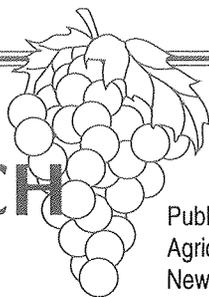


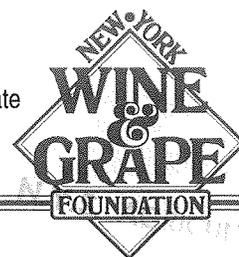
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GRAPE RESEARCH NEWS



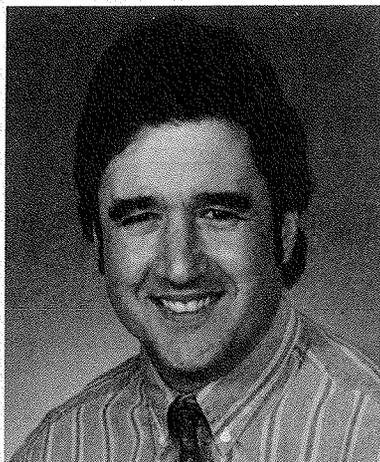
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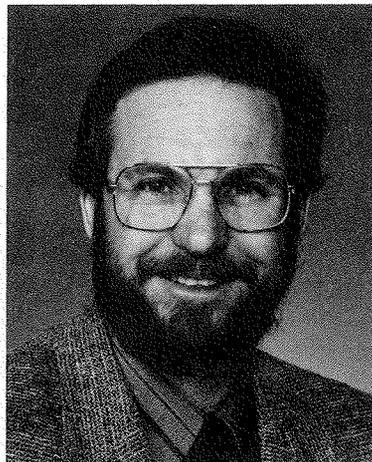
CORNELL FACULTY APPOINTED IN GRAPE PATHOLOGY AND ENTOMOLOGY

Grape Pathologist Named



Wayne Wilcox Associate Professor of Plant Pathology at Cornell University's Agricultural Experiment Station in Geneva, has officially assumed responsibility for research and extension on grape diseases. For the previous 11 years, he had similar responsibilities with respect to diseases of tree fruit and small fruit crops. His grape research will focus on the basic biology of the four major fungal diseases of grapes in New York—powdery mildew, black rot, downy mildew, and bunch rot—and how this knowledge can be applied to improving the efficiency and economy of current control programs within an environmentally sound framework. He will assume statewide leadership of the extension program in grape pathology, working in cooperation with Cornell regional grape extension specialists. Wilcox received his B.S. in pomology, and his M.S. and Ph.D. in plant pathology, all from the University of California at Davis. He was Assistant Professor in Plant Pathology at the University of Kentucky and, in 1984, he accepted the position of Assistant Professor in Plant Pathology at Cornell in Geneva. He was promoted to Associate Professor in 1990. In 1992, Wayne was presented with the Ciba-Geigy Award by the American Phytopathological Society, in recognition of outstanding contributions to the field during his first decade of professional service. ♦

Grape Entomologist Arrives



Gregory English-Loeb has joined the Department of Entomology at Cornell University's Agricultural Experiment Station in Geneva, NY, as an Assistant Professor to fulfill research (70%) and extension (30%) responsibilities for the control of arthropod pests of grapes and small fruits. Greg received his Ph.D. in 1989 from the University of California, Davis, where he continued to work as a Research Associate, before and after completing a National Science Foundation Postdoctoral Fellowship at Stanford University in 1992. His research focused on host plant-mediated interactions between grapevines, spider mites, and the mites' natural enemies. After becoming familiar with the people and pest problems associated with grapes in New York State, Greg's general approach will be to try to understand the forces that govern interactions between vines, pests, and pest natural enemies, then exploit this information to design an integrated pest control program. He is assisted by Tim Martinson, who has headed up the grape program in Entomology since the departure of former grape entomologist, Timothy Dennehy. ♦

