



**Eastern District Innovative Grant Program
Fiscal Year 2006/2007
Application Form**

Project Title: Table Grape Production in Northeastern Wisconsin

Funding Requested: \$750.00

Project Applicant: Dean Volenberg, Agriculture Educator, Door County

Collaborators: Dick Weidman, Superintendent, Peninsular Agricultural Research Station

Matt Stasiak, Fruit Researcher, Peninsular Agricultural Research Station

Robert Burke, Community Resource Educator, Door County

Signature: _____
Dean S. Volenberg

Situation/Introduction

In the United States, wine, grape, and grape product industries contribute 162 billion dollars annually to the American economy. All segments of the grape industry are expanding as consumers demand for grape products increase. Currently, most all states have some type of grape related industry. Wisconsin is no different, and continues to expand the number of acres of vineyards and grape related industries. Vineyard expansion in Wisconsin can be attributed to the increased demand by wineries for grape varieties suitable for wine production. The expansion of vineyards and wineries revitalize and support local economies in rural communities. Other grape markets, such as table grape production could expand from the current production center in California and provide a local/regional, sustainable fresh market crop.

The market for table grapes is growing in the United States, with annual retail sales over 3 billion dollars in 2006. The consumption of table grapes has almost tripled over the last three decades, 2.9 lbs per capita (1970) to 7.5 lbs per capita in 2003. Since 1985, per capita consumption has been between 7 to 8 lbs per person. Fresh table grape consumption has likely increased because consumers have been made aware of the increased health benefits of eating more fruits. Fresh table grapes provide the same cardioprotective qualities as wine, and contain effective antioxidants such as polyphenols.

Wisconsin grape producers currently do not have UW system research support. This lack of a UW support specialist has resulted in UW-Extension providing information to current and potential vineyard growers. To continue this support, table grape trials need to be conducted on newly introduced seedless non-slip skin type table grapes. Classic American table grape types such as Concord is a slip skin type, so named because the pulpy inner fruit is easily popped out of the skin. Table grape variety trials will provide important information to vineyard growers on 1) fruit quality, 2) adaptability of varieties to Wisconsin conditions, and 3) realistic economic production.

The proposed project is the first step in improving the economic vitality of agriculture in Door County and has the potential of preserving agricultural land. Both of these aforementioned topics have been identified as key factors by a Door County Agricultural focus group. The

proposal integrates supporting resources and collaboration with the Peninsular Agricultural Research Station that will provide, grape growing expertise, land, water, tillage and spray equipment. The proposed project addresses a new program area that currently is not being addressed by the University of Wisconsin system.

Approach/Methodology

***Objective 1:** Establish and evaluate five seedless, non-slip skin table grape cultivars for flavor, yield, and winter hardiness.*

Table grape cultivars will be planted at the Peninsular Agricultural Research Station located in Door County. The cultivars trialed will be: Marquis (green), Einset (red), Vanessa (red), Reliance (red), and Mars (blue). One year old rooted cuttings will be planted with 8 ft. spacing between plants and water supplied via drip irrigation. Maturing vines will be trained using a modified Munson canopy management system that allows maximum sunlight penetration into the canopy for fruit ripening. After vines reach fruiting age (3 years), flavor will be assessed by consumer blind taste tests. Sugar and acidity levels will be quantified. The total yield per vine will be noted as well as winter injury. The trial will consist of five plants per cultivar.

***Objective 2:** Develop education extension material for producing table grapes in Wisconsin.*

We will develop an extension publication on growing table grapes in Wisconsin. The publication will focus on site selection, training system, pruning, table grape cultivars, and grape cultivar resources.

Expected Outcomes

- **Provide information on growing cold climate seedless table grapes to Wisconsin producers.** The information will be presented via an extension publication and educational events.
- **Promote local markets.** The table grapes will be promoted at local farmers markets and pick-your-own farms. The principal promotion will be in branding the table grapes as “Door County” table grapes. Table grape production beyond fresh market consumption could be used in value added products such as blended fruit wines.

Timetable: Plan of Work

Year	Description of Work
2007	Plant table grapes, establish trellis system and drip irrigation
2008	Prune and begin trellis training
2009	Prune continue trellis training
2010	Begin data collection
2011 to 2013	Data collection

Evaluation Plan:

- Quantify number of table grape acres local producers establish.
- Survey table grape producers to determine if this research effort impacted their decision making process in becoming a table grape producer.
- Quantify the number of table grape extension publications distributed by UW-Extension learningstore.

Budget:

Budget Category	Request
Grape Cultivars	\$ 100.00
Trellis System (posts, wire)	\$ 400.00
Irrigation lines (drip)	\$ 250.00
Total	\$ 750.00