



The **propensity** of the Alberta (and Canadian Prairie) spring season to **petulantly** jump from spring back to winter, then to spring, then to winter again, then back to spring is **peevish**, but is unfortunately eerily familiar. At this point, the soothing **platitudes** of “well, we need the moisture” and “that’ll keep the dust down” kick in. Hopefully, whatever the weather is doing to you today is within the lines of what you would like and is not detrimental to your spring efforts.

Regardless, here is another edition of Hort Snacks, full of articles, events and opportunity. There is a copy of the Alberta Direct Market Fruit and Vegetable **Price Survey** (sent out **previously** in mid-April, as a separate **package**), as well as some information on Late Blight disease of **potato** and tomato (also sent earlier this past month). You’ll find a number of **pieces** on **programs, properties** for sale and the usual **plethora** of tidbits to get the ideas flowing.

As your **parachute** into your truly busy season, don’t forget to take time to keep your batteries charged, look after your health and safety and those around you and have a little fun. If you have questions, we’ll do what we can to help. If you have suggestions or ideas for the newsletter, feel free to send them along. We hope to see many of you over the next few months. Good luck.

Oh, and this month’s edition is brought to you by the letter “P”. :)

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FEATURED WEBSITE

University of Arkansas Sustainable Hydroponic and
 Soilless Strawberry Production Systems
 – [YouTube video series](#)

NEWSLETTER USE RESTRICTIONS

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THINGS TO DO / THINGS TO THINK ABOUT THIS MONTH

Strawberries

- Light application of nitrogen as growth commences (end of April or early May → 10-20 lbs actual N/acre); make a heavier application if there was severe winter damage
- Foliar application of complete fertilizer once leaves fully developed; if regrowth is weak, weekly applications may be necessary
- Application of herbicides for grassy weed control prior to bloom (if required)
- Frost protection of June bearers at bloom if required
- Deblossom newly planted June bearers for season
- Deblossom newly planted Tristar Day-neutrals for 6 weeks
- Apply herbicide 4-6 weeks after planting new fields

Raspberries

- Complete cane thinning
- Remove dead cane tips down to active growth
- Make 2nd application of N (mid-May) → 20-40 lbs actual N/acre

Saskatoon Berries

- Commence 1st application of nitrogen and phosphorus during early-mid May (additional application June-end) → 15-25 lbs actual N/acre; 10-20 lbs P/acre → adjust rate when banding

Black Currants

- Apply nitrogen (end of April or early May) – starting in 3rd year → 50 lbs actual N/acre

Vegetables

- Pre-planting application and/or incorporation of herbicides (trifluralin, etc.) for registered crops in early part of month (if not completed previously)
- Seeding of most crops should be completed before month end
- Consider multiple planting dates to spread out harvest dates and reduce risk
- Transplant crops when risk of frost is past or protect crops using field or row covers or mini-tunnels
- Extending the early growing season in spring rather than fall has more sunlight benefit
- Consider try a few “new to you” varieties, to hedge your risk against the loss of “standby” varieties

General / Other

- Monitor soil moisture conditions and irrigate as required
- Install / repair outhouses, update signage, arrange washing facilities & drinking water locations
- If foliar feeding, application on slow drying days may increase uptake

Pest Monitoring / Management

- Continue insect and disease monitoring
- Watch out for unusual insects → often linked with weather
- Do not apply pesticides during full bloom

Vegetables

- Flea beetle adults emerge and begin egg laying towards mid-month – monitor for shot holes in cotyledons late month
- Consider the use of appropriate seed treatments in cool and/or wet seeding conditions

Strawberries

- If Botrytis fruit rot was a problem in the past, consider application of fungicides as growth commences; generally one early application and one late application should be sufficient.
- Monitor 1st blossoms for Tarnished Plant Bug activity and take control options as necessary
- Monitor for strawberry clipper weevils when temperatures exceed 18°C

Saskatoon berries

- Make applications of insecticides and fungicides based on label timing, with adjustments for weather conditions and scouting / monitoring activities (e.g. dryer conditions may allow you to skip a Entomosporium control application)
- Decis 5.0EC applied at green tip stage (flower bud break to tight bud cluster), early flowering (25-50% bloom) and after petal drop
- Jade 250E/Mission 418EC (propiconazole) may be applied at white tip, petal drop and green fruit stages
- Adhere to Pre-Harvest Interval and Re-Entry Intervals for respective pesticides

Black Currants

- Apply insecticides against currant fruit fly at petal fall (repeat 7 days later)

DETAILS TO COME SOON

Fruit & Vegetable Field Days

#1 / #2 / #3

July / August / September
(dates TBA)

The plan for this year:

- Evenings
- Single farm locations
- Focused / Specific topics

Watch www.albertafarmfresh.com OR
AARD [Coming Events](#) for event details.