NEW LEADER NAMED FOR GENEVA'S COLD HARDY GRAPE COLLECTION

Warren F. Lamboy has recently assumed the duties of curator of the USDA/ARS cold-hardy grape collection at the Geneva, New York repository. Warren has been with the Plant Genetic Resources Unit in Geneva for the past four and one-half years as a Cornell Research Associate. His educational background includes a B.S. in mathematics, an M.S. in statistics, and a Ph.D. in Plant Biology. In addition to continuing the established record of maintenance and distribution of material from the collection, Warren also plans to intensify the documentation of the genetic diversity in the collection. He has begun a collaborative project with colleagues in California and Australia to use DNA sequences to "fingerprint" accessions and to determine genetic relationships between them. Such information will be used to evaluate potential new accessions for inclusion in the collection, to test for trueness-to-type, and to aid in the establishment of a grapevine core collection. ♡



RECENT THESES BY CORNELL GRADUATE STUDENTS

Two Cornell University graduate students have recently completed their Master of Science degrees, working on grapes as their major research effort. **Aurea Carrasco** received her M.S. degree working with her major professor, Thomas Henick-Kling, Department of Food Science & Technology, at the Geneva Agricultural Experiment Station. The title of her thesis project was "Effect of Sulfur Dioxide and Yeast Starter Culture on Chemical Composition and Sensory Quality of Chardonnay and Pinot noir Wines." Aurea will continue to work towards her Ph.D. in the Food Science department under the direction of Dr. Karl Siebert.

Junko Watanabe just completed her M.S. degree under the tutelage of Professor Robert Pool, in Cornell's viticulture program. Her thesis title was "The Evaluation of an Optical Method to Estimate Leaf area of Grapevines." Junko will be returning to her native Japan where she has accepted a position in marketing, and hopes to introduce our New York wines to Japanese consumers. ♡



FROM THE EDITOR

Martin Goffinet

Since the last issue in October 1994, there have been several new faces in the grape research/extension programs at Cornell. This issue introduces them to our readership. Since the death of Roger Pearson in spring of 1993, the faculty position in grapevine pathology has been vacant. That has now changed, with the recent appointment of Dr. Wayne Wilcox, Department of Plant Pathology, at the New York State Agricultural Experiment Station, Geneva. Wayne will be doing grape pathology research and spend part of his time in grape extension activities. Since the departure of Tim Dennehy in early 1994, the faculty position in grape entomology/extension has also been vacant. Dr. Gregory English-Loeb has joined the Department of Entomology at the Geneva Experiment Station to serve as Cornell University's research/extension leader for grape entomology. Both Wayne and Greg will work closely with other researchers, field extension staff, and the industry to further improve our grape industry. Also, Dr. Warren Lamboy, Research Associate affiliated with the USDA/ARS germplasm repository at Geneva, has taken on responsibilities of the curatorship of the living repository collection of cold-hardy grapevines, which are grown, propagated, maintained, described, researched and disseminated.

In this issue, Wayne Wilcox, David Gadoury and Robert Seem discuss the problems many growers had last year with outbreaks of powdery mildew. The pathogen's cycle of activity is explained as an aid to understanding its control. The authors also go over spray decisions and action plans that will help growers avoid the outbreaks common last year.

Before closing, I want to express the gratitude of the Cornell grape research community to individuals and companies responsible for recently donating funds for grape and wine

research. Canandaigua Wine Company, John S. Dyson, and an anonymous donor have pledged to contribute a total of over \$500,000 during a five-year period, in order to set up endowment funding for research. These funds join others, such as the Grape Production Research Fund, the J.M. Kaplan Fund, and the Lake Erie Regional Grape Program Fund, in assuring the long-term, in-depth research needed to back an increasingly complex industry. The New York State Wine & Grape Foundation also provides significant funding for enological and viticultural research on vines, pests and disease, through its State matching-grants program. In the shadow of level or reduced government funding for grape research, non-government funding sources have become essential to the New York grape industry's continued success under national and international competition. ♡

