

Putting a Face on the NYS Grape IPM Program and Lake Erie Regional Grape Program Extension Team - A Multi-pronged Approach to Information Transfer.

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Grape Growing Regions of Cattaraugus, Chautauqua, Erie and Niagara Counties in New York and Erie County, Pennsylvania

Abstract:

Providing up-to-date production information to the diverse demographics of the Lake Erie Grape Growing region is a challenge that has been met through the use of a number of electronic information transfer techniques ranging from web sites and electronic newsletters to digital videos. However, the use of electronic information transfer tools has brought about concern over a 'faceless' extension program. To ensure that a connection is maintained between the NYS Grape IPM Program, Lake Erie Regional Grape Program Extension team and members of the Lake Erie grape industry, weekly Coffee Pot meeting were held from May through the end of August at a different grower venue each week.

Background and justification:

Issue – The demographics of growers in the Lake Erie grape industry makes it difficult to plan educational activities appropriate for this diverse audience. Because many newcomers are approaching grape growing as a part-time business venture in the beginning, attending traditional educational events such as meetings during the day or evening is often in direct conflict with their primary off-farm jobs. The type of timely, in-depth information growers need in order to make intelligent decisions during the growing season is not found in the traditional newsletters delivered through the mail. Moreover, some growers off farm work schedules may make contact with extension personnel difficult to schedule. However, established growers and members of the grape processing industry have expressed concern with electronic information transfer taking the place of human contact.

Response – In recent years the Lake Erie Regional Grape Program Extension team has been making a concerted effort in developing programming that can be delivered via e-mail and the world wide web. Electronic communication provided by the team in addition to electronic newsletters and web pages included videoconferencing and short instructional videos and has been shown to provide educational opportunities to a diverse audience, and has no time

restrictions of when the information can be accessed. However, even when combined with the team's conventional information transfer methods of twilight meetings, a winter grower conference, hard copy newsletters, publications and fact sheets, there was a void in connecting the available information with vineyard practices in the Lake Erie Grape Industry. In response to challenges in crop and disease management during the growing season, weekly small group meetings, Coffee Pot Meetings, were held across the Lake Erie grape belt. As every growing season is typically different in the different areas of the belt, the agenda for discussions at the small group meetings are determined during the meeting by questions and concerns of those attending the meeting. This has allowed the team to provide a more hands-on approach to implementing new research-based information.

Objectives:

1. Develop grape integrated pest management (IPM), production, and business management information required by grape growers and processors in a form that is easily accessed to ensure timely transfer.
2. Develop and implement programming that brings the 'face' of extension and research to the information being delivered.

Procedures: list them for each of the numbered objectives

1. The following electronic information transfer tools have been developed, implemented, and maintained for the grape industry in New York and Pennsylvania.
 - a. *The Crop Update*. This electronic newsletter is a collaborative effort of Lake Erie Regional Grape Program extension team members in New York and Pennsylvania and is delivered on a weekly basis to 326 subscribers. Current and past editions of *The Crop Updates* can also be found on the web at:
<http://lergp.cce.cornell.edu/update.htm>
 - b. Historical weather database incorporating weather records for the Fredonia Vineyard Lab from 1926 to present. <http://lergp.cce.cornell.edu/weather.htm>
 - c. New York State Grape IPM Web site home page
<http://lergp.cce.cornell.edu/IPM/Home.htm>
 - d. Elements of IPM for Grapes in New York
<http://www.nysipm.cornell.edu/elements/grapes.asp>
 - e. New York and Pennsylvania Pest Management Guidelines for Grapes
<http://ipmguidelines.org/grapes/default.asp>
 - f. Lake Erie Regional Grape Program web site home page
<http://lergp.cce.cornell.edu/index.htm>
 - g. Videos of production practices featuring growers who have implemented research based information into their vineyard operation as well as the economics involved with the practice.
2. Working with the Lake Erie Regional Grape Program Extension team, develop small group meetings and vineyard visits to implement information transfer methods that

promote personal contact with members of the grape industry and encourage the development of a multiplier effect.

