Issue 23 – October 10, 2024 Manitoba Potato Report



Seasonal Reports

Weekly Weather Maps

Potato Production

Provincial Summary

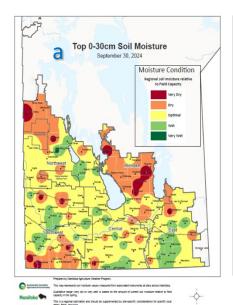
- There was minimal to no rainfall in the province from Sept. 30 to Oct. 6. This helped dry and improve the soil moisture conditions for a good harvest in most areas.
- The cumulative precipitation from May 1 to Oct. 6 is still above the 30-year normal in most potato growing areas, ranging from 101 to 188% of normal. In the top 0-30 cm zone, soil moisture relative to field capacity became optimal with a few wet or dry areas.
- Harvest in the province is estimated to be about 90% complete, and ranges from 75% to 100% at various farms. Many farms are expected to finish harvesting within a few days.
- Weather forecast indicates light frost (-2 to -3 °C) on Oct. 12 /13, and cooler day time air temperatures. Light rainfall is forecasted for Oct. 12 in some potato growing areas.
- There is no report of late blight in Manitoba.
- "Potato early dying", caused by Verticillium wilt and black dot, is now seen in most fields.
- Regular weekly reports are also available at http://www.mbpotatoes.ca/index.cfm. The site has SPRAYcast® that provides a 3-day spray advisory weather forecast for selected sites.
- This is the last report for 2024 season.

Ag Weather Data

Precipitation and Soil Moisture

- The week of Sept. 30 to Oct. 6 had very little rainfall throughout the potato growing areas of the province (Table 1) which allowed fields to dry out.
- Some fields in Winkler were still too wet for easy harvest due to the Sept. 16-18 rain events.
- The week's cumulative rainfall was minimal throughout the potato growing areas of the province, ranging from 0 mm to 5.8 mm. (*Table 1*). <u>Province of Manitoba | agriculture Weather Conditions and Reports (gov.mb.ca)</u>.
- The cumulative rains from May 1 to Oct. 6 are near normal at 101 % in Glenboro or much above the 30-year normal, at 188 % in Winkler; other selected sites ranged from 112 to 135 % of the normal (*Table 1*). https://www.gov.mb.ca/agriculture/weather/pubs/percent-normal-precipitation.pdf
- Soil moisture relative to field capacity has lowered and is now mostly optimal with a few wet or dry spots in the potato growing areas (Fig. 1 a,b). <u>Soil-moisture-30cm.pdf (gov.mb.ca)</u>. The 0 to 120 cm zone still ranges from optimal to wet in potato growing areas, as displayed on the <u>Soil-moisture-120cm.pdf</u> (gov.mb.ca) map.





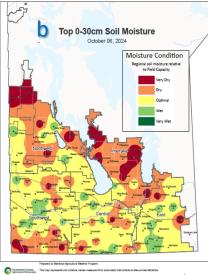


Fig. 1a: By Sept. 30, Lack of rains in the week, Sept. 23-30 changed soil moisture (relative to field capacity) to generally optimum in 0-30 cm zone in the potato growing areas.

1 b: Due to scant rains in the week of Sept. 30-Oct. 6, the soil moisture in 0-30 cm zone had become generally optimum to dry in some areas.

Temperatures – Air and Soil

- Daytime high temperatures from Sept. 30 to Oct. 6 were 5 to 6 °C warmer than the previous week, ranging from 22.0 °C (Carman) to near 25.1 °C (Austin) (*Table 1*).
- Overnight lows were colder than last week, ranging from 1.8 °C (St. Claude) to -4.1 °C (Rivers) (*Table 1*).
 The frost was seen mostly in the western potato growing areas. There was minor frost damage on tubers which were exposed. The low overnight temperatures helped lower the tuber pulp temperatures being brought into storage.

Weather Data Summary for Selected Potato Site Stations

- The "potato crop water demand" (CWD) information was not calculated this week since irrigation is no longer needed. Harvest is nearly complete at most farms.
- According to the Environment and Climate Change Canada (ECCC) current weather forecast:
 - There is a chance of some precipitation across the province on Oct. 12, and then on Oct. 22/23.
 Weather (mbpotatoes.ca) ..
 - Forecast for air temperature highs at various potato growing areas are projected to be around low teens to mid-20s °C, ranging from 11 to 25 °C up to Oct. 11 to 16; and overnight lows from 5 to -2 °C. Manitoba Weather Conditions and Forecast by Locations Environment Canada.
 - There could be overnight frost on Oct. 12/13 (-2 to -4 °C) in the western potato areas of the province. (Rivers, Shilo, Carberry, Wellwood, Wawanesa, Glenboro, Treherne, Holland, Austin). (Weather (mbpotatoes.ca).