THE BIOLOGY AND CONTROL OF POWDERY MILDEW

Wayne F. Wilcox, David M. Gadoury, and Robert C. Seem
 Cornell University
 Department of Plant Pathology
 New York State Agricultural Experiment Station, Geneva

The 1994 growing season was a "banner year" for powdery mildew throughout New York, from Lake Erie 'Concord' vineyards to 'Chardonnay' plantings on Long Island. Some of these outbreaks were predictable, but the severity of many was surprising. This article reviews some basic and new information concerning the biology and control of this disease. We also speculate on what went wrong with mildew control in 1994, and give recommendations for avoiding a repeat of the problems in 1995.

Disease biology. Recall that the powdery mildew fungus overwinters in small, black fruiting structures called cleistothecia. The cleistothecia are formed on infected leaves and fruit, are washed into bark cracks, then release spores (ascospores) from bud break through bloom the following spring. These ascospores initiate the disease cycle by causing primary infections. As mildew colonies develop, they produce different spores (conidia), which then cause repeating generations of secondary infections into the summer (on fruit) or fall (on leaves).

The point of this short review is to emphasize that when designing powdery mildew control programs, it's useful to think of the primary and secondary phases as two separate diseases. This is because: (a) the secondary phase cannot develop until the primary one is established. Significant levels of disease in the summer (secondary infections) are much more likely when primary infections are not well controlled through bloom. (b) The moisture requirements for the two phases are also different. Specifically, primary infections require approximately 0.1 inch or more rain for spore release and infection, whereas secondary spread can occur under dry or wet conditions. A summary chart of these differences is given in Table 1.

Control. Strategies for fungicide use will be covered in a later section. First, here is a brief summary of the strengths and weaknesses of some old, new, and future control products for this disease:

- **Sulfur.** Cheap, relatively effective, phytotoxic on some varieties, short residual activity (approx. 7 days). Because much of its activity is due to vapor effects, there is a pronounced influence of temperature on performance. That is, optimum control is provided at temperatures of 75–85°F; in contrast, poor vaporization during cool weather causes sulfur to be much less effective at temperatures below 65°F. For this reason, sulfur does not always provide effective control of early season primary infections.

- **DMI (Sterol inhibitor) fungicides—Bayleton, Nova, Rubigan.** Provide protectant plus curative (post-infection) activities. They are absorbed by leaf and fruit tissues, which means that they resist weathering but are not washed to unsprayed tissues by rain; thus, they require thorough coverage for good control. There is a potential for resistance development. Bayleton failure has been documented in several New York vineyards and is suspected in others. Nova and Rubigan often remain effective when Bayleton first fails, but these closely related materials should be used with caution in such vineyards.

- **JMS Stylet Oil.** A highly refined mineral oil that is now registered for control of powdery mildew on grapes. Provides

Table 1. Factors affecting primary and secondary infection phases of grapevine powdery mildew.

Factor	Primary powdery mildew	Secondary powdery mildew
Function	Disease initiation	Disease spread
Source	Overwintering, own vineyard	Current infections, own or nearby vineyard
Season	Bud break through bloom	Season-long after primary develops
Moisture required	Rain	Relative humidity 20% or higher

control comparable to that of sulfur, but is not limited by low temperatures. May cause phytotoxicity if applied within 7–14 days of captan; also incompatible with sulfur, but may help with mites. Appears to kill active mildew colonies. Requires very thorough coverage— 100 gal/A of spray solution.

- **Potassium bicarbonate.** Not yet labeled for powdery mildew control. Has many of the same properties listed above for JMS Stylet Oil, but no known incompatibility problems.

To illustrate these points, Table 2 gives results from a trial conducted in 1994 in a Geneva, NY test vineyard of the hybrid cultivar Rosette (very high disease pressure, many years of Bayleton use).

Table 2. Control products for grapevine powdery mildew, rates and interval of application, and effect on 'Rosette' clusters and leaves.

