

AGRI-FACTS

Practical Information for Alberta's Agriculture Industry

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Bush Fruit in Alberta

Jams, jellies and preserves processed from home-grown bush fruit provide personal satisfaction and great eating. Bush fruit production requires careful planning and lots of work, but the rewards are well worth it.

Grape

Many homeowners want to grow this vine fruit, but believe that severe Alberta winters make grape growing impossible. However, a few varieties can be recommended for trial throughout the province when they can be grown in a sheltered, sunny area with sandy soil.

Because maximum exposure to the south is desirable, plant grapes on the south side of a building wall or on a southern slope of a hill. Areas sloping south generally have warmer nighttime temperatures and if well drained, are less likely to freeze in the spring and fall. A soil with good physical texture, drainage, aeration and water holding capacity is necessary for good growth. Lighter soils promote earlier ripening and higher sugar content; however, because sandy soil dries out fast, peat moss, compost, or well-rotted manure should be incorporated before planting. Plant vines where they can be trained in an east-west fan system on wire (#11 galvanized) or on a trellis. Plant early in the spring, before the plant breaks dormancy. After planting, cut back the vines to two or three strong buds. This helps prevent plant desiccation and forces growth into the lower shoots.

A liberal application of well-rotted manure or compost every spring will provide the essential nutrients grapes require. Cultivation is important because grapes do not compete well with other plants for nutrients and water. Cultivate as shallow as possible to prevent root damage. Mulch to a depth of 5 to 10 cm to help prevent weed growth and protect the roots from soil temperature fluctuations. Materials for mulching include grass clippings, straw or wood chips.

After planting, prune the plants back to two or three buds. In the second spring, cut back the vines produced over the previous growing season to four or five strong buds. The ideal time to prune grapes is late

winter or early spring, after the plant is uncovered from its winter protection. Late spring pruning may result in some 'bleeding' but this does little harm to the plant. In following years, prune back all previous years vines, leaving no more than 30 buds on each plant. Remove sucker growth at its source because it produces little fruit.

Grapes are self-fertile, so one plant will successfully produce fruit. Thinning the fruit increases berry size and hastens maturity. The best time to thin fruit is at blossom time when whole clusters of flowers can be removed. Generally a plant with one cluster per shoot may ripen two weeks before an over-cropped plant. Pruning away weak and thin shoots that cause shading to the fruit cluster will hasten fruit ripening.

Grapes are especially sensitive to drought. Keep them well watered. Sufficient water will help the fruit to reach their maximum size and hasten maturity. Water the plants until late August, then withhold water to allow the plants to harden off for winter.

Once grapes are picked, the ripening process stops. If frost is expected, the fruit can be protected by covering them with blankets or sheets. Harvest grapes for table use and for wine when both the color and flavor peak. Grapes used for jelly should be picked before they are fully ripe, when they will contain higher amounts of pectin.

Before freeze-up water the plants well. Lay the vines down on the ground and cover with 15 cm of soil, then a layer of straw. Before the buds break in spring (late April to mid-May) uncover the vines slowly over a period of one week to 10 days. Total removal of cover may kill the vines. Tie the vine up and prune. Cover the plants with a sheet or blanket if there is a risk of frost.

Varieties worthy of trial are: Beta, Riding Mountain, Fredonia and selections of the native grape. Beta, a very prolific fruit producer is the most popular with home gardeners. Beta's compact clusters of blue medium-sized berries are excellent for jelly, jam and juice making, but are somewhat tart for eating out-of-hand. The native Grape (*Vitis vulpina*) is hardy and needs little winter protection.

This grape produces clusters of purple to black, sour berries, which can be used for jelly.

Blueberry

Blueberries (*Vaccinium* spp.) grow naturally in areas where the water table is very high, and the soil is acidic and made up largely of peat moss. As a result they have very shallow roots that seldom reach beyond the drip line of the plant. Blueberries have few root hairs and rely on mycorrhizal fungi for increased water and phosphorous uptake.

Blueberries require a well-drained acid (pH of 6.0 or lower) soil, high in peat moss. They should be grown in full sun, with a good supply of water during fruit production. Good snow cover and constant cold are essential for the winter survival of the blueberry. Two cultivars from Minnesota, Northblue and Northern Country, are worthy of trial in gardens with acid soils.

Highbush cranberry

The highbush cranberry (*Viburnum trilobum*) is native to Alberta and a highly valued ornamental plant. It produces fruit which makes good jelly, however, unlike the true cranberry, the fruit is too seedy for jam.

Highbush cranberry may grow up to 3 m tall. In the wild, it grows in shady, moist, wooded areas, but it also does well in exposed locations. Stock is available at many Alberta nurseries. Plant the bushes 3 m apart, water in well, and cut back the stems to two-thirds of the original height to promote dense bushy plants.

Choke cherry

The choke cherry (*Prunus virginiana*) is another native plant that has become popular as a ornamental. This tree can be used in shelterbelts because it suckers readily and quickly forms a dense hedge row. Choke cherries also provide shelter and food for birds and small animals. Schubert choke cherry is often used as a specimen tree because of its deep wine-colored leaves.

Choke cherries are available at most Alberta nurseries. When planting a shelterbelt, plant the trees 2 m apart in soil that has been summer fallowed for one year. Around the home, plant choke cherries like any other ornamental tree. The fruit makes excellent jams and syrup.

Nanking cherry

The fruit of Nanking cherries (*Prunus tomentosa*) is bright red and sweet. It is excellent for use in jelly and wine making but lacks the size and firmness necessary for canning. Nankings are available from many Alberta nurseries. Nanking cherry can be propagated by dividing

the crowns of established bushes or planting the seed. Nanking cherries need cross pollination, for fruit production, therefore more than one plant is required, or an early flowering plum such as Brookgold, Bounty or Dandy.

Mature plants reach heights of up to 2 m. Plant in rows 3 m apart with 2 m between the plants in the row. Prune annually to prevent shrubs from becoming too dense. Remove no more than one-third of the total number of branches at one time. This allows the plant to replace older wood with young, vigorous wood.

Korean or Chinese bush cherry

The Korean or Chinese Bush Cherry (*Prunus japonica*) may not always produce fruit because it is not totally winter hardy. In most cases the fruit is bitter, although there are some sweet selections. The fruit makes good jelly. The maintenance procedures are the same as for Nanking cherries.

Mongolian cherry

The Mongolian cherry (*Prunus fruticosa*) is native to Eastern Asia and grows well in Alberta gardens. The medium to dark red fruit is excellent for jelly, wine, syrup and preserves. Due to its spreading form and shiny leaves, the plant has an ornamental value. Cultural requirements for the Mongolian cherry are similar to that of the Nanking cherry, with one exception, Mongolians need a larger row spacing because of their suckering habit. Plant them at least 2.5 m apart.

Western sandcherry

The western sandcherry (*Prunus besseyi*) needs to be cross-pollinated to produce fruit; therefore it should always be planted in pairs. It is a valuable plant for pollinating a wide range of *Prunus* species such as plums. Sandcherries can be used as pollinators for late blooming plums such as Brookred and Pembina, and in turn the plums will pollinate the sandcherry.

Sandcherries are hardy and very productive. Selections are pleasant to eat out of hand, as well as being good for jam and canning. Named selections of sandcherries include Mando, Manmoor and Brooks.