

SERA-IEG 14

Minutes of the meeting held September 16 - 18, 2003 in Clarksville, TN
Meeting Headquarters - Wingate Inn, Clarksville, TN

Meeting agenda:

September 16, 2003

6 pm Reception held at Beachaven Vineyard & Winery, 1100 Dunlop Lane, Clarksville, TN 37040

September 17, 2003

8 am Depart Wingate for vineyard/winery tour

9 am Hall's Fruit Farm, Portland, TN

Owner, Wilburn Hall, established his first vineyard in 1985. Currently, he has approximately 35 acres of American bunch and French-American hybrids and 2 acres of Black Satin blackberries. All fruit is sold to Tennessee wineries in Middle and East Tennessee.

11:30 am The Red Barn Winery & Vineyard, 1805 Tanyard Road, Lafayette, TN 37083

Glen and Judy Clement began planting grapes to replace tobacco as their main crop about 1996. Currently, they have ceased growing tobacco entirely. The winery is an old tobacco barn, which is still evident as you tour the facility. It has been tastefully designed to reflect this important part of Macon County's history. The Clements grow about 8 acres of American bunch, French American hybrid and muscadine grapes and 2 acres of blackberries, all for use at their winery. They also purchase fruit from other Tennessee growers. After lunch, a tour of the vineyard and winery and brief beginning of the business meeting were conducted.

5:30 pm Beachaven Vineyard & Winery, 1100 Dunlop Lane, Clarksville, TN 37040

Beachaven Vineyard and Winery was founded in 1986 by Judge William O. Beach with his son-in-law, Ed Cooke. Beachaven is one of Tennessee's largest wineries with a capacity of about 40,000 gallons. Located just off I-24, it is a popular stop for tourists as well as for local residents. During the summer months, Beachaven sponsors "Jazz on the Lawn," a series of concerts that attract a large number of visitors and is one of the premier cultural attractions in the Clarksville area.

Beachaven Winery offers wines made from American, French American hybrid, muscadine and *V. vinifera* grapes. Their Tennessee Chardonnay won a silver medal winner in an international competition. Fruit wines and sparkling wines complement their inventory. Beachaven utilizes grapes from their vineyards, fruit from local growers and fruit from out-of-state in accordance with provisions outlined in the Tennessee Farm Winery Act.

A tour of the winery and a tasting of Beachaven wines was held. At the tasting, Bob Bates presented Justin Morris the "William Nesbitt Award" in recognition of the tremendous contributions he has made to grape production and winemaking in the region, nation and the world.

September 18, 2003

9 am Reconvene business meeting at Beachaven Winery

SERA-IEG 14

Business Meeting

September 17, 2003

The meeting was convened at 2 pm following a tour of the winery and vineyard at the Red Barn Vineyard and Winery with President Bill Morris presiding.

Justin Morris, University of Arkansas, Administrative Advisor for Extension

Dr. Greg Weidemann, Univ. of Arkansas, the Research Administrative Advisor for our SERA group asked me to express his regrets that he was not able to be with the group; he had major conflicts. He encouraged us to meet our deadlines for renewal of SERA IEG-14. A one-year extension has been approved. An additional four years requires revision of our proposal to address the following concerns:

Develop plans for creating and maintaining a website for SERA IEG-14 which provides information useful not only to participants but also to end-users.

Consider an objective that deals with multi-state collaboration in development of extension educational materials for staff development and/or end-users.

The revised proposal for renewal must be received by February 1, 2004.

Tom Bewick, CSREES National Program Leader in Horticulture for Fruits and Vegetables

Industry representatives shared a plan for a "Technology Road Map for Tree Fruits." In it, production costs need to be cut by 30%. Many points in scientific development and extension need to be addressed in other areas of horticulture to enable meeting needs for development of a strategic plan for horticulture. Support appears to be developing to promote horticulture. About \$130 million per year for five years has been budgeted as an initial commitment.