Treatment, rate/A	Interval*	Area (%) mildewed	
		Clusters	Leaves
Untreated.	—	36.8	89.6
Microthiol 80DF, 2.0 lb	7 day	7.0	54.6
JMS Stylet Oil, 2 gal	7 day	5.3	37.2
Microthiol 80DF, 4.0 lb	7 day	3.8	23.4
Potassium bicarbonate, 8.3 lb	7 day	2.6	80.0
Bayleton 50DF, 4.0 oz	14 day	12.5	80.6
Nova 40W, 4.0 oz	14 day	0.6	20.6

*7-day schedule =15 June–3 August, 8 sprays; 14-day schedule =15 June–28 July, 4 sprays. Sprays were applied using a hooded boom sprayer delivering 200 gal/A.

Reasons for problems in 1994. There were certainly different reasons for control problems in different vineyards. Some of the most common probably were:

1. Failure to provide good prebloom control. One rationale for needing good prebloom control was given previously, i.e., to limit disease spread by limiting the development of primary infections. Another is that early establishment of powdery mildew in the young cluster leads to severe fruit infection. Table 3 gives the results from a trial conducted last season in an unsprayed 'Concord' vineyard at Geneva, where fruit were inoculated at different stages of development. Although 'Concord' fruit are regarded as relatively resistant to powdery mildew, it is clear that this resistance doesn't kick in until after fruit set. Highly susceptible *vinifera* and hybrid cultivars, whose fruit are generally considered to be at risk until veraison, may be even more vulnerable as they first develop.

Table 3. Effect of growth stage at the time of inoculation with powdery mildew spores on the amount of berry and rachis infection in 'Concord' clusters recorded on 8 Aug 1994.

Inoculation date, stage	Area (%) infected	
	Berries	Rachis
8 June, Prebloom	39.3	93.6
22 June, Fruit set	53.6	91.1
6 July, 1/4" fruit	0.6	60.8
14 July, 1/2" fruit	0.2	56.8
Uninoculated	0.7	41.8

2. Weather during the prebloom-to-fruit set period was extremely favorable for disease development.

In the Lake Erie and Finger Lakes regions, weather during this period was wet and warm, favoring primary disease establishment and rapid disease spread. The time between inoculation of a grapevine with mildew spores to the development of a mildew colony with a new crop of spores is 32 days at 46°F; 18 days at 50°; 11 days at 57°; but only 7 days at 61° and 5 days at 81°. Therefore, warm weather before and after bloom last year shortened the generation time of the disease, allowing it to "explode" once primary infections occurred. For instance, during a 16-day period at the Fredonia, NY Viticulture Lab in mid-June, the average (day and night) temperature was 72°F, sufficient to allow three complete generations of the powdery mildew fungus to develop. Thus, six primary infection periods beforehand, plus several quick generations of secondary spread, spelled trouble if control programs weren't strong. Similarly, analysis of weather data during two recent light and heavy mildew years shows the strong relationship between early season wet weather (primary infection periods) and disease severity on 'Rosette' fruit at Geneva (Table 4).

3. Too cold for sulfur early. In the Finger Lakes and Lake Erie regions, temperatures for the first 30 days after bud break were rarely above 65°F. The limited activity of sulfur at temperatures below 65°F was discussed before. So was the fact that powdery mildew infections can occur at temperatures well below this level.

Table 4. Amount of 'Rosette' berry surface infected by powdery mildew in August, and number of infection periods from bud break through bloom and from early bloom through fruit set at Geneva, NY.

Year	Fruit surface (%) infected	Number of primary infection periods*	
		Bud break to bloom	Prebloom to fruit set
1988	<0.1	7	2
1989	24.6	12	7
1991	1.0	6	2
1992	61.0	10	7

*Primary infection period = at least 0.1 inch of rain and 50°F

4. Resistance to DMI fungicides (especially Bayleton). Currently, we do not know how widespread resistance is, but problems with Bayleton are becoming more frequent. Vineyards where Bayleton provided poor control using a decent program (rates, timings, intervals, coverage) should be considered suspicious, particularly if they have a long history of DMI fungicide use.