Table 1. Manitoba Ag Weather Data – Sept. 30 – Oct. 6

Region	Max Temp (°C)	Min Temp (°C)	Rain (mm) for the week	Rain (mm) (Since May 1)	2024 Rainfall (% of normal) since May 1
Altona	23.0	-0.2	0	438	129
Austin	25.1	-0.4	3.8	429	128
Bagot	24.7	-2.7	4.0	452	135
Carberry EC	23.3	-3.6	1.9	391	122
Carman	22.0	-2.2	0.4	445	125
Cypress River*					
Glenboro	23.5	-2.2	2.1	331	101
Holland	23.7	-2.4	1.2	399	112
Morden*					
Portage EC	23.5	-0.3	0.9	391	117
Rivers	23.5	-4.1	5.8	337	118
Shilo	23.5	-3.3	1.4	435	136
St. Claude	24.0	1.8	0.9	415	126
Treherne	23.6	-1.1	0.7	413	125
Wawanesa	23.6	-1.8	2.3	389	121
Winkler	23.1	1.4	0	644	188

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

NA – Crop water demand data not available. cwd (mbpotatoes.ca)

Crop Progress

- Harvest is in full swing and going smoothly. Due to negligible rainfall, harvest was not disturbed.
- Harvest in the province is estimated to be about 90% complete, and ranges from 75% to 100% at various farms.
 - Harvest is complete at many farms. And all harvest is expected to finish within the next 7 days.
- Yields are average to better than average in most process potato crops, which were irrigated. Some fields
 which were wet, early or later in the season did not perform well.
 - Farms have reported gross yields in the range of 350 to over 500 cwt per acre in irrigated processing crop fields.
- Tuber pulp temperatures at harvest were warm in the week of Sept. 13-30, but by Oct. 2, the tubers have cooled and this week were even cooler: 45-53 °F (7.2 to 11.5 °C).
- Winkler fields showed excess moisture from the rain events last week. Some growers have indicated that harvest was slow in these wet fields.
- Weather forecast indicates cooling overnight temperatures across the province. Some western potato areas may have frost on Oct 12/13, with overnight air temperatures forecast to be -2 to -4 °C.

Disease Monitoring

- Heavy rainfall in the week (Sept. 16-22) led to wet soils in many potato growing areas of the province; and
 the warm air temperatures led to warm tubers in afternoon harvests. Warm soils with high moisture make
 the tubers prone to various rots including soft rots, pink rot and pythium leak.
- Some tuber rots in storage have occurred. Soft rots by Pectobacterium, Clostridium, pink rot and fusarium dry rot (Fig. 2) have been recorded.



^{*} Data was unavailable.

 Potato early dying (PED) caused by verticillium wilt and black dot diseases are now more severe with crop maturity and as a result most fields appear desiccated.



Fig. 2: Warm tubers at harvest showed some incidence of pink rot, soft rot (Pectobacterium spp.) and fusarium dry rot.

Last report for 2024:

Wishing all a successful completion of the 2024 potato season.

Thanks to all farms, agronomy consultants and industry stakeholders for providing regular updates and photos for the weekly potato reports. Special thanks to Scott Graham, Leon Jarvis, Tavis Mangin & Riley Wolfe (Simplot), Mitch Wright, Vaughn Burch (McCain Foods), Orla Sheridan (Shilo farms), Steve Saunderson & Janelle Lavich (Choice Agri), Greg Dyck (Crop Care), Harrison Loewen & Kurt Ginter (KR CropCheck), Kurtis McKee, Ryan and Sheldon Wiebe (JPW farms), George Moir (Marginet Farms), Andrew Doerksen (Beaver Creek farms), Gord Penner (Kroeker Farms), Dave Buhler (Haskett Farms), Kyle Froese (Corduroy farms), Russel Jonk (Swansfleet farms), Alan and Matt Waldner (Cascade farms) for in-season updates on crop & pest information, disease samples, support for the aphid & ECB monitoring and early dying surveys.

This year's late blight spore traps network was supported by Simplot Canada, McCain Foods, Manitoba Agriculture, Choice-Agri, Delta Ag, BASF, Heritage Coop and the Sporometrics Team.

Special thanks to my summer student, Cassidy Phillips and other Manitoba Agriculture staff - Tom Gonsalves, Manika Pradhan; AAFC staff Curtis Cavers, Leonard Arnal, X. Zheng & Scott J.

Finally a big thanks to WIN (Weather Innovation Consulting LP) for maintaining the website www.mbpotatoes.ca and support for late blight forecasting.

If you have questions about potato production in Manitoba and the potato reports please contact vikram.bisht@gov.mb.ca, or 204-745-0260.

