A Cut Above:
How the Northern Grapes Project will Foster Growth and Development of the Cold-Climate Wine Industry

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The Northern Grapes Project is funded by the USDA’s Specialty Crops Research Initiative Program of the National Institute for Food and Agriculture, Project #2011-51181-30850
Northern Grapes: Integrating viticulture, winemaking, and marketing of new cold hardy cultivars supporting new and growing rural wineries

• 5 Year Coordinated Ag Project
• 12 Institutions
• 34 Research/Extension Scientists
• 18 Industry Associations
• $2.5M Funded (2 yr) USDA ($6.1M 5 yr budget)
• Matched > 25 Organizations and Individuals

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“...To develop grape production, winemaking, and marketing practices suited to the unique characteristics of V. riparia-based [Northern Grape] cultivars marketed through retail tasting rooms and their niche in the US wine market.”
Multi-Disciplinary Studies

Address

- Varietal performance and resulting fruit and wine flavor attributes in different climates
- Applying appropriate viticultural practices to achieve consistent fruit characteristics for ripening
- Applying winemaking practices to their unique fruit composition to produce distinctive wines that consumers will like and purchase
- Understanding consumer preferences, individual/regional marketing strategies to increase sales and sustained profitability of wineries and vineyards.
The Model

Viticulture
Growing Quality Grapes

Enology
Producing High Quality Wines

Consumers
Understanding Marketing, Sales

= Profitable, Vibrant Industry
Cold – Climate Cultivars

- Cultivars are new to growers (Frontenac 1996)
- Cultivars are also new to consumers
- Vineyards and wineries small and young
- Industry dispersed across Upper Midwest and Northeast
- Coordinated effort necessary
Outcomes:

• 5 YR: Production and sales double

• Improved quality from better growing and winemaking practices will improve customer retention and drive repeat sales

• Cold-climate cultivars will establish unique regional marketing identities

• Wineries will apply business and tasting room management practices that drive sales
Outcomes:

Wineries and vineyards will transition from ‘startup’ status to ‘sustained profitability’
Industry Input

• 2009 – Planning Grant
• 2010 – Workshops with Industry in VT and MN
• January 2011 – Project Submitted
• August 2011 – Funding Notification

Addressing Research and Extension Needs of the Cold Climate Wine Industry:
SCRI Planning Workshops
November 12-13, 2009, Burlington, VT
February 11-12, 2010, Bloomington, MN

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Four Reasons
Why I’m Here Today

Murli
Dharmadhikari

Jim Luby & Peter Hemstad
Four Reasons
Why I’m Here Today

Thousand Islands Vineyards
Alexandria Bay, NY

Tug Hill Vineyards
Lowville, NY

Rob McDowell
Champlain Region

Richard Lamoy
Hid-In-Pines Vineyard
Farming for Flavors

Grapes

“does exhibit cherry and black currant flavors and aromas... but can be much more complex with integrated notes of blackberries, pepper, plum, tobacco, leather, and spice”.

$$$$?
Farming for Flavors

**Frontenac Port**

Made from 100% Illinois Frontenac grapes grown at Arbor Hills Vineyards. These grapes have created a wonderful big berry wine with a chocolate complexity.

- Bronze - 2009 Illinois State Fair Bronze-2009 Indy Wine Competition

**Price:** $15.50

**Quantity:** 1
Farming for Flavors

How does environment affect Flavors?

Climate and standard maturity indices

Harlene Hatterman-Valenti
Rebecca Harbut
Paulo Sabbatini
Tim Martinson
Kevin Lungerman
Lorraine Berkett
Sonia Schloemann
Bill Nail
Anne Fennell
Paul Read
Paul Domoto
Bill Shoemaker

Lincoln Peak Wines
Farming for Flavors

How does canopy manipulation affect flavors?

Finger Lakes
Cayuga White
7-8 T/acre ($500-600/T)
$10 Bottle Price

7-8 T = $3500 - $4800
Growing costs: $1,500-1,800/acre
Farming for Flavors

How and when do flavors develop as fruit ripens?

Volatile metabolites

Koziel and Maurer
GC-MS-olfactometry

Dhrmadhikari
TA, Ph, Phenolics
Farming for Flavors

How can winemaking practices modify flavors?