5. Poor sprayer calibration or coverage, insufficient fungicide rates. It's always easy (and uncomfortable) to blame grower mistakes for control problems, but sometimes it's true. Often it's "probably what happened to your neighbor."

Avoiding a repeat in 1995. First of all, recognize that vineyards that had unusually high levels of powdery mildew by August or September of last year will be starting out with unusually high levels of primary inoculum this spring. Because there is a direct relationship between primary inoculum density and when sprays must start on a given variety, early season control will be more important than ever. Generally, this will mean beginning spray programs at 1-inch shoot growth on viniferas and susceptible hybrids and at 3-6 inches on 'Concord' and similar cultivars, unless weather is exceptionally dry and cool. Second, remember the critical importance of the prebloom-through-fruit set period for berry infections, and maintain excellent control during this period as weather conditions demand.

With respect to fungicide choices, recognize the limitations of sulfur during cool weather and don't rely on it until temperatures exceed 65° on a regular basis (usually early June in upstate locations). Consider using the DMI's (Bayleton, Nova, and Rubigan) in the early season-through-fruit set period rather than in the summer. The reasons for doing so are several, but include: (a) use the "big guns" when they are critically needed to prevent an epidemic from getting started; (b) this is also a critical period for black rot control (Bayleton and Nova only); and (c) you are less likely to select resistant powdery mildew isolates during this period than you are with summer sprays.

Recognize that with these DMI fungicides, shaving rates and extending spray intervals beyond 14 days is a good way to start losing control and building up resistance. If Bayleton has looked shaky, try Nova or Rubigan (include mancozeb or ferbam for black rot with Rubigan); note the efficacy of Nova in a "Bayleton-resistant" vineyard shown in Table 2. Finally, consider substituting JMS Stylet Oil for sulfur under certain conditions, e.g., cool temperatures or sulfur-sensitive varieties.

FUNDS ESTABLISHED FOR VITICULTURE AND ENOLOGY RESEARCH

"Canandaigua Wine Company Fund" Established

Canandaigua Wine Company, Inc., has agreed to contribute \$250,000 to establish a major endowment in support of the Director's Excellence Fund to be used for viticultural research at Cornell University's New York State Agricultural Experiment Station, in Geneva, NY. Established in perpetuity, the endowment will be called *The Canandaigua Wine Company Fund*. In setting up the fund, Canandaigua Wine Company recognizes that funding for viticultural research and resulting technological knowledge is critical if the New York grape industry is to remain competitive in the national and international arenas.

"This endowment is an invested fund whose income, not principal, will be available to support research programs," said Dr. James Hunter, Director of the Geneva Experiment Station. "With the dramatic decreases in state funding over the last decade, it is clear that our future depends on a combination of public and private support. Canandaigua Wine Company's gift to establish the endowment represents a permanent commitment to the viability and success of the grape industry in New York State." The director of the Experiment Station will meet with representatives from Canandaigua Wine Company on an annual basis to review the progress of funded research programs and to determine research projects to be supported in the future.

Established in 1945, Canandaigua Wine Company is the largest wine producer in New York State and is the second largest wine producer in the nation.

"John S. Dyson Fund for Viticulture and Enology"

An agreement has been made between Cornell University and John S. Dyson to

(John S. Dyson Fund, *continued*)

establish an endowment fund of \$250,000 to be fully developed over the next five years. The endowment — *The John S. Dyson Fund for Viticulture and Enology* — will generate earned income that will be used to support viticulture and enology programs at the Geneva Experiment Station. Oversight of the Fund will be provided by the Director of the Geneva Experiment Station, in consultation with the Dean of the College of Agriculture and Life Sciences, Cornell University. 🍇

Anonymous Contribution to Cornell Grape Research Programs

Through a challenge program currently underway as a part of Cornell's capital campaign, an anonymous donor has entered into an agreement with Cornell to supplement the moneys to be generated by "The Canandaigua Wine Company Fund" and "The John S. Dyson Fund." The anonymously donated funds will approximate \$160,000 for grape research needs at Geneva over the next five years. 🍇

