



University of Nevada
Cooperative Extension

Impact

Tef crop production helps sustain the agricultural industry

The purpose of this program is to introduce Nevada farmers to and help train them in the cultivation of tef, a small-seeded grain and forage crop that requires less water than alfalfa and can be more profitable. There is a strong market for tef seed, which is made into flour to make an Ethiopian flat bread known as injera, as well as for tef hay as a high-quality horse hay.

Issue:

Alfalfa or grass hay is produced on more than 92 percent of Nevada's irrigated agricultural lands. The lack of alternative crops limits producer options when hay prices fall or input costs such as electricity rise. This situation is compounded by threats to irrigation water from urban communities and natural drought. Three recent fact sheets examining the economic situation of forage production operations in Churchill, Eureka, and Humboldt counties showed returns of \$.89, -\$45.62, and -\$25.15 per acre respectively. University of Nevada Cooperative Extension (UNCE) is working with farmers in Churchill, Lyon, Pershing and Humboldt counties to raise tef instead of alfalfa. Demand for tef in the U.S. currently exceeds the supply. Not only is tef used in Ethiopian restaurants, it is also an important source of gluten-free flour, which is required by people who suffer from intolerance to gluten – an estimated 1 in every 133 Americans.

What Has Been Done:

Last year Cooperative Extension assisted 11 producers to grow tef grain and forage in Churchill, Lyon and Pershing counties. UNCE faculty members led Nevada tef producers to Idaho to study agronomic and harvesting techniques with longtime tef farmers and tef buyers. They also worked closely with Nevada growers on field plantings, fertility management, pest identification and harvest timing. Extension experts planted, evaluated and analyzed experimental tef fields in three locations in Lyon County, where an increasing amount of irrigation water is being sold to provide higher flows to Walker Lake.

Impact:

The number of acres committed to growing tef in Nevada has increased. It tripled from 2005 to 2006 to more than 300 acres, and by 2008 there were 11 producers growing tef grain and forage on more than 1,000 acres in Churchill, Lyon and Pershing counties. As the supply has grown, Cooperative Extension has worked to establish a market for the crop. Faculty members have facilitated meetings between tef growers and three separate groups from Ethiopian communities in California and Nevada who want to supply tef to ethnic markets across the country. Although a 13 percent drop in sunlight in Western Nevada in 2008 – caused by wildfires in California in June and July – affected yields, the total Nevada tef seed production of 876,000 pounds was nearly half the seed produced in the entire country. Seed sales grossed \$635 per acre with chaff sales grossing \$215 per acre for a total of \$850 per acre. When tef was grown exclusively as forage, the hay sold for approximately \$600 per acre. What's more, input costs were cheaper than alfalfa, and tef required a third less water. Net income from tef crops in Churchill, Pershing, Lyon and Humboldt counties equaled or exceeded average net income from alfalfa.

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