MENTAL SNACKTIME - Energy

"Words are singularly the most powerful force available to humanity. We can choose to use this force constructively with words of encouragement, or destructively using words of despair. Words have energy and power with the ability to help, to heal, to hinder, to hurt, to harm, to humiliate and to humble." – Yehuda Berg

"In times of great stress or adversity, it's always best to keep busy, to plow your anger and your energy into something positive." – Lee Iacocca

"The energy of the mind is the essence of life." – Aristotle

"When you are enthusiastic about what you do, you feel this positive energy. It's very simple." – Paulo Coelho

"Should you find yourself in a chronically leaking boat, energy devoted to changing vessels is likely to be more productive than energy devoted to patching leaks." – Warren Buffett

"Most people spend more time and energy going around problems than in trying to solve them." – Henry Ford

Upcoming Conferences / Workshops

May 2015

- 12th International Conference of the European Industrial Hemp Association (EIHA)
May 20-21, 2015 – Rheinforum – Wesseling/Cologne, Germany
<http://www.eiha-conference.org/>

June 2015

- *University of Saskatchewan Plant Sale Day*
June 5, 2015 – Horticulture Field Lab – Saskatoon, SK
www.fruit.usask.ca/extension.html
- *Haskap Day 2015*
June 26, 2015 – Horticulture Field Lab – Saskatoon, SK
www.fruit.usask.ca/extension.html
- *Greenhouse Canada Grower Day 2015*
June 22, 2015 – Holiday Inn – St. Catharines, ON
www.greenhousecanada.com/grower-day
- *International Floriculture Expo*
June 8-10, 2015 – McCormick Place, Chicago, Illinois, USA
<http://www.floriexpo.com/>

July 2015

- *Cultivate 15 (Formerly OFA Short Course)*
July 11-14, 2015 – Greater Columbus Convention Centre – Columbus, OH
<http://cultivate15.org>
- *99th Potato Association of America (PAA) Conference*
July 19 -23, 2015 – The Doubletree Hilton – Portland, Maine, USA
www.potatoassociation.org
<http://www.paaannualmeeting.org>

CleanFARMS 2015

CleanFARMS will be running obsolete pesticide & livestock medication collections in October of 2015 as follow:

- Southern Alberta (Red Deer to border)
- Northern Saskatchewan (Davidson north)

The program is free and ag-retail collection locations/dates will be released in early summer. The program is delivered by CleanFARMS and its members in each province/region of the country every three years.

Visit www.cleanfarms.ca for more information.

NOTE: Can you please re-distribute this note to all your organizations and members so it gets as wide a distribution as possible?

Thanks!

Summer Farm Employment Program

If full time farmers are thinking about hiring a student for summer employment, now is the time to apply. Once again, Alberta Agriculture and Rural Development will be offering the Summer Farm Employment Program. This program gives Alberta's youth the opportunity to gain farm work experience and provides wage support to farmers for the months of July and August. Alberta Agriculture and Rural Development provides wage support to a maximum of \$400 per month as well as worker's compensation coverage and safety training information.

Employers must own or rent a farming operation in Alberta with gross production of \$25,000 per year and work must be directly related to the farming operation. This does not include domestic work or child care. Employers must recruit their own employee, provide daily supervision and ensure safe working conditions for their employee. Monthly records of time worked must be completed by the employer. Employees are paid by the farmer and by the government for each respective part of their salary, which must meet provincial minimum hourly rates.

Employees must be residents of Alberta, between 15 and 24 years of age and cannot be a direct relative of the employee. Employees must not be working fulltime anywhere else or attending school while participating in the program. If they have been working full time prior to July 1 for the employer, they are not eligible for the program. Employees require a social insurance number in order to receive payment under this program.

Farm safety is an emphasis in this program and all summer farm employers and employees are required to review a safety DVD together. Employees must complete and pass a safety quiz based on the DVD information in order to be accepted into the program.

Application forms and detailed information are available on Alberta Agriculture and Rural Development's website www.agriculture.alberta.ca. Applications are processed on a first come, first served basis. Applications can be printed from the website or obtained by calling the Ag-Info Centre at 310-FARM (3276). **The deadline for applying is May 31st, 2015** and signatures of both employee and employer must be included.

Q: What new crop or product are you most excited about for this season?

A: Haskaps coming into limited production

A: Growing eggplant for the first time as part of a diversified veg farm

A: Strawberries



Next Month's ? → [What is your most significant pest problem \(weed, disease, insect\)?](#)

FOR SALE

Saskatoon berry orchard and equipment – Tees, AB

Two portions will be approximately 24+acres & 136+acres if you know of anyone looking for a mature Saskatoon orchard & very private & beautiful home yard & 4 bedroom 2164 sq. ft. Bungalow. Of course there is a Quonset and storage barns too.

Equipment

- PTO driven 95 gal, (I believe) tank sprayer on frame & wheels set up to spray trees
- Jovarus Berry Harvester
- numerous berry tray / baskets & freezers

Medcke market garden

We have been market gardening for the past 7 years with success. Our farm is set up beautifully already for a market garden. We are located along the Pembina River, with beautiful rich black soil. We have irrigation lines, abundance of saskatoons, raspberries, sea buckthorn, some strawberries, other berries and many veggie pots. We have tillers, a tractor, zero turn mower, coolers, freezer, etc. We also have a large heated shop for preparations.

We are located 2 km off Hwy 44, 1 and 1/2 hours north of Edmonton. High speed internet through Telus, as well as MCSnet. The house plot is 26+ acres, we also have adjacent to our personal residence; 2 separate 25+ acreages without building for sale (also river front and currently in organic alfalfa). Altogether we have 80+ acres. Our house listing is MLS# E3408642. All 3 properties are listed by our agent Brandi Wolff (780-349-0764).

Serviceberry Farms irrigation

3" aluminum hand move irrigation pipe c/w risers, sprinkler heads and nozzles. 57 lengths, each length is 40 feet. Hook and latch system. Selling as a unit, \$4500.00. If interested, I can provide pictures.

