

**Contract**

UNL Viticulture Department - #18-13-049 - \$600

**Contact**

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**Issue of Interest**

To enable the Viticulture Program to provide assistance to Nebraska's grape growers and ultimately help the wineries, as they pursue identification of terroirs and the possible establishment of American Viticulture Areas in Nebraska. The project will monitor vineyards in several parts of the state for environmental and pest parameters, as well as conduct an experiment to compare the performance of Nebraska-grown grape cultivars on different trellis systems.

**Approach to Problem**

Support of the developing Nebraska grape and wine program was addressed in several ways, including research on cultivars, bud break studies, hardiness evaluation, and pest management. These studies were conducted at our University of Nebraska Viticulture Program (UNVP) research sites in three locations, which are located at the Kimmel Education and Research Center (KERC), as well as the Peru and Nemaha research sites. Monitoring of disease and insect incidence was conducted in collaboration with UNL Entomology personnel. Environmental monitoring took place on 12 commercial vineyard sites. The Nebraska Grape and Winery Board approved \$600 from the Winery and Grape Producers Promotional Fund to pay for UNVP activities, which were used for two projects.

The first is an interdisciplinary project to monitor vineyards in several parts of the state for environmental and pest parameters. The goal of this project is to garner information that will enable the Viticulture Program to provide assistance to Nebraska's grape growers and ultimately help the wineries, as they pursue identification of terroirs and possible establishment of American Viticulture Areas.

The second project is to conduct an experiment to compare the performance of important Nebraska-grown grape cultivars on different trellis systems.

The amount awarded (\$600) will partially pay for a viticulture technologist salary, travel costs to visit sites, installation of monitoring devices, evaluation of trellis systems, material costs for installation of monitoring devices, and trellis systems, as well as data acquisition and communication costs.

**Goals/Achievement of Goal**

Preliminary information was obtained regarding possible establishment of an American Viticultural area for parts of eastern Nebraska. Climatic and soil data are being accumulated, but to pursue this project further will require a significantly higher infusion of funds. These funds would be put to use by garnering information that will enable UNVP to provide assistance to Nebraska's grape growers and ultimately help the wineries, as they pursue identification of terroirs and the establishment of American Viticulture Areas.

### **Results, Conclusions, Lessons Learned**

Data was acquired by Paul E. Read, UNVP Director; Stephen Gamet UNVP Vineyard Technologist, and two graduate students. Data taken included the time of bud break, rating of winter survival, evaluation of disease incidence, and harvest parameters, such as pH, titrateable acidity (TA), and degrees Brix. Please see the UNVP web site for bud break and winter survival ratings. Insect incidence was reported by Entomology graduate student, Chelsea Wasem, and is presented on the UNVP web site. Support of the developing Nebraska grape and wine program was addressed in several ways, including research on cultivars (see web site <<http://agronomy.unl.edu/viticulture>>), bud break studies, hardiness evaluation, and pest management. These studies were conducted at our University of Nebraska Viticulture Program (UNVP) research sites in three locations, at the Kimmel Education and Research Center (KERC), the Peru and Nemaha research sites. Monitoring of disease and insect incidence was conducted in collaboration with UNL Entomology personnel and environmental monitoring took place on 12 commercial vineyard sites.

### **Progress According to Outcome Measures**

Support of the developing Nebraska grape and wine program was addressed in several ways, including research on cultivars, bud break studies, hardiness evaluation, and pest management. It has been ascertained that there is interest in a "Loess Soils" American Viticulture Area being investigated as a joint effort with Iowa growers, since both sides of the Missouri River are bounded by regions of loess soils.