GROWING GRAPES IN MONTANA

A new research and demonstration study by MSU Extension is evaluating some new grape varieties for Montana.

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Montana-made products have a certain mystique and advantage on the store shelf. However, most Montana wines, beers, and distilled spirits are made from crops grown in other states. Montana wineries, breweries, and distilleries are searching for locally grown inputs, and these businesses are convinced their products can support premium prices if made solely from Montana-grown crops. Opportunities exist for Montana landowners to grow crops desired by our state's libation industry.

Opportunities also exist to link agriculture and the libation industry with tourism. For example, a successful strategy used in other states is to promote "libation trails" for tourists. Libation trails highlight the locations of local breweries, wineries, vineyards, or distilleries and encourage tourists to visit these businesses. Events such as Oktoberfests, wine festivals, and holiday shopping expos stimulate tourist traffic, and lodging businesses and restaurants collaborate to offer travel packages.

Montana's Flathead Valley is one area where people are working to link and promote agriculture, the libation industry,

and tourism. Flathead Valley tourism is big business, with tourists contributing more than \$142 million annually to the local economy. Summer visitors to Glacier National Park and winter visitors to Big Mountain Ski Resort anchor Flathead Valley tourism. In an effort to fill vacant hotel rooms and restaurants during the off-seasons of spring and fall, the Kalispell Chamber of Commerce Visitors Bureau created a day-trip guide to local breweries, wineries, and distilleries. Today, the "Drink in the Scenery" page on the Kalispell Chamber of Commerce website is the most downloaded day-trip guide in Montana.

Montana has a strong tourism industry statewide, and a booming libation industry as well. The addition of local vineyards, orchards, and hop farms could simultaneously strengthen Montana's agriculture, libation, and tourism industries.

One reason that vineyards are not more common in our state is because European grape varieties require more days of warmer weather than Montana can provide. But recently, researchers at Cornell University in New York



and the University of Minnesota have developed cold-hardy grape varieties. A new research and demonstration study by Montana State University Extension is evaluating some of these new grape varieties for Montana. The study, funded in part by the Montana Department of Agriculture Specialty Crop Block Grant Program, includes 12 varieties of cold-hardy grapes, planted in five locations across western Montana: Kalispell, Yellow Bay, Ronan, Plains, and Helena. Initial findings of the study show promise, with 'Frontenacs' as the best-suited wine grape variety tested so far. 'Brianna' and 'Somerset' are the early favorites for table grapes, but it will be several more years before recommendations are released on the cold-hardy grape varieties that grow best in western Montana.

One challenge to growing grapes is the large amount of labor required. About 750 hours of labor are needed per acre for pruning, canopy management, spraying, and harvesting. Infrastructure costs also are high for irrigation and trellis systems, averaging \$5,000 to \$10,000 per acre. Location is the single most important criterion for success. Vineyards must be located away from frost pockets, preferably on south or southwest slopes to maximize sun exposure, and grapes grow best on well-drained sandy or gravelly soils. Grapes are extremely sensitive to contact with any herbicide used in or near a vineyard. In response, a new system for weed control within vineyards has been tried that uses a paint roller with a long handle to apply herbicide only to target weeds. Physical cultivation is still the suggested management practice, keeping the ground open and weed-free for at least the first three years of vineyard establishment. Winter hardiness of two- to threeyear-old grape vines also has been improved by harvesting some immature clusters of grapes soon after flowering, thereby allowing vines to enter dormancy earlier in the fall. Otherwise, if clusters are left on the vines, the vines continue to grow and try to ripen the fruit, only to experience freezing temperatures before the vines have entered dormancy.

As a result of the interest in grape growing in Montana, an email listserv of over 100 growers from across Montana is now hosted by Montana State University Extension. This listserv prompted the formation of the Montana Grape

Growers Association (MGGA) that held its first meetings in fall 2012 and early summer 2013. Educational seminars at these meetings covered the nuances of making wine from cold-hardy grapes, best management practices for vineyards, and other topics. For more information about the MGGA or growing grapes in Montana, please contact me by phone at (406) 758-5553 or email at pmcglynn@montana.edu. To see a list of the grape varieties tested so far, visit the MSU Extension Flathead County website at www.flathead.mt.gov/extension.