AROMATIC WHITES

- Edelweiss & La Crescent
- Impact of processing on volatile extraction
  - duration of skin contact
  - enzyme treatment
How can wineries develop business & marketing practices to drive sales?
How to effectively ‘brand’ and market Cold Climate wine?

Reasons for Project Activities

• Cold hardy grapes and their wines have little consumer awareness
• Emerging and Growing Industry
• Policy is often haphazard
• Tourism is a big part of winery operations
• Relatively high price of wines requires brand equity development
• Baseline Monitoring for Project Assessment
Gallo – The Competition?

$10/bottle.

Magnum.
Where do you see your business heading?
What do you want to be producing five or ten years from now?
What resources, skills, and information do you need to get there?
Farming for Flavors

What knowledge and skills does it take to produce wine?

Growing Grapes

- Vine anatomy & growth
- Fertility and water relations
- Cropping level & Vigor
- Pest Biology & Mgt.
- Equipment & repair
- Pesticides
- Labor management
Farming for Flavors

What knowledge and skills does it take to produce wine?

Making Wine

- Chemistry
- Microbiology
- Sensory evaluation
- Equipment/Plumbing
- Sanitation
- Compliance (TTB, reporting)
Farming for Flavors

What knowledge and skills does it take to produce wine?

Selling Wine

- Retail Management
- Advertising
- Design
- Packaging
- Staff – Training/Mgt
- Event management
- Promotion
Committed to Education

- Integration of Research and Extension
- Systems-based approach
- Develop your skills
Northern Grapes Symposium

- Winter Conferences
- Thanks to MGGA!

www.northerngrapesproject.org
Northern Grapes Webinars

- 70-100 each broadcast
- Interactive
- Creates community

www.northerngrapesproject.org

Managing Acidity in the Winery
January 10, 2012
12:00 Noon Eastern (11:00 AM Central)
7:00 PM Eastern (6:00 PM Central)

Cold-hardy cultivars such as Frontenac, St. Croix, La Crescent and Marquette are known for retaining acidity at ripeness, and managing it in the winery can present challenges for winemakers. Dr. Murli Dharmadhikari, Enologist and Director of the Midwest Grape and Wine Industry Institute at Iowa State University, and Dr. Anna Katharine Mansfield, assistant professor of enology at Cornell University, will discuss chemical and biological methods for reducing acidity in wines made from Northern cultivars. Dr Tim Martinson, director of the Northern Grapes Project, will provide an orientation to the webinar series, and a brief overview of the USDA-funded Northern Grapes Project.

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4 issues each year

Project news

Profiles

Activities

www.northerngrapesproject.org
Towards Building Social Capital

Cooperation

Communication

Trust

Cooperation
The Finger Lakes
Small Winery Segment

Wine Trails
The Finger Lakes
Small Winery Segment

Promotional Partnership with
Corning Glass Museum
The Finger Lakes
Small Winery Segment

Joint Tastings
Works in Progress
The Finger Lakes
Small Winery Segment

Shared Resources
Mobile Bottling Line
Coyote Moon Vineyards

Holiday shoppers snap up local food and wine baskets
## Partnering Industry Associations

- Connecticut Vineyard and Winery Assn.
- Illinois Grape Growers and Vintners Assn.
- Iowa Wine Growers Assn.
- Lake Champlain Wines
- Massachusetts Farm Wineries and Growers Assn.
- Michigan Grape and Wine Industry Council
- Minnesota Grape Growers Assn.
- Nebraska Winery and Grape Growers Assn.
- New Hampshire Winery Assn.
- New York Wine and Grape Foundation
- Northern Illinois Wine Growers
- Northern New York Wine Grape Growers
- Scenic Rivers Grape and Wine Association (Iowa & Illinois)
- South Dakota Specialty Producers Assn.
- Upper Hudson Valley Wine and Grape Assn.
- Vermont Grape and Wine Council
- Western Iowa Grape Growers Assn.
- Wisconsin Grape Growers Assn.
Thanks

Terri Saveryn
Missy Machkhashvili
Peter Hemstad
Jim Luby

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Chrislyn Particka