Issue 1 – April 24, 2024 Vegetable Crop Report

Seasonal Reports Weekly Weather Maps

Vegetable Crop Production

Fruit Crop Report

Provincial Overview

Field work has begun in a few of the drier vegetable fields in Manitoba.

There have been no reports of seeding of commercial vegetable acres in Manitoba to date. However, seeding of some radishes and carrots have been reported by a market garden operator.

Seeding of vegetables in greenhouses for transplanting is well under way. Seeding dates are dependent on the specific vegetable crop to be transplanted and the intended planting dates in the field or high tunnel.

Manitoba Agriculture – Vegetable Research Trial / Demonstration Plot Update

Manitoba Agriculture operates a trial/demonstration high tunnel at the Agriculture Agri-Food Canada site in Portage la Prairie along with field trial/demonstration plots (Figure 1).



Figure 1. High tunnel in Portage la Prairie

A high tunnel is defined as a semi-permanent structure that looks like a greenhouse and is covered in UV-resistant greenhouse poly. A high tunnel has no permanent heat and no powered ventilation system. Vegetable and/or fruit crops can be grown in the ground or in containers within the high tunnel. A high tunnel is normally high and wide enough to allow the entry of small to mid-sized tractors.



The Manitoba Agriculture high tunnel was built in 2014 from component parts sourced in Manitoba and built on site. High tunnels are available commercially as kits that include all the required components. For our purposes, we wanted to test the viability of designing and building a made in Manitoba high tunnel from scratch and evaluate the structure's longevity and cost effectiveness.

Detailed information on the design, components, and setup of the high tunnel is available on the Manitoba Agriculture website at https://www.gov.mb.ca/agriculture/crops/crop-management/pubs/high-tunnel-design.pdf

Temperature and relative humidity sensors are installed in the tunnel and updated online every hour. The "real time" data and a daily summary can be accessed online: <u>Real Time High Tunnel Sensor Data (mbagweather.ca)</u>

High Tunnel Research Trial / Demonstration Plot Update

- Vegetable variety trials/demonstrations will be conducted in the high tunnel this coming season.
- Pepper, tomato, and cucumber seed was planted in the greenhouse in early April, for evaluation in the high tunnel this season (Figure 2).
- Soil sampling has been conducted at 0 to 6", 6" to 12", and 12" to 24" depths (Figure 3). Results are pending and will be used to finalize the fertility plan for the 2024 high tunnel research trial plots.
- Planting date for high tunnel variety trial/demonstration plots is projected to be between April 30 and May 10, but exact date will depend on the forecasted overnight low temperatures.



Figure 2. Vegetable seedlings started in the greenhouse.



Figure 3. Soil sampling for fertility testing.

Field Trial / Demonstration Plot Update

- Pepper varieties have been sown in the greenhouse, with a projected field planting of late May to early June.
- Tomato, cucumber, melons, squash, pumpkin, and zucchini seed will be sowed in the greenhouse in the coming weeks based on a projected planting date of late May to early June.
- Soil samples will be taken in the field and results used to finalize the fertility plan for the field research trials/demonstration plots.

Next Issue: June 5, 2024

