Evaluation of goji berry as a high-value fruit crop in Wyoming

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Issue: Some Wyoming producers, including local food producers, are always looking for alternative crops and markets to keep their operations economically viable, especially during years of poor crop prices. High-value alternative crops, such as fruit crops, can help provide economic stability and a new market to capitalize on. Unfortunately, Wyoming’s climate (short growing season, early and late freezes, and harsh winters) makes fruit production difficult and inconsistent as a reliable cash crop.

Goal: Evaluate goji berry (Lycium barbarum) (Fig. 1) as a potential high-value crop for Wyoming and study the feasibility of organic production.

Objectives: Assess the performance of the cold-hardy (U.S. Department of Agriculture Plant Hardiness Zone 3a [-40 to -35°F]) goji berry plant to determine the days required for flowering, fruiting, length of the growing season, and yield potential per plant at two locations, Powell and Sheridan, Wyoming.

Expected Impact: To date, this study indicates that goji berry plants are suitable for fruit production in some areas of Wyoming. In spring 2017, the plants broke dormancy between March 25 and April 5, which is approximately a month prior to grapevines growing within the same vineyard. The survival rate was 98%, and the total yield was 0.56 lb/plant over two harvest periods.

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Figure 1. Goji berry.