Results and discussion:

In years past Coffee Pot and IPM Roundtable meetings were held each Wednesday during the growing season at various locations (typically barns, shops or wineries) across the five counties involved in the Lake Erie Regional grape program. The Coffee Pot meetings started at 10 AM and the IPM Roundtable discussions followed in the afternoon at 2 PM. The agenda for each meeting was developed through questions by growers which allowed the conversation to be targeted to the concerns of the day, specific to the area where the meetings were held. Due to the large geographical area covered by the Lake Erie Regional Grape Program it is not uncommon for one area to be experiencing drought conditions with the resultant insect problems while other areas are experiencing extremely wet conditions and the disease problems which typically are found with these conditions. Working with the NYS Department of Environmental Conservation and the Pennsylvania Department of Agriculture we are able to provide category credits for one hour of the two hour meeting as historically the discussion at these meetings has averaged one hour of discussion on IPM related issues and one hour on production, business management and other issues.

During the 2007 growing season the afternoon IPM Roundtable meetings were replaced with the offer of vineyard visits with the extension team and interested participants of the morning Coffee Pot meetings. Coffee Pot meetings started during the first week of May and ran through the last week in August. We have found that meetings held after this time in September and October are poorly attended due to the start of harvest. Weekly meetings distributed around the grape belt help to keep meeting an appropriate size to ensure good interaction between the extension team and participants as well as between the participants themselves. A survey conducted after a recent Coffee Pot meeting showed that learning from other growers was an important component of the meetings. Hearing the costs and benefits of a particular practice from those who have implemented the practices into their vineyard operation as well as being able to ask questions is regarded by participants as one of the biggest benefits of Coffee Pot meetings. The team has found that a meeting involving 15 – 18 industry members has the best interaction. When meetings have gotten to 25 participants or above there is the tendency for the audience to treat it more like a lecture than an interaction. Plans have been made to start monthly Coffee Pot meetings during the dormant season, starting in January 2008 to introduce new team members (both the viticulture and farm business management positions were vacant for the last half of 2007) and to address some major issues that have surfaced such as the rising costs of fertilizer and fuel as well as the cost and availability of labor.

Following are some numbers that represent usage of the various information transfer methods developed by the NYS IPM Grape Program and the Lake Erie Regional Grape Program.

326 subscribers have the electronic newsletter, *The Crop Update*, e-mailed to them weekly throughout the year.

304 growers and members of the WNY grape industry attended 17 Coffee Pot meetings for an average of approximately 18 growers/meeting. Informal surveys conducted at the end of each

meeting found that a majority of participants had changed at least one of their vineyard practices from information obtained in past small group meetings.

Short 3- to 5-minute digital videos have been produced on five topics: 1) Vineyard Mapping, 2) Scouting, 3) Vineyard Nutrition, 4) Crop Estimation and Thinning and 5) Construction and Use of Pheromone Traps and are currently being reviewed for relevance and usefulness by area growers and industry personnel as part of a project which will ultimately produce 12 videos and companion economic worksheets. These videos focus on the delivery of research-based information through video representation of the practice, appropriate research and extension staff as well as interviews with growers who have implemented the practice into their vineyard operation. More in-depth video has been captured and videos are being made of research and extension seminars where more detail is provided for various production practices and basic viticulture knowledge such as site selection, bud construction, development, and productivity.

Impacts –

Participants have indicated during the informal surveys that the small group meetings are one of the more valuable activities the LERGP extension team conducts during the heart of the growing season.

Ten participants completed and returned a survey conducted at a dormant season Coffee Pot Meeting recently. In the survey they were asked, ‘Have you changed or implemented any of the following practices after discussions at Coffee Pot meetings?’ Please check all that apply

Response (%) Question

100%	Pre and post bloom fungicide applications
40%	Spray every row and increase water used per acre
50%	Spot spraying for pests (Grape berry moth, weeds, etc.)
80%	Adjust nitrogen rates in vineyards
50%	Use split applications of Nitrogen
40%	Incorporated soil and petiole testing in your nutrient management plan
60%	Crop estimation and thinning
50%	Managing vineyard operation by block rather than whole farm

As seen by the results to the left of the questions above, 100 percent of the survey respondents indicated that pre and post bloom fungicide applications had been implemented in their vineyard operations. These spray timings are the cornerstone to a successful vineyard disease management strategy as they target the primary inoculum of the four major diseases of grapes in the Lake Erie Region, powdery mildew, downy mildew, black rot and Phomopsis Cane and Leaf Spot. Managing a vineyard operation on a block-by-block basis rather than as an operation as a whole has been one of the key management topics focused on by the LERGP Extension team and the Grape IPM Program in particular. Reducing pesticide use and pest management costs through spot spraying for vineyard pests has been implemented by 50% of survey respondents while ensuring adequate spray deposition through increasing the amount of water per acre and spraying every row was the least implemented IPM practice at 40% of respondents.

