperatures at 5 cm depth, at selected sites shows a dip around April 21 & 22.

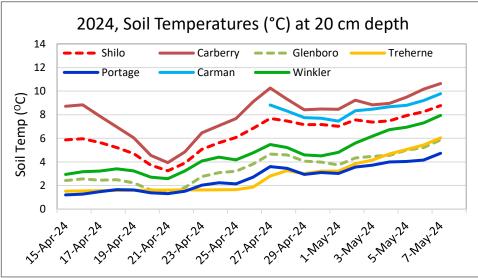


Fig. 7. Soil temperatures at 20 cm depth at selected sites, shows a dip around April 21.

Table 1. Manitoba Ag Weather Data - May 1-5

Region	Max Temp (°C)	Min Temp (°C)	Rain (mm) for the week	Rain (mm) (Since May 1)	2024 Rainfall (% of normal) May 1-5	2023 Rainfall (% of normal) May 1 - 7	2022 Rainfall (% of normal) May 1 - 14
Altona	19.0	1.3	30.8	31	474	12	135
Austin	18.7	2.2	16.7	17	226	22	188
Bagot	19.0	1.3	25.5	26	345	60	163
Carberry EC	19.1	0.2	17.7	18	203	23	132
Carman	19.3	0.0	22.5	23	341	15	108
Cypress River	19.1	0.4	31.1	31	370	17	165
Glenboro	18.6	0.1	23.1	23	231	22	146
Holland	19.4	0.6	23.0	23	274	17	153
Morden						61	105
Portage EC	19.8	4.1	18.9	19	255	62	134
Rivers	18.3	-0.6	17.6	18	251	27	287



Shilo	18.6	0.3	27.0	27	310	20	184
St. Claude	17.9	2.8	21.4	21	274	36	93
Treherne	18.0	2.6	23.4	23	300	28	86
Wawanesa	19.2	-0.4	33.6	34	386	21	148
Winkler	19.3	1.0	29.2	29	463	38	111

Crop Progress

- Potato planting started in western Manitoba on April 22 in 2024, as opposed to April 27 in 2023, May 11 in 2022, and April 23 in 2021.
- Snow cover was not an issue, as in the spring of 2023. However, cold soil and rain during the last few days of April 2024 and May 3 disrupted planting by 3 to 5 days.
- Planting in the western side of the province is currently 40-100% complete. Central potato growing areas around Portage are around 25-40% complete. The southern part of the province is close to 40% planted.
- Overall, potato planting is around 60% complete in the province; and a week earlier than last year. With good weather, and no rain in the forecast, planting could be over 75% within the week. In comparison, 2021 had over 75% of planting completed by mid-May, but only about 15% in 2022.
- Late blight risk maps, P-Days, and SprayCast maps will be available at http://www.mbpotatoes.ca/index.cfm.

Disease Monitoring

- Late blight risk forecasting is provided on a regional basis at www.mbpotatoes.ca. Late blight disease risk will start accumulating around June 1, when normally 50% of the fields show emergence. In the last four years, no late blight has been observed in Manitoba.
 - Late blight can start from infected seed potatoes, from cull piles with late blight infection or sometimes from infected tomato plants. In 2010 infected tomato plants were responsible for spreading the inoculum across Manitoba.
- Diseases like blackleg, early blight, and powdery scab will be monitored during the season.
- Herbicide injury on seed and non-target drift will be identified, if needed.

Insect Pest Monitoring

- Aphid monitoring using suction traps will start in early June in 8 or 9 seed fields. Green peach aphid and Potato aphids could be a concern for seed potatoes. In 2023 aphid catches were very high.
- European corn borer monitoring will start in early July.
- Colorado potato beetle incidences will be monitored and if possible tested for insecticide resistance.
- Wireworm damage has been sporadic in the province.

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

Wishing Manitoba growers and industry colleagues a very good season ahead.

