GROW GRAPES IN WYOMING? WHY NOT?

Turn your yearn for juice, jellies, fruit, and wine into table staples

By Sadanand Dhekney

Ever dreamt of making wine, jam, juice, or jelly from your own grape vines?

Make it a reality.

Growing grapes is a hot topic with Wyoming homeowners and producers seeking viable alternatives to traditional crops; however, Wyoming's freezing winter temperatures, spring frosts, and short growing seasons have limited cultivation of popular bunch-grape varieties.

Thanks to the persistent efforts of grape breeding programs in Minnesota and New York, a number of excellent cold-hardy, hybrid cultivars can now be successfully grown in the Cowboy State.

Choose Right Variety, Right Site

Growing grapes can be highly rewarding; the key to success in a unique climate such as Wyoming's lies in choosing the right varieties and placing them in protected sites to promote vine growth during the summer and shielding them from wind and low temperatures during the harsh winters.

Most bunch grapes that grow well in other parts of the country will not survive here. Pay close attention to their cold hardiness - varieties suited to USDA hardiness zone 4b (-25 to -30) and below tend to do the best here. Also, pay attention to maturity dates. Selecting early-maturing varieties ensures grapes have time to ripen completely before the first killing frost in the fall. The minimum number of frostfree days for cold-hardy grapes varies with varieties. The ultra-early varieties need approximately 110-130 frost-free days to mature and ripen. Mid-season and late varieties require upwards of 140 frost-free days to mature and ripen. These can change somewhat if the weather fluctuates. The number of required days can decrease in warm years and increase in cold ones.

Choose a variety by its planned use (eating them fresh as table grapes or processing them into juice, jam, jelly, or wine). Some seedless table grape varieties that will do well here include 'Canadice', 'Somerset Seedless' and 'Reliance.'

Cultivars such as 'Frontenac', Frontenac Gris', 'Marechal Foch' and 'Marquette' produce excellent quality wine-grapes in Wyoming's short growing seasons. 'Valiant' is a popular, cold-hardy grape that can be used for making juice, jam, jelly, and wine.

Whether interested in growing grapes for wine, fresh consumption, juice, or jellies, a vine or two can be an excellent addition to the home garden and, if done correctly (see page 6), can be a very rewarding experience.

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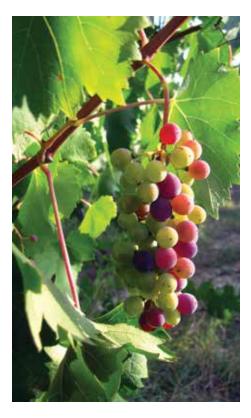
GETTING GRAPES GROWING

Purchase plants from reliable sources to ensure receiving trueto-type, vigorous, and disease-free vines. A list of licensed grapevine nurseries is at the University of Minnesota's grape breeding program website www.grapes.umn.edu.

Soil type can be an issue. Grapes grow well in sandy to sandy-loam, well-drained soils. Collecting and having a soil sample analyzed will determine soil type and provide a good estimate of what amendments may be needed to ensure vigorous vine growth. Contact your local UW Extension office for a list of area soil laboratories. Addition of well-decomposed compost free of any herbicide residues will assist in root establishment. Site selection is vital. Grapes require plenty of sunshine for flowering, fruit development, and ripening. Select a site that provides maximum exposure to sunshine during periods of active growth as well as being sheltered from the worst winter weather.

How to Plant

Plant the vines after the danger of spring frost to give root systems plenty of time to establish the first growing year. Vines with well-developed root systems should be planted in footdeep holes by spreading the roots evenly and topping them with soil. Irrigate vines immediately after planting. Grapes are drought-tolerant plants but require adequate water during the initial establishment period



of two to three years. Overwatering or waterlogged soils will cause roots to rot and kill vines. If planting vines in clay soils, be extra careful with watering frequency. Drip irrigation will ensure uniform distribution of water throughout the root zone. Avoid irrigating vines with water containing high levels of dissolved salts.

Irrigate vines at weekly intervals during periods of drought and critical growth stages including flowering and fruit development. Apply water deep enough to fill the root zone.

Care and Maintenance

Vines need suitable support. A fence, arbor, or even the sidewall of a house or garage can be an excellent support system to help maximize growth and fruiting. Specialized trellis systems are required for commercial production, and designs vary with the variety of grapes being grown. Grapes need tender loving care during the growing season but must be pruned severely during dormancy (after the leaves fall in fall and before new leaves emerge in the spring). Avoid pruning too early in the winter to avoid cold injury to vines.

IN WYOMING

Fruiting occurs exclusively on new growth; pruning up to 90 percent of the previous season growth is essential for a good crop the next year. Regular, annual pruning anytime from April to early May prevents entangled, unruly, and unproductive vines growing in a garden.

Fertilize grapes in the spring following bud break and during periods of active vegetative growth. Apply about 3.5 to 5 ounces of 10:10:10 garden fertilizer late May through early June. Avoid overfertilizing; this promotes vigorous vegetative growth but decreases fruiting. Do not fertilize vines in late summer or fall.

Hot and dry weather during the growing season ensures a diseasefree environment, although vines may occasionally be infected with fungal diseases, such as mildews and rots, following wet periods. Copper- or sulfur-based fungicide sprays can effectively control fungal diseases. Grasshoppers can be pests during the growing season and should be controlled when they reach higher levels to avoid complete defoliation of vines.



INFORMATION SOURCES

Commercial grape production in Wyoming for table and wine purposes has steadily risen since the first vineyard (Table Mountain Vineyards near Huntley) was established in 2001. The Wyoming grape industry, which started with two growers, has expanded to include approximately 20 producers growing grapes on 25 to 30 acres with an annual production of 40 to 45 tons of fruit.

The Wyoming grape and wine association (www.wyogrape.com) coordinates grower activities and provides information on establishing new vineyards or grape growing-related questions.

The University of Wyoming has an active grape research program at the Sheridan Research and Extension Center (http://bit.ly/shrec) and provides recommendations on grape production practices. The university also offers a grape production course every fall, which can be accessed on-line by videoconference.