Alberta Direct Market Average Berry & Vegetable Prices – 2014 / 2015

A number of farms contributed their pricing information, with a wide range in size, diversity and operational focus. As well, prices reported on producer websites were added into the pricing dataset.

Most prices are reported per pound (for fruit and most vegetables), however many farms charge on a volume basis (often 4L pail) or on a per unit basis (for a number of vegetable crops – e.g. per head, per bag, per bunch). For the purposes of comparison, the price per pound was calculated assuming 5 pounds per pail for all fruit; however, the actual weight of fruit per volume can vary. In converting prices to a “per pound” basis, it was assumed that 1 pint is equal to 0.625 pounds. The price per pound varied according to the container size, with some producers offering a range of container sizes for some pre-picked fruit. In this case, an **average** price was generated to use in comparisons with other farms. In cases of vegetable pricing, producers reporting a price per pound for a product were compared with producers reporting similarly, whereas producers reporting in a price per unit were compared with other similar reported data. Data was not compared between reported weight and volume datasets. Where possible, the u-pick and the pre-pick (pre-picked on-farm sales, farmer’s market sales, etc.) prices are reported.

Many producers offer a volume discount (sometimes with several different prices for different volumes) or include a price adjustment for customers bringing pails/containers or charge a fee for pails. The average price discount or charge for a 4L pail was \$1. Some producers also make some price adjustments for early or late crops, depending on the crop.

Not all of the data contributed could be reported, as there was insufficient data to create a quality range &/or average. The number of data points comprising a dataset is included (e.g. n=x). If three or more data points were available, both a range and an average were reported. While the prices reported represent a range, there may be significant variation within the range. As a result, the median value was also included (for the fruit crops only), which represents the middle value of the dataset. Producers should consider their individual, specific costs of production, as well as their customers and markets when setting their prices. **Use the prices as a guide only**, and do not make adjustments to price, simply because you are lower than the average. In a number of areas, prices appear to be reaching the limit of what the market will bear, for the time being.

For the 2015 season, some producers were considering a price increase, due to a range of factors, however it appeared that many were maintaining their price. A number of producers are offering a range of prices and offerings, such as different volumes, fresh/frozen, washed/unwashed, delivered/pick up, etc., depending on the product.

Fruit Prices

Strawberries									
Marketing Generalities	Strawberries were usually often sold on a U-pick basis, however many more producers are selling pre-picked berries at the farmers’ markets or on-farm. Volume of container was typically 4L pail/basket; however more, smaller container options are appearing (mainly for pre-picked product).								
	U-pick (n=8)			Pre-Pick (On-farm or unspecified) (n=8)			Pre-Pick (Farmers’ Market) (n=3)		
	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)
	\$2.6 - \$8.0	\$3.76	\$3.0	\$4.0 - \$7.75	\$4.89	\$4.2	\$3.93 - \$7.75	\$5.23	\$4.0
Comments	Prices varied with the size of the container that they are sold in, with most producers offering various sizes. There did not tend to be a huge difference in price between pre-picked product that was sold on-farm and Farmers’ market product. Some product delivery systems were in place in some areas.								
Raspberries									
Marketing Generalities	Raspberries were most often U-picked, with some pre-picked (farm gate / farmer’s market) sales. A number of farms did not pre-pick raspberries								
	U-pick (n=16)			Pre-Pick (n=7)					
	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)			Median (price per pound)
	\$2.25 – \$19.5	\$5.29	\$3.5	\$3.0 - \$24.4	\$9.7	\$6.0			
Comments	Prices varied with container size, often being sold in pint or smaller volume containers, which significantly elevates the price per pound (and returns). The labour of picking raspberries for sale can be significant								

Saskatoon Berries									
Marketing Generalities	Saskatoon berries were often sold U-picked, however many farms offer pre-picked fruit. Pre-pick prices most often were more than u-pick prices, depending on the operation and how they were packaged. It was not reported whether pre-picked sales were fresh or frozen, although it can be assumed that immediate sales were fresh, with later sales certainly frozen. Prices varied with different volumes of product sold. Value added product was not included, but would feature prominently in most operations.								
	U-pick (n=15)			Pre-Pick (n=10)			Pre-Pick (Farmers' Market) (n=4)		
	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)
	\$2.0 - \$5.0	\$3.0	\$3.0	\$3.2 - \$5.0	\$4.08	\$3.9	\$4.2 - \$5.38	\$4.94	\$5.09
Comments	-								
Black Currants									
Marketing Generalities	Type of harvest (hand vs mechanical) not reported in most cases. Value-adding would be common								
	U-pick (n=3)			Pre-Pick (n=3)					
	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)			
	\$2.0 - \$5.0	\$3.33	\$3.0	\$2.13 - \$3.13	\$2.75	\$3.0			
Comments	Equal number of u-pick versus pre-pick reported								
Sour Cherries									
Marketing Generalities	Limited prices reported								
	U-pick (n=3)			Pre-Pick (n=3)					
	Range (price per pound)	Average (price per pound)	Median (price per pound)	Range (price per pound)	Average (price per pound)	Median (price per pound)			
	\$2.0 - \$5.0	\$3.2	\$2.6	\$2.13 - \$3.13	\$2.75	\$3.0			
Comments	Equal number of u-pick versus pre-pick reported; In past years, some variation in price due to pitted versus not pitted.								
Haskap (Blue honeysuckle)									
Marketing Generalities	Limited prices reported. All were for u-pick								
	U-pick (n=4)								
	Range (price per pound)	Average (price per pound)		Median (price per pound)					
	\$3.0 - \$5.0	\$4.0		\$4.0					
Comments	-								
Other Fruit									
More "alternative" fruit are coming onto the market, but still limited numbers reported. Other fruit includes chokecherries, rhubarb, etc.									
Rhubarb	Prices were reported in limited numbers, but rhubarb tends to be sold as pre-picked, with prices ranging from \$1.5 - \$4.0/lb, and an average price of \$2.25/lb (n=5) and a median of \$2.0/lb. Some rhubarb is sold by piece.								
Chokecherries	Prices weren't reported in any quantity, but are typically similar to those of Saskatoon berries.								
Other fruit (e.g. gooseberries, apples, crabapples, etc.)	Wide range of prices reported. There were too few numbers to report for any one crop. Prices are typically per pound, most often u-pick.								

