FINGER LAKES VINEYARD NOTES NEWSLETTER '96 #3 February 26, 1996

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Edited by David V. Peterson.

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FAREWELL TO ADELE AND HELLO TO KATIE

After 32 years of working as a secretary with Cornell Cooperative Extension and the Finger Lakes Grape Program, Adele Spencer has retired. All of us will miss Adele and wish her the best of luck in the future. Below are her official parting words.

"I would like to thank the Grape Growers for the gifts I was presented with at the 47th Annual Finger Lakes Grape Growers' Convention. I have enjoyed working with all of you for the past 32 years. Since I will not be at the Finger Lakes Grape Growers' office, I will miss seeing you when you come in with your questions or when you call the office.

Sincerely, Adele Spencer."

Katie Tomlinson is a new full time employee of Cornell Cooperative Extension in Yates County. She started January 2 and has replaced Adele as secretary for the Finger Lakes Grape Program. She will also support all areas of CCE along with our other Office Assistants.

Katie comes to us from a private industry in Utica where she was a member of their marketing team. She has a strong computer background and will be a real asset to both CCE and the Finger Lakes Grape Program.

Katie was married to David Tomlinson on January 27 and they now make their home on Skyline Drive in Bluff Point.

We are looking forward to her being part of the team. When you stop in or call, please welcome her to our organization.
NORTHEAST WEATHER ASSOCIATION NOW FORMING

Tim Weigle

After numerous attempts, a non-profit weather association is now being formed in conjunction with a federal telecommunications grant program. The weather association will oversee the collection, assembly, and distribution of weather information from the current network of private and state-owned weather instruments. The weather network has the capability to automatically download Sensor Instruments and Campbell Scientific weather instruments.

Association members will have a choice in how they get up to date weather and pest information during the 1996 growing season. A daily fax will provide infection period and pest status and we are currently working with providers of weather forecasts specifically designed for agricultural producers. Those of you who visited our table at the Finger Lakes Grape Growers' Convention got a look at the new computer bulletin board system (BBS) that can put volumes of information at your fingertips. The graphical interface of the BBS in 1996 is a great improvement over the text based system used in 1995. Growers will now be able to use their personal computer to gain access to pictures of pests and their damage, the Grape Recommends, the new Grape IPM manual along with weather information from all weather stations in the region. We are currently planning to place six Weather BBS sites across New York State. Two or three of the sites will be within Finger Lakes Region area codes.

While owning weather equipment is not necessary for participation in the weather association, payment of a membership fee will be required. The exact costs of the various categories of membership are currently being worked out with more exact information to be available after the board of directors meeting on March 4. The board of directors includes growers, processors, and consultants from various commodities including grapes, apples, onions, and potatoes along with IPM staff and Geneva faculty members. The creation of the weather association will help ensure the weather network will continue and has a chance to grow. Growers have expressed a continued interest in purchasing weather equipment. A group purchase of Sensor Instruments Field Monitors™ is currently being planned by combining interested persons from fruit and vegetable commodities. If you are interested in purchasing weather equipment, learning more about the weather network and/or the weather association, please contact Tim Weigle at (716) 672-6830.

UPDATE ON GRAPE CROWN GALL RESEARCH

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Crown gall on grape, caused by the bacterium Agrobacterium vitis, is a serious problem worldwide that primarily affects cold-sensitive cultivars of Vitis vinifera, but can also be a problem on some hybrids and V. labrusca. A. vitis survives systemically in grape and is often spread in propagation material. Crown gall therefore may remain dormant in vines for several years and then become quite severe in seasons following winters where cold injury occurred. It has been detected in many different cultivars of grape in several regions of the world. Methods for indexing grapes for the presence of systemic A. vitis have been developed and research on improvement of indexing methods is continuing. Presently, we are identifying very specific regions of the bacterial DNA that can be used in a very sensitive technique called PCR for indexing cuttings. The only technique that has thus far been successful for producing vines that are free of the A. vitis is propagation from shoot tips. It is likely that if such plants were grown in a noninfested soil that they would provide a good source of crown gall-free wood. Although heat treatment greatly reduces the pathogen in cuttings, it does not completely eradicate it.

