

Developing and Testing a Code of Sustainable Viticulture Practices for Vineyards In New York and Pennsylvania.

Principle Investigators

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Funding sources (other than NYS IPM Program):

New York State Farm Viability Institute \$150,000

Project Summary

We propose to develop and work towards implementation of a sustainable viticulture program for the Long Island, Finger Lakes, and Lake Erie/Ontario regions in NY and the Lake Erie region of Pennsylvania. Such a program addresses risk management for this clientele because much of the grape production in NY occurs in environmentally sensitive areas adjacent to major bodies of water (Great Lakes, Finger Lakes, Long Island sound), and amidst a growing suburban and lakeshore-cottage population. By defining a code of sustainable practices that are both environmentally sound (reducing inputs) and economically sustainable, the wine and grape industry in NY will be able to demonstrate to policy-makers, regulators, and neighbors that they are dealing proactively with potential environmental risks. This will reduce the risk of potential regulation that could have severe negative economic impacts for the industry. Consumers and industrial purchasers are increasingly asking for documentation that their products are being produced in environmentally sustainable ways. Adoption of sustainable production practice guidelines will allow both major purchasers (bulk juice and wineries) and the small winery segment to demonstrate their commitment to environmentally responsible production, and may allow value-added marketing opportunities for their products.

The key steps in developing sustainable ag programs are defining a set of sustainable practices, developing a grower self-assessment workbook to enable growers to rate their practices and develop action plans, and finally a means of verifying adoption by growers and publicizing the program to consumers, neighbors, and the general public. This project will focus on the first two steps by involving a broad segment of the grower population in defining the practices and developing a grower self-assessment workbook.

The self-assessment guidelines will address the totality of vineyard management practices, including: specific weed and vineyard floor management, pesticide application technology,

disease and insect management, and fertility management practices. The first step in the process will be to convene grower meetings to introduce the concept of sustainable viticulture. These groups will help define the specific practices to be incorporated into the guidelines. We will then produce a draft set of guidelines by working with a representative group of grower and processors recruited through the NYS Winegrape Growers, the Long Island Vineyard Technical Group and contract growers with National Grape Cooperative and Canandaigua Wine. This workbook will build upon the draft Long Island Sustainable Viticulture Program guidelines produced by Alice Wise and Libby Tarleton. A draft will be produced by early 2006 and tested with a minimum of 5 producers in each region during the 2006 growing season. Following revisions during the winter of 2006-2007, the workbook will be released for general use in 2007. We expect 30 Lake Erie, 30 Finger Lakes and 20 Long Island producers to complete the workbook and document adoption of some or all of the sustainable practices during 2007.

Targets - What Participants Learn, Achieve, Apply

Targets	Estimated Number	Actual Number	How Verified
Introduce sustainable viticulture concepts at grower conferences, summer field meetings and through newsletters. Growers will be educated in experience with sustainable viticulture programs in other regions and how they work.	550	665	Attendance Records, newsletters sent
Small groups representing growers and processors from each region will compile and discuss specific conservation, vineyard floor management, fertility management, and disease and insect pest management practices to include in workbook.	13	13	Meeting notes, attendance
Develop and review sustainable practices workbook in written and electronic formats.	13	13	Draft workbook completed by April, 2006
Testing and revision of practices during 2006growing season, provide growers with technical assistance in completing workbooks; assess results.	15	12	Completion of workbooks

Project Materials

Sustainable Viticulture in the Northeast Newsletter #1

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Cornell Cooperative Extension Joint publication of the Finger Lakes Grape Program, Lake Erie Regional Grape Program, and the Long Island Grape Program of CCE-Suffolk County, May 2006, SV#1, Material Type: Article (8 pages).

This is the first of a series of bimonthly newsletters featuring a detailed look at specific vineyard production practices that enhance sustainability, which will continue through 2008. Each issue will feature Sustainability Concepts, Best Management Practices, and a grower sidebar detailing how concepts described can be put into practice in the field. This issue focuses on 'optimizing nitrogen use in vineyards'. It describes how growers can reduce nitrogen use by 50% by evaluating vine growth, accounting for soil organic matter, and modifying timing, without reducing yield and quality.