Vegetable Prices

Artichokes	U-pick (n=4)		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	-	-	\$2.5 - \$5.0	\$3.67	
Comments	Farmers' market prices higher (too few to report)				
Beans	U-pick (n=4)		Pre-Pick (n=5)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.75 - \$4.0	\$2.45	\$2.25 - \$5.0	\$3.24	
Comments	-				
Beets	U-pick (n=4)		Pre-Pick (n=7)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.5 - \$2.0	\$1.88	\$0.8 - \$2.5	\$1.97	
Comments	Often a slight discount for larger quantities. Lower prices often represent bulk / larger volume discount.				
Broccoli	U-pick		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	Too few reported	-	\$1.0 - \$3.5	\$2.0	
Comments	Per head prices ranged from \$2.5 - \$3.5 per head (n=3)				
Cabbage	U-pick		Pre-Pick (n=3)		
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)	
	Too few reported	-	\$2.5 - \$3.0	\$2.67	
Comments	Price per pound ranged from \$0.36 - \$0.80 (n=3)				
Carrots	U-pick (n=7)		Pre-Pick (n=12)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.0 - \$2	\$1.64	\$1.0 - \$3.25	\$2.44	
Comments	Some price variation depending on time of year, product size (higher price for smaller) and package volume.				
Cauliflower	U-pick		Pre-Pick (n=3)		
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)	
	-	-	\$2.5 - \$3.0	\$2.83	
Comments	Price per pound ranged from \$1.0 \$2.0, with higher prices at FM				
Corn, sweet	U-pick (n=3)		Pre-Pick (n=3)		
	Range (price per dozen)	Average (price per dozen)	Range (price per dozen)	Average (price per dozen)	
	\$4.0 - \$9.0	\$5.67	\$8.0 - \$12.0	\$9.33	
Comments	Some sales per cob (resulting in higher cost per dozen), but most per dozen. Prices specifically stated for Farmers' Markets tended to be higher (as much as \$2+), occasionally packaged in smaller quantity groups.				
Cucumbers, Pickling	U-pick (n=4)		Pre-Pick (n=6)		Pre-Pick (Farmers' Mkt) (n=3)
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Range (price per pound)	Range (price per pound)
	\$1.5 - \$2.5	\$1.94	\$1.5 - \$3.0	\$2.5	\$1.5 - \$2.5
Comments	-				

Cucumbers, Slicing	U-pick		Pre-Pick (n=4)			
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)		
	Too few reported	-	\$0.80 - \$2.0	\$1.45		
Comments	Price per unit ranged from \$1.0 - \$2.5 each					
Garlic (bulb/head)	U-pick		Pre-Pick (n=6)			
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)		
	Too few reported	-	\$0.50 - \$3.5	\$2.13		
Comments	Size of head/bulb will vary					
Kohlrabi	U-pick		Pre-Pick (n=3)			
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)		
	Too few reported	-	\$1.0 - \$1.5	\$1.25		
Comments	-					
Lettuce (bagged)	Pre-Pick (n=6)		Pre-Pick (Farmers' Mkt) (n=4)			
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)		
	\$2.0 - \$3.5	\$2.58	\$2.5 - \$3.0	\$2.88		
Comments	Limited u-pick prices reported; Bag sizes vary					
Lettuce, Romaine (head/bag)	U-pick		Pre-Pick (n=4)			
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)		
	Too few reported	-	\$2.0 - \$4.0	\$3.13		
Comments	Bag and head size varied					
Onions, Bulb	U-pick (n=3)		Pre-Pick (n=6)		Pre-Pick (Farmers' Mkt) (n=3)	
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)
	\$1.5 - \$2.0	\$1.67	\$1.0 - \$2.0	\$1.61	\$1.0 - \$2.5	\$1.72
Comments	Type/colour not typically specified. Some packaging for slight volume discount					
Onions, Green	U-pick (n=4)		Pre-Pick (Farmers' Mkt) (n=3)			
	Range (price per unit)	Average (price per unit)	Range (price per unit)		Average (price per unit)	
	\$1.0 - \$3.0	\$1.75	\$2.25 - \$2.5		\$2.38	
Comments	How they were sold as a unit varied. Some individually, most bunched. Assumed up to 10/bunch					
Onions, Sweet Spanish	U-pick		Pre-Pick (n=4)			
	Range (price per pound)	Average (price per pound)	Range (price per pound)		Average (price per pound)	
	Too few reported	-	\$1.5 - \$2.5		\$2.04	
Comments	Some packaging for slight volume discount					
Parsnips	U-pick (n=3)		Pre-Pick (n=4)			
	Range (price per pound)	Average (price per pound)	Range (price per pound)		Average (price per pound)	
	\$2.0 - \$2.0	\$2.0	\$2.0 - \$3.0		\$2.5	
Comments	-					