Proposed legislation includes the "Specialty Crops Competitiveness Act," which would allocate \$470 million per year for five years to go to states for promotion, research and technology transfer. Each state would get some of this money, with the rest going to states having the most specialty crops. A specialty crop is defined as one in which there is no subsidy program.

A fund will be established for the development of a strategic plan for horticulture. It will provide grant money to explore areas of interest needed by industry. Block grants to the states will not go to universities, but probably will be sent to the Department of Agriculture of the states. Many USDA programs are designed to go to growers and marketers. Movement of money from state departments of agriculture to universities may be uncertain. Better working relationships between these two groups are needed.

Viticultural Consortium funding will be level. A special grant will be used in Missouri to

evaluate cold hardiness. As part of the Viticultural Consortium East, a new project for evaluations of grape cultivars and rootstocks will be developed.

Federal contributions have been flat for years. Pressure is being directed toward decreased funding; therefore, things could get worse.

In extension, we need to figure out how to make grower access to the internet better.

Justin Morris requested that a copy of the mailing list should be sent to Tom Bewick. Tom will send information to us for dissemination to agents and on to growers since this is where the money will be used.

Publication and Web Site

Ed Hellman (Texas) volunteered to assist or replace Barclay Poling in development of the web site. The web site is a "must do."

In addition to the points already listed for the web site, a collection of all regional publications dealing with grapes and wines should be added. Links to related disciplines need to be a part of the site.

Steve Stringer agreed to provide the leadership in developing a research/extension publication on muscadine cultivar trials.

Andy Allen will touch bases with Barclay Poling regarding the status of the web site and the publication. Barclay has stated that he is committed to development of the site and that the development of the publication is on track.

In the title, "multi-state" should be used in place of "regional."

Andy Allen reported that North Carolina growers want a grape production guide specifically for North Carolina. It will be a revision of the Mid-Atlantic guide and may be available next year.

Joe Masabni (Kentucky) will check to see if the "Commercial Grape Pest Control Guide" developed for Midwestern states is on the internet, or if it can be put on the web.

2004 Meeting Site

Several options were discussed for the 2004 meeting:

1. Bruce Zoecklin had suggested meeting in Virginia in conjunction with the Eastern Region of the American Society for Enology and Viticulture which will be held in June in Charlottesville, VA. However, he has not gotten back to the Group.
2. Joe Masabni discussed a possible invitation at some point in time to meet at the Western Kentucky Research and Development Center in Princeton, KY.
3. Ed Hellman of Texas A&M suggested hosting the group in September 2004. The state reports and business meeting could be held in Austin, Texas, and the tour of wineries and vineyards in the Hill Country of Texas (Fredricksburg area) would follow the business

meeting. The group would be able to see the Research and Extension efforts on Pierce's Disease at these locations.

Meeting adjourned at 4 pm.

September 18, 2003

Business meeting reconvened at 9 a.m. at Beachaven Winery with Bill Morris, President, presiding.

Meeting Site for 2004

Having Texas serve as the host of the 2004 meeting was discussed. Ed Hellman would serve as president for 2004. Ed will check with Jim Kamas regarding the feasibility of meeting in Texas and if Jim would consent to acting as secretary. With Jim's concurrence, Ed will create a tentative program and submit it to the Group. Tony Johnston (Middle Tennessee State) volunteered to serve as secretary if needed. This plan was voted on and approved.

State Reports

Justin Morris (Arkansas) handed out a booklet containing copies of all the state reports he received prior to the meeting.

1. North Carolina - Andy Allen

Andy's research plots are starting to yield their first data. Due to the wet growing season, black rot, downy mildew, sour rot and bitter rot were problems. The North Carolina industry is growing. The total acreage of grapes is about 1,300. Currently, there are 26 wineries with 12 new ones expected to come online within the next year. *V. vinifera* is the predominant type of grape in the western part of the state and muscadine is most common in the eastern part. Pierce's Disease is the limiting factor on production of *vinifera* grapes in Eastern North Carolina.

