

Revised November 2016

Agdex 230/20-3

Beginning Berry Production

very important to

berry production

Alberta's commercial berry industry centers around four crops:

- strawberries
 - raspberries
- saskatoons black currants

Interest in sour cherries and haskap is increasing, and plantings of these berry crops are also being established.

Things to consider

The location of a berry farm is important. Consideration should be paid to the proximity of urban centers (if selling direct to consumer), the climate (heat pockets, chinook wind, etc.), soil conditions, air/soil drainage, and shelter. Adequate shelter is

All berry crops prefer soils with a high level of organic matter. Strawberries perform best on sandy loam soils, raspberries on loam to clay loam, and black currants and saskatoon on most soils.

Adequate shelter is very important to berry production. Shelter should be placed to reduce the prevailing winds of summer and winter. Shelter reduces desiccation (drying), improves snow coverage and provides winter protection.

Permanent shelters should be spaced 122 to 152 m (400 - 600 ft) apart. Supplementary shelter provided by silage corn or sunflowers should be planted every 9 to 15 m (30 - 50 ft) in rows, also perpendicular to prevailing winds. It is important not to plant raspberries directly south of an east-west shelterbelt due to the possibility of warm air pocketing during winter (dormant) months.

The majority of Alberta's berry production is presently sold through u-pick operations. Requirements for u-pick operations include the proximity to large population centers, all-weather roads, adequate parking, and adequate signage.

A neat, clean, attractive sign is a definite asset. It is the customer's first impression of your farm, your product, and you. Signs should give directions, instructions and information.

The equipment required for berry producers includes the following:

transplanters

rototillers

- sprayers
- irrigation

• straw spreaders/rakes (strawberries)

• pruners (raspberry/saskatoons/currants)

Optional equipment:

- fertilizer spreader
- pipe trailer
- frost alarm
- sub-soiler

Irrigation is a must for berry growers to obtain the maximum production potential from plants. Trickle or drip irrigation is effective and cost-efficient for saskatoons, raspberries and currants.

Strawberry growers should investigate sprinkler irrigation if at all possible. Due to the close row spacings of strawberries, trickle irrigation can become costly. Sprinkler irrigation also assists in the incorporation of herbicides, field cooling, and frost protection of strawberries. If water is limited, a trickle system should be installed. Water sources, quality and quantity should be evaluated before planting.

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Production factors to note:

- temperature and climate
- soil characteristics
- plant nutrition
- insects
- diseases
- weeds

All these factors will have an influence on plant health and production.

Varieties

Growers are encouraged to use recommended varieties of berries. Variety trials are conducted yearly throughout the province. Results from these trials, along with grower input, form the basis for varietal recommendations. Here are the present varietal recommendations for berry crops:

Strawberry

Junebearing: Kent, Glooscap, Cavendish, Honeoye Day Neutral: Albion, Tristar, Seascape

Raspberry

Boyne, Killarney, Festival, Souris Primocane Raspberry: Red River, Double Delight

Saskatoon Smoky, Northline, Theissen, Honeywood

Black currant

Ben Lomond, Ben Alder

Plant spacing will depend on the cultivation and spray equipment that will be used between the rows. Here are some general planting recommendations:

June-bearing strawberries:

- between plants 0.3 0.5 m
- between rows 1.2 1.5 m

Raspberries:

- between plants 0.6 1.0 m
- between rows 3 5 m

Saskatoons/black currants:

- between plants .6 1.0 m
- between rows 3.5 5.5 m

Crop yields vary yearly and may be influenced by a number of factors such as winter survival, sunlight, temperature, soil fertility, water, etc. Average Alberta yields of crops grown under irrigation with proper nutrition are shown below. Individual yields will vary depending on climate and management.

Strawberries: 5,000 - 10,000 lbs/acre Raspberries: 4,000 - 7,000 lbs/acre Saskatoons (mature 7 yrs): 2,000 - 4,000 lb/acre Black currants: 4,000 - 8,000 lb/acre.

Information sources

Strawberry

Compendium of Strawberry Diseases (includes insects) Second Edition The American Phytopathological Society 3340 Pilot Knob Road St. Paul, MN 55121-2097 USA Tel: 1-651-454-7250 www.apsnet.org

Commercial Strawberry Production on the Prairies Alberta Agriculture and Rural Development 7000 - 113 Street Edmonton, AB Tel: 780-427-0391 www.agriculture.alberta.ca

Integrated Pest Management for Strawberry #3351 Publications Division of Agric & Natural Resources University of California, 6701 San Pablo Avenue Oakland, CA 946608-2431 USA www.ipm.ucdavis.edu/ipmprojects/ads manual strawberry

Raspberry

Compendium of Raspberry & Blackberry Diseases & Insects American Phytopathological Society 3340 Pilot Knob Road St. Paul, MN 55121-2097 USA Tel: 1-651-454-7250 www.apsnet.org

Saskatoons

Saskatoon Berry Production Manual Alberta Agriculture and Rural Development 7000 - 113 Street Edmonton, AB Tel: 780-427-0391 www.agriculture.alberta.ca

Dwarf Sour Cherries

Dwarf Sour Cherries: A Guide for Commercial Production University Extension Press University of Saskatchewan #237-221 Cumberland Avenue North Saskatoon, SK S7N 1M3 Tel: (306)966-5565, Fax: (306)966-5567 E-mail: uep.books@usask.ca

Videos or DVDs

Fruit: A Growing Industry in Alberta includes both *Ins and Outs of Saskatoon Production* and *Pick of the Crop* \$20.00 plus GST, shipping and handling Alberta Agriculture and Rural Development Tel: 780-427-0391 www.agriculture.alberta.ca

Provincial Organizations*

Alberta Farm Fresh Producers Association www.albertafarmfresh.com

*provincial organizations sponsor a Berry Production School yearly

Hort Snacks (a horticulture crop production and marketing newsletter) published by Commercial Horticulture Specialist

The development of this factsheet was supported in part by *Growing Forward 2*, a federal-provincialterritorial initiative. Prepared by Alberta Agriculture and Forestry

More information, contact: Alberta Ag-Info Centre Call toll free: 310-FARM (3276) Website: agriculture.alberta.ca