UPCOMING EVENTS



21–22 March 1995, Organic Grape and Wine Production Symposium, Jordan Hall, New York State Agricultural Experiment Station, Geneva, New York Under SARE (Northeast Region Sustainable Agriculture Research and Education Program) funding, a group of Cornell researchers and organic and conventional grape growers have been studying the feasibility of organic wine and juice grape production in New York. The results of this five year project will be presented in this conference on organic grape and wine production, but other speakers from the organic producer communities in the east, California and Germany will also share their experiences in organic grape and wine production. This is *The Third Nelson J. Shaulis Viticulture Symposium*, co-sponsored by the Cornell Alternative Agriculture program, NOFA, and the New York State Grape Production Research Fund. Registration fee is \$50.00 and includes a copy of the proceedings.

Some featured speakers will be:

Dr. Gunter Schruft, Director,	State Wine & Viticulture Research Institute, Freiburg, Germany
Dr. Laurie Drinkwater	Rodale Institute, Pennsylvania
Elizabeth Henderson	Northeast Organic Farmer's Association (NOFA)
Rich Gahagan	Bureau of Alcohol, Tobacco, and Firearms (Regulations)
John Schumacher	California, Hallcrest Organic Winery
Dr. Robert Pool	Cornell Professor of Viticulture
Dr. David Peterson	Cornell Cooperative Extension, Finger Lakes
Jim Kamas	Cornell Cooperative Extension, Lake Erie
Dr. Timothy Martinson	Cornell Entomologist - IPM Specialist
Dr. David Gadoury	Cornell Plant Pathologist
Dr. Gerry White	Cornell Agriculture Economist
Dr. Stuart Klausner	Cornell Professor of Agronomy
Richard Figiel	Organic vineyard and winery grower / owner - Finger Lakes
Scott Smith	Organic vineyard and winery grower / owner - Finger Lakes

For information contact Judy Robinson, Department of Horticultural Sciences, NYSAES, Geneva, NY 14456. Phone: 315-787-2238; Fax: 315-787-2216.

22–23 March 1995, The 24th New York Wine Industry Workshop, Jordan Hall, New York State Agricultural Experiment Station, Geneva, New York. This workshop immediately follows the Organic Grape and Wine Symposium of March 21 and 22, at the same location. The focus of the workshop is "Wine Grapes and Wine Styles of New York State." Areas of discussion include: conditions of soils & climate in each region; historical perspective of wine production; viticultural options; rootstock & cultivar selection; vineyard floor management and vine nutrition; BATF update, and also a look at winemaking options, vinification styles, blends, including wine tasting. The meetings also are in conjunction with the **Annual Meeting of the New York Wine & Grape Foundation**, which will be held on March 22, at the Geneva Experiment Station. The Foundation will hosts its Wine Showcase and Unity Banquet the evening of March 22, at Club 86, Avenue E., Geneva, NY. For information on the Wine Industry Workshop program, registration forms and fees, contact: Thomas Henick-Kling, Department of Food Science & Technology, NYSAES, Geneva, NY 14456. Phone: 315-787-2277; Fax: 315-787-2397. To register for the meetings and seminars of the New York Wine & Grape Foundation, contact: Ms. Karyl Hammond, New York Wine & Grape Foundation, 350 Elm Street, Penn Yan NY 14527. Phone: 315-536-7442; Fax: 315-536-0719.