2. Florida A & M - Jiang Lu

Florida A & M is moving the grape work into new facilities. An old winery originally designed by Dick Vine has been remodeled. Breeding work utilizing both traditional and biotech methods are being used. Trials of promising selections are being done at the Research Center and with growers in their vineyards. Some work is being done utilizing somatic hybridization between muscadines and bunch grapes.

Copies of the Florida A & M Center for Viticulture and Small Fruits Research Annual Report for 2001-2002 were distributed. The report outlines the mission, goals, research, extension and outreach and instruction at the center.

3. Texas - Ed Hellman

The effects of partial rootzone drying and regulated deficit irrigation on yield, fruit chemistry and grapevine cold acclimation are being studied. The test was initiated in 2002 and is being repeated in 2003. While partial rootzone drying had no effect on yield, cluster weight, berry weight, TA and pH, the 2X treatment which provided nearly full replacement of water lost to evapotranspiration had significantly lower sugar content. Regulated deficit irrigation during

the fruit set to veraison period reduced cluster weight with a trend toward reduced yield. Sugar accumulation was higher and shoot acclimation was advanced.

A multi-agency, multi-disciplinary team was assembled in 2003 to investigate Pierce's Disease and insect vectors in Texas.

A winegrape variety trial is being established at the Lubbock Agricultural Research and Extension Center.

4. Tennessee - Dave Lockwood

Tennessee currently has 29 licensed wineries. Grape acreage is estimated at 400. American bunch and French American hybrid cultivars make up the bulk of the grape production. Muscadine and *V. vinifera* cultivars are being grown in selected sites throughout the state; however, the bulk of the fruit of these types of grapes is being brought into the state under the provisions of the Tennessee Farm Winery Act. Plantings at three experiment stations have been established utilizing advanced selections from the Arkansas breeding program. Cooperative work on the use of nematodes for grape root borer control is being done with Ohio State University and the University of Georgia. A grant from EPA for monitoring vineyards for the presence of grape root borer and the development of training materials directed at controlling this pest has been received.

5. Georgia - Mel Hall

Georgia is now facing statewide permanent water restrictions. Fruit rots were severe due to the frequency of rains throughout the growing season. A new winery will soon be opening in Southwest Georgia. Wine interest in North Georgia remains high.

The cultivar demonstration at Tifton is in the fourth leaf. Production was good with minimal loss to rots.

Duplicate replicated plantings were made at Griffin (third leaf) and Tifton (second leaf). The plantings are providing valuable comparisons of breeding selections at the two locations.

6. Florida - Bob Bates

Dennis Gray is working on development of disease-resistant grape cultivars for Florida via genetic engineering biotechnology. In 2001, a US patent was issued to the Univ. of Florida and USDA for the use of lytic peptide genes to control Pierce's Disease. Another project involves in-vitro selection of disease-resistant grape cultivars for Florida and their use for discovery of unique resistance genes.

In July 2002, the "Grapevine Biotechnology Research Team," comprised of researchers at the MREC and USDA received the 2002 USDA Secretary's Honor Award, the highest award given annually by USDA, in recognition of research on genetic engineering of grape to combat Pierce's Disease.

Food Science and Human Nutrition Department - In view of the considerable interest among growers and wineries regarding the nutraceutical value of Florida grapes, work is ongoing to optimize and popularize the beneficial properties of Florida grapes, grape products and byproducts.

Grape Pathology/Pierce's Disease Research involves two projects: "Pathogenic and Genetic Characterization of Pathotypes of *Xylella fastidiosa* from Various Hosts" and Biocontrol of Pierce's Disease of Grape with weakly virulent strains of *X. fastidiosa*."

"Best Practices for Florida Wine Production" is a publication developed to address wine interests in the state. It is a general introduction emphasizing the special challenges of viticulture/enology in Florida.