Peas	U-pick (n=4)		Pre-Pick (n=4)		
	Range (price per pound)	Range (price per pound)	Range (price per pound)	Range (price per pound)	
	\$1.75 - \$4.0	\$2.38	\$3.5 - 5.0	\$4.0	
Comments	-				
Peas, Snap	U-pick (n=3)		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.75 - \$2.0	\$1.83	\$3.5 - \$5.0	\$3.67	
Comments	-				
Potatoes, mature	U-pick (n=3)		Pre-Pick (n=9)		Pre-Pick (Farmers' Mkt) (n=3)
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	Range (price per pound)
	\$0.80 - \$1.0	\$0.90	\$0.50 - \$2.5	\$1.31	\$0.60 - \$2.5
Comments	Prices vary within season but also depending on volume (lower price for higher volumes)				
Potatoes, Baby/New	U-pick (n=7)		Pre-Pick (n=7)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.75 - \$2.5	\$2.07	\$2.0 - \$3.5	\$2.61	
Comments	Prices tend to change (drop) slightly as season progresses				
Pumpkins	U-pick (n=7)		Pre-Pick (n=5)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$0.5 - \$3.0	\$1.58	\$0.5 - \$2.0	\$1.32	
Comments	Price varies with size. Also sold per unit, with a wide range in prices				
Rutabaga	U-pick		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	Too few reported	-	\$0.5 - \$1.0	\$0.67	
Comments	Some sold by unit, ranging from \$0.50 - \$1.0 each (likely depending on size)				
Spinach	U-pick (n=3)		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	\$1.47 - \$4.0	\$2.82	\$4.0 - \$8.0	\$6.67	
Comments	Sold in a range of package sizes, bunches, etc.				
Squash, Winter (per pound)	U-pick		Pre-Pick (n=4)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	Too few reported	-	\$1.0 - \$2.0	\$1.52	
Comments	Types not specified				
Squash, Winter (per unit)	U-pick (n=3)		Pre-Pick (n=3)		
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)	
	\$2.0 - \$8.0	\$4.33	\$2.25 - \$3	\$2.58	
Comments	Types not specified				
Swiss Chard	U-pick		Pre-Pick (n=3)		
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)	
	Too few reported	-	\$3.0 - \$14.0	\$8.0	
Comments	Package volumes varied				

Swiss Chard (bagged)	U-pick (n=3)		Pre-Pick (n=6)	
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)
	\$1.47 - \$2.0	\$1.66	\$1.5 - \$14.0	\$5.08
Comments	Package volumes varied			
Tomato	U-pick (n=3)		Pre-Pick	
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)
	\$2.0 - \$4.5	\$3.17	-	-
Comments	-			
Zucchini (per pound)	U-pick		Pre-Pick (n=3)	
	Range (price per pound)	Average (price per pound)	Range (price per pound)	Average (price per pound)
	Too few reported	-	\$1.95 - \$2.5	\$2.32
Comments	-			
Zucchini (per unit)	U-pick (n=3)		Pre-Pick (n=7)	
	Range (price per unit)	Average (price per unit)	Range (price per unit)	Average (price per unit)
	\$0.50 - \$1.0	\$0.67	\$1.0 - \$3.0	\$1.68
Comments	Size of unit varies			

2015 Growing Season – Prices Changes / Adjustments

For the 2015 growing season, the majority of producers appeared to be holding prices somewhat for the various crops they grow, with slight increases being typically due to factors such as increased input costs, etc. All price changes were very minor. Similar to previous years, price increases (or lack of increase) were scattered across the province and varied considerably. Some producers shift prices throughout the growing season, as influenced by supply, demand and/or rarity of a particular product, particularly in reference to early harvests.

Producers continue to vary in how they charge for fruit, with many charging per pound, but a fair number charging a flat rate for a fixed container (volume) size, typically small volume containers (e.g. pint). Price per pound was more common in the vegetables; however it depended very much on the type of vegetable. U-pick was less common than pre-pick in the data reported again this year. Pre-picked fruit product sold at the Farmers' markets was typically sold in containers by volume. Sales of small volume containers or packaging resulted in a much higher price per pound (when compared to larger volumes). Per unit pricing of vegetables was likely due to simplicity of marketing and packaging, rather than having to deal with wide ranges of weights.

Most producers charge for pails / containers or provide a discount to customers that bring their own containers. A number of u-pick pricing was dependant on the number of pails picked/purchased and vegetable sale prices were usually dependant on the quantity purchased. Some producers charge for a delivery service if that is something that they provide. On-line orders/sales option is appearing on a number of producer websites; however the details of this were not delved into.

It is evident that great care and attention must be given to input costs, cost of labour, transportation and to what prices the market will bear, related to other producers, retail pricing, etc.