9–12 July 1995, International Workshop: Strategies to Optimize Wine Grape Quality. Conegliano Veneto, Italy. Sponsored by the International Society for Horticultural Science, Viticulture Section. For information, contact: Professor C. Giuliva, Istituto Coltivazioni Arboree Via Gradenigo, 6 35131 Padova, ITALY Phone: 39-49-8071550; Fax: 39-49-8074995

19–20 July 1995, Alternative Winegrape Varieties Symposium, Charlottesville, Virginia. The Eastern Section of the American Society for Enology and Viticulture (ASEV/ES) will sponsor a this two-day symposium in conjunction with the 1995 annual ASEV/ES meeting in Charlottesville, Virginia (See below). The theme of "alternative" winegrape varieties is intended to draw attention to varieties that have developed special consumer niches or that have regional importance because of disease resistance, cold hardiness, or other attributes. Varieties to be discussed include: Viognier, Marsanne, Chardone1, Muscat Ottonel, Malvasia bianca, Sangiovese, Nebbiolo, Norton/Cynthiana.

Speakers from California, Michigan, Missouri, New York State, Virginia, and Italy will discuss current viticulture, enology, and marketing strategies. Comparative wine tastings, social events, and local tours are planned with the program. The symposium will be followed on July 21 and 22 by the annual meeting of the ASEV/ES. For program specifics and registration information, contact Dr. Tony Wolf, Virginia Agricultural Research and Extension Center, 595 Laurel Grove Rd., Winchester, VA 22602. Phone: 703-869-2560; Fax: 703-869-0862.

21–22 July 1995, The Annual Meeting of the American Society for Enology & Viticulture/Eastern Section. Charlottesville, Virginia. The annual meeting (1.5 days) will be preceded at the same location by the International Symposium on Alternative/Grape Varieties (1.5 days). The program includes research presentations on viticulture and enology from universities and industry, student paper and scholarship awards, trade show, wine reception, winery tours, a luncheon featuring Virginia wines, and a sparkling wine tasting/awards banquet. For registration and exhibitor information contact: Dr. Don Splittstoesser, Department of Food Science & Technology, NYSAES, Geneva, NY 14456. Phone: 315-787-2275; Fax: 315-787-2397.

17–21 July 1996 (Early Announcement), Fourth International Symposium on Cool-Climate Viticulture & Enology: "Applying Current Viticulture and Winemaking Technologies to Maximize Wine Quality." Riverside Convention Center, Rochester, New York USA. This symposium will be immediately followed by the 21st Annual Meeting of the Eastern Section of the American Society for Enology & Viticulture.

The Cool-Climate symposium will present the best current technical and scientific data on issues in grape and wine production, emphasizing their practical applications. This

will provide a varied program of much interest to industry personnel involved in research and production as well as a forum for exchange of current scientific knowledge for generation of new research ideas and collaborations. Hosted by the American Society for Enology & Viticulture/ Eastern Section. Sponsored by the International Society for Horticultural Science, and the American Society for Enology and Viticulture. Program areas include: vine stress physiology; adaptation to regional environments; ecologically sound grape and wine production methods; flavor development in the vineyard; flavor production during fermentation; wine sensory attributes and techniques of measurement; understanding the genetic basis for grape and wine production; and the world wine economy. Also included will be workshops; regional wine presentations; poster session; a trade exhibition; wine-theme meals; and conference tours. The official language will be English.

To receive a mailed announcement, listing program invited speakers, registration materials, accommodation information, and instructions for contributed papers, send a request to: American Society for Enology and Viticulture/Eastern Section, Department of Food Science and Technology, NYS Agricultural Experiment Station, Geneva, New York 14456-0462 USA. Fax: 1-315-787-2397

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Question: _____

Gratitude is expressed to those organizations whose support makes possible ongoing and valuable research activities for the benefit of the State's grape industry. Major funding is provided by the **New York State Wine & Grape Foundation; the Grape Production Research Fund, Inc.; and, the J.M. Kaplan Vineyard Research Program.**

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Got A Question? We are trying to address the many questions from grape growers and processors that come to Cornell's grape research community. We invite you to write to us at *Grape Research News* to bring to our attention any questions you have about grapes. We will see to it that those questions are answered by someone knowledgeable in the area of your concern.
Save yourself a long distance phone call. Put it in writing on the back of form below, cut it out, and send it to us.

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Mail to:

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