Draft Grower Self-Assessment Workbook for Sustainable Viticulture Practices

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Finger Lakes Grape Program

Lake Erie Regional Grape Program

Cornell Cooperative Extension of Suffolk County Long Island Grape Program, N/A,

Material Type: Workbook

This grower self-assessment workbook assists Northeastern US grape growers in evaluating their production practices to reduce environmental and economic risk. The 139 questions in eight sections covering vineyard management, soil management, nutrition management, weed management, pest management, pesticide management, irrigation and continuing education present up to four management alternatives, ordered from most sustainable to least sustainable. Self-assessment allows growers to determine areas in which they are using sustainable practices, and areas in which they can modify practices to increase sustainability and reduce environmental and economic risk. Following assessment, growers can then develop an action plan to address specific issues identified in the review. For New York growers, use of this workbook qualifies as a 'Tier II' Agricultural Environmental Management (AEM) planning tool. AEM is a program of the NY Dept. of Agriculture and Markets to reduce the amount of non-point pollution from agricultural sources.

A draft of the Self-Assessment Workbook can be found at:

http://hosts.cce.cornell.edu/lergp/Sustainable_Viticulture/SV_Home.htm

Individual Stories / Examples of Success / Quotes

From Tom Davenport, Director of Viticulture, National Grape Cooperative:

National Grape Cooperative is very pleased with the results of this project, which we actively participated in. Significant progress was made in reaching the major milestone associated with the project – developing a code of sustainable vineyard practices. Specifically, for the first time, a team of industry grape producers, representatives from Cornell, industry processors, wineries, and extension agents along with representatives of the Soil and Water Conservation Districts (SWCD) have from across New York State have worked together to develop a sustainable viticulture program. This team worked diligently to address many divergent issues associated with the geographic and varietal diversity that exists from the Long Island growing region on the East to the Lake Erie growing region on the west.

During this process, for the first time the industry recognized much “common ground,” and we all learned the benefits of working together through the combined expertise team members brought to the table.

The project’s major outcome was the development of a set of sustainable practices that will enable industry producers to benchmark how well they are doing in meeting ever-increasing environmental, social, and economic demands. The initial test group of grape producers enthusiastically endorsed the need for and value of the practices developed, and the potential that exists to use this sustainable program in ways that will enhance their farm’s viability.

From Barbara Shinn, Shinn Estates Vineyard, Mattituck, NY (Long Island)(participant in development and testing of the workbook):

“The workbook is organized in a way that any grower can translate a question that may arise in the field or a question that may arise from cultural practices used in the field, and then easily and thoroughly reference that information. For example, when I needed to obtain a quantitative overview of the amount of nitrogen that our cover crop yielded to the soil, the equation was (very thoroughly) outlined. I was able to decrease my nitrogen applications this year.

“ The workbook will greatly benefit the industry and growers. The industry will benefit by joining or even spearheading sustainable agriculture in the east. The growers will benefit by saving money and by having confidence in the guidelines set forth by fellow growers who have participated in the very practices discussed, and the crop and resulting wine will be sustainably produced. The buying public is integrally interested in purchasing sustainable agricultural crops/products.”

Aggregate responses from 15 ‘test’ vineyards, as reported by Jamie Hawk, Sustainable Viticulture Educator, Finger Lakes Grape Program:

Without exception, all 15 of the NY grape growers completing the sustainable viticulture self-assessment workbook during the field-testing phase of development were impressed with its content, layout and user-friendly style. Each grower’s eyes were opened to specific practices whereby modifying their behavior toward sustainability could reap potential environmental and economic benefits. For example, a Seneca Lake grower was inspired to tailor his nitrogen applications after learning about efficient fertilization in vineyards through the workbook. Other

growers remarked on practices that they knew were weaknesses for them, but now felt more comfortable addressing having been enlightened on the practices via the workbook. The self-assessment workbook excels as an educational tool, providing thorough coverage of sustainable viticultural practices for NY while clearly highlighting areas of potentially beneficial behavior change for growers.

From a medium sized grower of bulk wine and juice varieties near Penn Yan, NY:

"I read your Sustainable Viticulture article about nitrogen use this spring. I cut back from 70 lb/acre to 35 lb/acre for my Concordes and 60 lb per acre for my hybrids. I used about half of what I normally order, and haven't seen any difference in growth of my vines"

Delivery area:

This project was delivered in 2 states: New York, Pennsylvania