Carrot Rust Fly

Psila rosae

Crops Affected: carrot, celery, parsnips, parsley and other umbelliferous plants

Life Cycle:

- Damage is caused by larval stage feeding on roots
- Overwinters as a pupa in the soil (about 10cm down), emerging as an adult in June
- Adults are small black flies, with a reddish head and long, yellow head
- Adults leave fields to find shelter plants, where they mate
- Females return to lay eggs in the evenings
 - Eggs are laid on the ground in crop fields
- Larvae are legless, cream-white maggots with dark mouth hooks
- Young larvae (maggots) feed on root radicles of crops, whereas older larvae enter and tunnel in the lower third of the root
- Mature larvae leave the root and pupate in the soil
- More than one generation may occur in a season (typically two)
- Sheltered locations often have higher damage levels

Symptoms:

- Feeding damage causes a range of damage, depending on the size of the larvae and the crop root
- Young crops may be killed as larvae feed on root radicles
- Early feeding may cause forking, stunting, or development of fibrousness
- Older larvae enter the lower third of the root, and create tunnels in the tissues
- Secondary pathogens (fungal/bacterial) can invade damaged tissues

Monitoring:

- Yellow sticky traps may be clipped vertically to stakes 5-10cm above crop canopy, within 1-2m of field edges
 - 1-2 traps per hectare is general recommended
 - Thresholds vary from 0.25-1 flies/trap/day – if thresholds are reached for a week, controls may be required
- Monitor from spring through to harvest

Management:

- In some areas, delaying seeding to avoid early generations can be effective, however, in the prairies, this is not necessarily going to be as effective
- Harvest more susceptible field areas (e.g. margins) earlier, to reduce damage
- Removing tops can open up the canopy, improve ventilation and spray coverage in the late season
- Timely application of registered products to control adults
 - Since adults are only present for a short period, carefully monitor prior to spraying to increase efficacy
 - Apply products in the evening when adults are active in the field
- Naturally occurring parasites can potentially reduce populations to some extent



**Carrot rust fly damage to carrot
with larva emerging**

Photo by www.mtvernon.wsu.edu

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310-FARM (3276)

FAX: 403-742-7527

[Pest Management Regulatory Agency \(PMRA\) –
Electronic Label Search Engine](#)

Search the database for electronic labels

Saskatoon Juniper Rust

Causal Organism: *Gymnosporangium nelsonii*

Crops Affected: Saskatoon berry, juniper species (alternate host); also causes rust on pears and some other rosaceous species

Disease Cycle:

- 2 hosts required to complete entire sexual cycle
 - cycles between species
 - may increase as specific spore types on each host
- Galls on junipers produce jelly-like orange-brown "horns" in wet springs, releasing spores
 - typically in May-June
 - Spores can travel several kilometres to infect Saskatoon berry plants
- Leaves and fruit may be infected, causing characteristic swellings and growths
- Infection and spread favoured by temperatures between 10-24°C with wet plant surfaces
- Moist or rainy conditions can increase spore production and spread of infection
- Spores produced on Saskatoon berries will infect junipers, completing life cycle

Symptoms:

Junipers

- Globular woody galls which produce jelly-like spore bodies (horns) after rain

Saskatoon berries

- Early symptoms include yellowish spots and swellings on leaves and fruit
- Swellings grow to become firm spiky outgrowths from leaves and fruit
- Twigs and branches may swell and be distorted
- Orange rusty powder evident on and around outgrowths

Management:

- Avoid planting near native stands of Juniper
- Remove junipers or prune out galls from infected junipers within approximately 1-2 km of orchards – fairly impractical in areas where rust is prevalent
- Apply registered protective controls during late May – mid June
 - Adhere to prescribed rates and pre-harvest intervals



Rust infected berries
– Note: powdery orange spores

Photo by Tricia Simon



Rust infected spurs on Saskatoon

Photo by Tricia Simon



Rust infected Saskatoon leaf and berry – Note: powdery orange spores on leaves and fruit, as well as spikey growths on leaf and berry surfaces

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- [Market Farming with Rotations and Cover Crops: An Organic Bio-Extensive System](#)

Late blight Update (all crops)

Over the last several years, there has been a great deal of concern in Alberta surrounding a serious disease called Late blight that affects mainly potatoes and tomatoes. This disease is caused by a fungal pathogen called *Phytophthora infestans*. The favourable conditions for disease development, combined with the presence of the pathogen, have resulted in multiple outbreaks of Late blight in commercial, market garden and urban potato and tomato crops throughout parts of Alberta. A number of different strains of the pathogen have been identified in different years, each being more or less aggressive on either potatoes or tomatoes. For 2015, this disease continues to be a risk for all Solanaceous crops (potato/tomato family) grown in Alberta.

About the Disease

When the pathogen is present and weather conditions are favourable for disease development, commercial potato and market garden crops are at risk from Late blight, as are all other plantings of potatoes and tomatoes. There is also a risk of spread into greenhouse tomato operations. The risk of introduction comes from either infected transplant material (tomatoes or other host crops) or infected seed potato stock (either imported or carried over). During the season, if spore loads build up, there is a risk of introduction of the pathogen via wind-blown/storm carried transfer.

Late blight is a serious plant disease caused by the fungus-like microorganism, *Phytophthora infestans*, and is found in most potato and vegetable-growing areas of Canada, although historically it does not occur every year on the Prairies. Late blight is most damaging on tomatoes and potatoes, but may also affect eggplants, peppers, petunias and some related Solanaceous weeds, such as nightshade and wild tomato. Late blight is an aggressive disease that, if left unchecked, can cause significant and rapid crop losses in gardens, greenhouses, fields and in controlled environment storages, e.g. potato bins.