We have been interested in determining if wild grape in New York can harbor A. Vitis and thus serve as a source of crown gall inoculum.
Wild grapevines from several regions were assayed and many were found to harbor *A. vitis*. However, all were nonpathogenic and therefore their role, if any, in crown gall development in commercial vineyards is yet to be determined. We are presently determining if these strains can acquire pathogenicity genes from pathogenic strains and then become pathogens. When several of the wild grape isolates were tested for their ability to prevent pathogenic strains from causing crown gall (biological control) a few were effective.

We recently found that *A. vitis* can survive in association with decaying grape roots and canes in soil for at least two years. The bacterium was even isolated from small fragments of tissue in soil and the recovered isolates retained their ability to cause crown gall. Therefore, it is apparent that even if clean plants are planted in old vineyard sites there is a risk for them to become infected by *A. vitis* surviving in association with residual grape tissues in soil. This has stimulated interest in the development of biological controls that could be used to protect "clean" vines that are planted in contaminated soils. We have been testing a nonpathogenic strain of *A. vitis*, F2/5, that originated in South Africa, along with some of the wild grape strains mentioned above. These are very effective for preventing gall formation at wound sites on grape. Field evaluations of the biological controls were initiated on Long Island and in Washington State. New experiments will be initiated in the Finger Lakes this season.

Another strategy for crown gall management may be the use of grape rootstocks that are resistant to crown gall. Some rootstocks, such as C3309, 101-14 MGT and Riparia Gloire are highly resistant and allow fewer and smaller infections than are found on susceptible cultivars such as Chardonnay and Merlot. Our recent experiments, however, have shown that the "resistant" rootstocks can still harbor high populations of *A. vitis* systemically and therefore could serve as silent carriers of the pathogen. Other resistant rootstocks have not been tested for their ability to carry *A. vitis*.

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**CALENDAR OF EVENTS**

March 7, 12, 19, 28, April 2, 9 (dates tentative). TOPICS IN VITICULTURE SHORTCOURSE. Yates County Office Building Auditorium. Penn Yan, NY. A series of half day sessions on the following topics: Employer/Employee Interactions for Improved Productivity, Grape Pest Management, Farm Safety, Vine Growth & Development, Grapevine Nutrition, Row Middle Management. Registration fee of $25 for entire course. You should have already received registration information. The first session is scheduled for Thursday March 7 from 1:00 - 5:00 pm; March 12 & 19 from 8:30 am - 12:30 pm. Other times TBA. Pre-registration required. You need not show up at all sessions, but please try to attend the first session if at all possible. If you cannot attend first session, contact David V. Peterson. For more information on program details, please contact David V. Peterson at (315) 536-5134, or Fax: (315) 536-5117.

March 9. IRREGULAR CROPPING AND POOR FLOWER SET IN NEW YORK VINEYARDS: THE MILLERANDAGE PROBLEM. BOCES, Fredonia, NY. Program was previously mailed. Pre-registration required by March 1 for lunch reservations. For more information: call (716) 672-2191, or Fax (716) 679-3122.

March 27. AGRICULTURAL ECONOMIC DEVELOPMENT: ACCESSING REGIONAL RESOURCES. Rustler's Roost, Henrietta, NY. Contact: Genessee-Finger Lakes Food System Project, Foodlink, 100 West Avenue, Rochester, NY 14611.

April 3 - 5. 25TH ANNUAL NEW YORK WINE INDUSTRY WORKSHOP. New York State Agricultural Experiment Station, Geneva, NY. Contact: Dr. Thomas Henick-Kling, Dept. of Food Science & Technology, NYSAES, Geneva, NY 14456-0462. Tel: (315) 787-2277 or Fax: (315) 787-2397.

July 16-20. 4TH INTERNATIONAL SYMPOSIUM ON COOL CLIMATE VITICULTURE AND ENOLOGY. Rochester, NY. Information on next 2 pages.
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