Studies are underway to focus attention on the well-documented health value of grape phytochemicals.

7. Missouri (Southwest Missouri State University) - Dan Waldstein

Dan handed out two publications. "2002 The Year in Review" highlights some of the work underway at the Missouri State Fruit Experiment Station in Mountain Grove, MO. The use of functional genomics in grapes is one of the featured areas. The second publication, "2003 Missouri Commercial Grape Pest Control Guide," is a cooperative effort of Department of Fruit Science faculty at the State Fruit Experiment Station, SMSU-Mountain Grove and the Department of Horticulture at the University of Missouri.

Chardonnay is the number two grape in Missouri and is growing in acreage. Norton is probably the number one cultivar at this time. Black rot was the primary early season disease this year and bunch rots comprised the late season disease problems. Insect control work included mating disruption for grape berry moth and grape root borer.

8. USDA - Steve Stringer

A muscadine grape repository has been established at the station in Poplarville, MS. Steve is investigating nutraceuticals in muscadines. He is also considering the release of CD8-67 muscadine. Testing locations are being sought to evaluate adaptation throughout the region. Use of GA3 at pre-bloom and CPPU has been shown to increase fruit set and fruit size of Fry Seedless. Dr. Stringer will take the lead on a regional publication focusing on muscadine grape trials.

9. Arkansas - Justin Morris

Interest in the "Vineyard Mechanization System" remains high with 600 acres under test, mainly in California. The concept of balanced pruning is changing to use machines for mechanized pruning and shoot thinning. Mechanically thinning fruit to the desired point is being referred to as "Balanced Cropping." With mechanical thinning, clusters are looser and berries are smaller, giving wine of equal or better quality than that from traditionally managed plantings. Mechanization is increasingly being viewed as a way to keep vineyards in business.

In enology, variety evaluations of grape cultivars for wine are being conducted. Cythiana wine attributes as affected by resins, membrane filtration, etc. are being studied. Work is ongoing in the degradation in color for blush wines. A full description is available at <http://www.uark.edu/depts/ifse/grapeprog/default.htm>. In cooperation with Dr. John Clark, wine grape breeding lines continue to be evaluated by IFSE. Dr. Clark continues the active breeding program. Major activities in 2003 included: 18 crosses made for table grapes; 2,990

seedlings planted in the field from 2002 crosses; 267 selections were evaluated; and 1,400 at fruiting yielded eight new selections.

Andy Allen proposed consideration of a grape/wine industry conference and trade show for the southern region in recognition of the diversity of growing conditions and *Vitis* germplasm that exists here. His proposal included sections for beginners and for established business using all types of grapes.

The symposium, "Viticulture in the South," held at the Southern Region of ASHS meeting in Mobile, AL identified 152 wineries in the region that produce in excess of 4,500,000 gallons of wine annually. A conservative estimate of the yearly gross retail value of these wines exceeds one quarter of a billion dollars. Significant increases in both the number of wineries and the grape acreage are occurring. Pierce's Disease is found over a large portion of the South. Work on Pierce's Disease and other diseases affecting *V. vinifera* will continue to be important. The suitability of muscadines, a major type of grape throughout the South, for wine and other value-added products needs further investigation.

Bob Bates (Florida) suggested that we touch bases with industries to gauge their interest and support for this meeting.

It was also suggested that affiliation with a major show in the southern region initially may be desired to get a show off the ground.

Gratitude was expressed to The Red Barn Vineyard & Winery and Beachaven Vineyard and Winery for their hospitality during the reception, tasting and tours and for allowing the group to use their facilities for the business meeting. Appreciation was expressed to Wilburn Hall of Hall's Fruit Farm for his part in the tour. Thanks were also given to Bill Morris, Charles Hall and Dave Lockwood for developing this year's program.

Respectfully submitted,

David W. Lockwood, Secretary

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