Symptoms & Disease Spread

Initial symptoms of Late blight are typically noted on older leaves, appearing as dark, water-soaked areas (lesions), sometimes with yellow edges, that move in from leaf tips/margins, becoming brown and brittle within a couple days. Late blight lesions are not contained by the leaf veins, as they are with another common foliar disease called early blight (caused by the fungus *Alternaria solani*). Lesions may also develop on plant stems and on potato tubers and tomato fruit. A small amount of sporulation (observed as white, fluffy growth on the edges of lesions) may be visible in some cases on the underside of affected leaves at the edge of lesions. Late blight develops most quickly in warm, wet/humid conditions and can spread very rapidly through plantings. Plants may be rapidly defoliated, die and yields can be significantly reduced.

Potato tubers may be infected by spores produced on the foliage which are subsequently washed into the soil. Infected tubers may have irregular, sunken lesions that are often first found around the eyes. Tomato fruit and potato tuber rot can penetrate into skin of the fruit or tubers, causing rot and discolouration of the internal tissues. The rot often has a reddish-brown colour. Late blight can spread from

diseased to healthy fruit and tubers in stored tomatoes, in potato piles in storage and on seed potato pieces.

On the Prairies, Late blight does not form an overwintering spore, as this requires two different mating types, one of which is not present. Rather, the pathogen overwinters on living tissues. The disease will only survive without a living host for 5-7 days. The disease is carried forward from one season to another on infected seed potatoes, cull piles, volunteer potatoes or living host plants (e.g. tomato transplants).

In-season spread is by spores (sporangia) produced on infected tissues (infected transplants, volunteers, weeds and diseased crop debris). Spores spread within the fields by rain or water splash. Sporangia may also move short distances in soil water and spores may move between fields on equipment. Spores can move considerable distances on the wind

Management

The priority for Late blight management should centre around efforts to reduce the introduction of the disease into plantings, either by avoiding overwinter survival or by monitoring for infected plant materials that might be brought in from other areas. Leaving potato cull piles or diseased materials in the open can lead to infection of healthy plants. Volunteer potato plants and Solanaceous weeds, such as nightshade and wild tomato, should be controlled. The use of LB-resistant tomato varieties in market and home gardens may assist in reducing disease levels.

Late blight can be managed in commercial crops using protective fungicidal sprays (with rotating chemistries), applied at regular intervals when conditions favour disease development. The use of cultural practices, such as drip or furrow irrigation and the adjustment of plant stand density, can be effective in reducing the risk or rate of disease development in alternative crops or smaller stands.

Infected plant material should be disposed of as soon as possible after detection, either by burying or freezing. If infected crop debris is composted, it should be covered with a tarp or soil until it has frozen to minimize the risk of spore survival and distribution. Killing potato tops can help to minimize tuber infection, as this encourages tuber skin set and stops top growth. Tubers can be harvested a couple of weeks after the tops are killed. Tubers should be heavily graded and culled before storage in an attempt to prevent entry of the disease into storage.

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“Late blight is a community disease”

For more information on Late blight, see the following resource:

[Late Blight of Potatoes & Tomatoes – FAQ](#)

If you think that you might have Late blight, please contact 310-FARM (3276) for assistance with diagnosis and management

Late blight in Greenhouse Crops

Over the last several years, there has been a great deal of concern in Alberta surrounding a serious disease called Late blight that affects mainly potatoes and tomatoes. This disease is caused by a fungus-like microorganism called *Phytophthora infestans*. The excellent conditions for disease development, combined with the presence of the pathogen, has resulted in continuing outbreaks of Late blight in commercial, market garden and urban potato and tomato crops throughout parts of Alberta. A number of different strains of the pathogen have been identified in different years, each being more or less aggressive on either potatoes or tomatoes. Recently a specific strain (US23) of Late blight, which is particularly virulent on tomatoes, has become more prevalent, increasing the risk for greenhouse tomato growers. In 2013, Late blight advanced across southern Alberta, coming close to greenhouse tomato areas. For 2015, this disease continues to be a risk for all Solanaceous crops (potato/tomato family) grown in Alberta.

Greenhouse Crops and Late blight

While most of the attention and focus is placed on field-grown crops, due to the size and scale of the industries that may be affected (e.g. commercial potato, market gardens, etc.), greenhouse producers of tomatoes or tomato transplants, as well as eggplants and petunias, should be concerned about their ability to potentially impact other industries or be adversely affected by Late blight.

Producers should monitor for Late blight in their crops, from the perspective of buyers, sellers and producers of plants. As buyers, producers are at risk of receiving infected plants from other regions, which may significantly affect their own production. As buyer/sellers, receiving infected plants creates the possibility of introducing diseased plants into areas where it could easily spread to other crop industries, which can start the disease cycle locally. As producers, if the disease is introduced in the province, there is the potential of having their crops infected as the season progresses, either affecting production or furthering the spread into other crops.

While potatoes and tomatoes are generally considered the primary crops that are affected by Late blight, crops like petunias, peppers and eggplants may also be infected and/or can spread disease to other, more common host crops (e.g. tomatoes), particularly if they are housed in the same greenhouse. Spread between multiple host crops can certainly occur in greenhouse situations.

It has been suggested that crops such as petunia are not likely to be entirely wiped out by Late blight, unless they are young seedlings (highly sensitive). However, older plants can serve as inoculum for the spread of disease within and out of a greenhouse environment.

