

Developing a potato crop



**ASSIGN
BUSTER**

Individual Research Paper on Potatoes

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Production

Seeding

The ideal timing for seeding potatoes is late April until mid May. The average temperature highs are between 10 - 19 degrees Celsius and the average temperature lows are between -2 - 4 degrees Celsius. (Environment Canada) Cooler temperatures are great for avoiding early sprouting and damaging of potato seed before and after it's in the ground.

Seed rate should be approximately 17 CWT (1700 lbs) per acre. The seed depth should be around 5 -6 Inches below the surface of the top of your hill. The target seed spacing is 15 inches from seed to seed. An approximate average spacing between rows is 34 inches.

Some conventional potato farmers will apply a fungicide, such as Titan or Emesto, during the cutting process of the seed. This will protect open cut seed from diseases.

Fertilization

The following is a Fertilizer program from Beaver Creek Farms located in south central Manitoba. Other farms in Manitoba may do it a variety of ways but this is a fairly common practice among Manitoba potato growers.

In fall, the year prior to seeding, broadcast a potash blend of 0-0-60 at a rate of 300 lbs/ac. Work it into the soil using a coulter disc, or other implement, to avoid nutrient loss during the freeze thaw seasons.

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During planting a liquid blend of 10-34-0, 15-0-0-20 and 28-0-0 is applied in furrow at a rate between 8 – 20 U. S. gal/ac, depending on the field nutrient requirement.

28-0-0 is banded during row crop cultivation/hilling at 18 U. S. gal/ac

Using a technique called “ Fertigation” 28-0-0 is applied twice is applied twice in July at a rate of 20 U. S. gal/ac. This is done by mixing 28-0-0 with the water supply and spreading it on the crops using the irrigation pivots.

All these techniques add up to a total nutrient application of 180-80-200-26.

Crop Protection

To protect against early disease, Quadris is applied in furrow while planting at an approximate rate of 0. 2 L/ac. Just Prior to emergence, Glyphosate is broadcast at a rate of 0. 7 L/ac to kill weeds to give a competitive edge to the near sprouting potatoes. One week after potato emergence Centurion is applied at 0. 75 L/ac to kill grassy weeds. A week after the Centurion a mix of Prism, at 24 g/ac, and Sencor, at 150 ml/ac, is applied more weed protection. Starting at the end of July a fungicide like Dithane or Pencozeb is applied every 7 days until harvest at a rate of 0. 9 kg/ac.

Harvest

The Optimal time for harvest is from mid to late September. The ideal size of potato, for food production, is from 4 – 16 oz. An approximate yield goal is around 350 CWT/ac or 35000 lbs/ac. Depending on selling contracts or storage availability some farms may haul potatoes directly to the production plant from the field. (Wiebe, 2016)

Marketing

End Use/Market

The end market is for food. Chips, wedges, French fries, mashed or baked, there are plenty of different ways to prepare a potato. The Russet Burbank variety is the preferred potato for McCain food products as well as McDonalds french fries. Potatoes make up 52% of all fresh vegetables consumed in Canada (www. thecanadianencyclopedia. ca)

Price Trends & Supply and Demand

The average price per CWT in the last few years has stayed around \$11. 00. The estimated price per CWT for the next growing season is approximately \$11. 10. (Roy Arnott – MAFRID Farm Management, 2016)

The global potato production has grown steadily from 267 million metric tons in 1990 to 385. 07 million metric tons in 2014. China, Russia, India, the United States and Ukraine are the largest producers of potatoes. China and India are emerging as the clear world leaders. During 2015, export sales of potatoes and potato products were 12 billion USD. The Netherlands, France, Germany, China, Egypt, U. S. A., Canada, Belgium, United Kingdom and Spain were the top ten exporting countries accounting for 77. 2% of potato exports in 2015. (www. fao. org)

The global trend in potato consumption is increasing, mostly in Asia and South America. However, the huge demand for potatoes comes from the United States and Belgium for processing purposes. (Statistics Canada)The increased demand for processed potato products will drive the demand for potatoes and will also affect potato prices in the future. During 2016-2021,

the fastest market growth is expected to be in the Middle East, Brazil and East Asia. (Mordor Intelligence)

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