Growers and sellers of greenhouse ornamentals and vegetable bedding plants might consider the production and/or sale of one or more of the limited number of Late Blight-resistant varieties, including *Mountain Magic*, *Defiant PHR*, *Mountain Merit*, and *Iron Lady*. These varieties may reduce the development of disease in home and market gardens.

What to Watch for in Greenhouse Crops

Scouting / monitoring can be done at the same time as plants are monitored for insect pests and other diseases.

Initial symptoms of Late blight are typically noted on older leaves, appearing as dark, water-soaked lesions, sometimes with yellow edges, that move in from leaf tips/margins, becoming brown and brittle within a couple days. Late blight lesions are not contained by the leaf veins. In crops such as petunias, lesions may not develop as rapidly and may resemble other foliar leaf diseases, depending on the stage of the crop at infection and the level of infection.

In high moisture/humidity situations, a small amount of sporulation (observed as white, fluffy growth on the edges of lesions) may be visible on the underside of affected leaves. Other diseases will likely form spores much more rapidly than the Late blight pathogen (e.g. *Botrytis cinerea*, the gray mold pathogen). Late blight develops most quickly in wet/humid conditions and can spread very rapidly through tomato plantings or very young petunia seedlings. Plants may be rapidly defoliated and die.

Specific strains of *Phytophthora* are more aggressive on tomatoes (US 23), and will often attack the fruit readily; therefore, producers should watch plants for both foliar and fruit symptoms. Infected fruit may have irregular, sunken lesions. Tomato fruit rot can penetrate into skin of the fruits, causing rot and discolouration of the internal tissues. The rot often has a reddish-brown colour.

Management Strategies

Careful monitoring of incoming, growing and outgoing plant material is one of the best strategies for managing Late blight within a greenhouse. Producers should consider separating different host plants as much as possible, particularly if there is a risk of disease on one of the crops. Consider culling poorer quality plants or carefully screening for potentially infected material.

Dispose of diseased material by burial, burning or freezing. Dying plant material can still transfer spores to living plants, continuing the disease cycle.

The Late blight pathogen thrives in warm, wet and/or high humidity conditions; therefore, careful ventilation can help to keep humidity at reasonable levels and can prevent condensation and prolonged periods of leaf wetness. Overhead watering will increase disease spread; this should be addressed if there is a risk that disease is present.

Protective applications of registered fungicides are appropriate in high risk situations; however, applications are not curative.

Late blight is a community disease. It will require effort on the part of all industries to return Alberta to a Late blight-free status. If you want to know more about Late blight or have questions or concerns, please call 310-FARM (3276) for assistance.

For more information on Late blight identification and management, see the Frequently Asked Questions document – [Late blight in Potatoes and Tomatoes](#)

LATE BLIGHT OF POTATO & TOMATO

Lesions may have a yellow edge

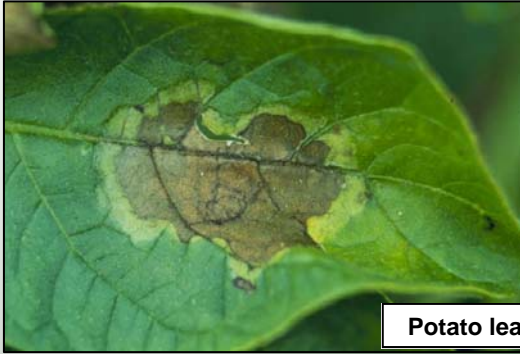


Photo by Dr. K. Al-Mughrabi, Govt of NB

Potato leaf lesions

Dark, water-soaked lesions (spot)

In humid conditions, fluffy white growth may be visible on leaf undersides at lesion edges



Photo by Dr. K. Al-Mughrabi, Govt of NB

Lesions are not contained by leaf veins

Lesions become brown & brittle within a couple of days



Lesions on tomato leaves



Photo by Dr. K. Al-Mughrabi, Govt of NB

Rapidly advancing lesions

Plant foliage may die back rapidly

Disease develops rapidly under warm & wet/humid conditions

Lesions may also develop on stems, tomato fruit or potato tubers



Potato foliage

Tomato fruit & potato tuber rot may have reddish-brown lesions

Disease may spread from diseased to healthy tomato fruit & potato tubers in storage & between potato seed pieces

Rot can penetrate the skins of tomato fruit & tubers — causes rot & discoloration of the internal flesh



Tomato fruit — lesions

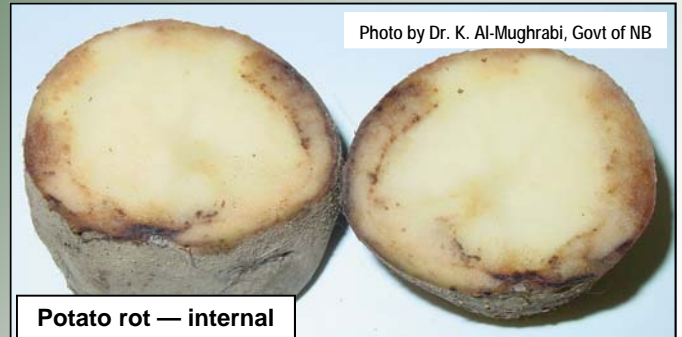


Photo by Dr. K. Al-Mughrabi, Govt of NB

Potato rot — internal