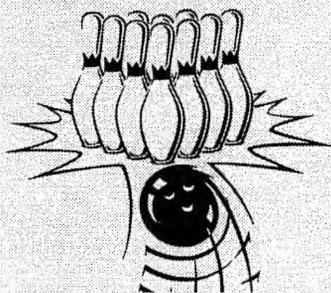


CORNELL
UNIVERSITY

STATION NEWS

GENEVA
NEW • YORKVOLUME LXXXI • NO. 3
JANUARY 21-28, 2000STATION CLUB
BOWLING PARTY

February 5, 2000

To bowl:

\$9, member; \$11, non-member.

To watch with
refreshments:

\$2, member; \$4 non-member.

Sign up by Jan. 31 with
Matt LewisNELSON SHAULIS, WORLD
AUTHORITY ON GRAPES, DIES

Nelson J. Shaulis, 86, professor emeritus of viticulture at the Experiment Station, died on Saturday, January 15, at Newark Hospital, in Newark, NY.

"We have lost one of the truly great scientists of the world in the field of viticulture," stated Jim Hunter. "Even though Nelson retired in 1978, he continued his research and his writings and, above all, his great enthusiasm for New York's grape industry."

"Nelson Shaulis was one of the truly great minds in viticulture of the 20th century," said Hugh Price, chairman of the Department of Horticultural. "His research and writings have a profound influence on grape production in New York and around the world. He will be sorely missed by friends, colleagues and admirers and remembered every time one sees a vineyard trained to the Geneva Double Curtain system."



Shaulis' career was primarily in research on the physiology of perennial fruit plants and peach trees at Penn State, and on grapes in New York, where his emphasis was on minerals and carbohydrate nutrition via soil and canopy management. His research in New York was primarily at the New York State Agricultural Experiment Station and at Cornell's Vineyard Laboratory at Fredonia, NY.

Shaulis' research and extension efforts on grapes in the field of viticulture have had a profound effect on the industry in New York State and throughout the world.

According to the Station's current viticulturist, Robert Pool, "Nelson's concepts have been applied in every major grape producing region of the world, and served as the knowledge base that allowed New World wine growing to emerge as a major factor in international trade in the last 20 years."

During his long and active research career, Shaulis developed two contributions that had a profound effect on the grape industry. The first was a training system for grapes called the Geneva Double Curtain (GDC). The system was initiated at the Geneva Station in 1960; field trials with growers began in 1964. Under this system, vines are trained to bilateral cordon wires located five to six feet above the vineyard floor, and the vines are short cane pruned. There is a four-foot division between the two top wires for each row of grapevines, and cordons are established along each wire. Vines in the row are alternated to the left or right cordon wires, which gives the celebrated double curtain effect. The system effectively doubles the cordon length per acre of vineyard and is used to train vines of certain vigorous varieties of grapes used for processing.

Advantages of the GDC system are many. It increases leaf exposure to sunlight, which

(Continued on page 2)



VINIFICATION
& BREWING
TECHNOLOGY
LABORATORY

Open House

Third Annual Gala Dinner
Premiere Wine Country Auction

Friday, March 31, 2000

Ramada Inn, Geneva Lakefront

\$100 per person

(\$50 tax-deductible contribution)

www.nysaes.cornell.edu/fst/vb

Shaulis, continued from page 1

results in better fruit and vine maturation, and increases yield, sometimes by as much as 90 percent. Vineyards managed in this way are better adapted for mechanical harvesting. The GDC is documented in Bulletin 811, dated July 1967, which is still one of the Experiment Station's most frequently requested bulletins.

A second major contribution was Shaulis' work with cooperators from Cornell's Department of Agricultural Engineering that resulted in the development of the mechanical grape harvester. Today, harvesters patterned after this design are used to harvest virtually all the commercial grapes grown in New York and many other locales.

Shaulis also conducted important research on factors to consider in siting vineyards, grapevine physiology, vineyard mechanization and management, mineral nutrition, rootstocks, and canopy microclimates. He was an expert in defining attributes of site, growth, canopy, and crop in vineyard management. He also pioneered the current interest in canopy management by documenting the negative impact of interior leaf shading and by providing new ways of measuring and expressing canopy density.

Because of his vast knowledge and intense research techniques, Shaulis was frequently called upon to assist or advise others throughout the world. In 1962, he spent the fall studying grape culture in France, Switzerland, Germany, and associated areas. In 1967-68, he was the Fulbright Senior Research Fellow in Australia, where he conducted viticultural research.

Shaulis' long and distinguished career began at Penn State, where he graduated with a B.S. in horticulture in 1935, and a M.S. in agronomy in 1937. He received his Ph.D. in Soils from Cornell University in 1941. He served as a Soil Conservationist with the USDA Soil Conservation Service from 1938-44, while he was also an instructor and, later, assistant professor in pomology at Penn State. In 1944, he was appointed assistant professor of pomology at Cornell at the Agricultural Experiment Station in Geneva, and pro-



Nelson Shaulis was a tireless researcher who was well known in the grape industry worldwide.

fessor of pomology and viticulture, from 1948-67. He retired as professor of viticulture, emeritus, in 1978, and remained very active in the field. He was a treasured sight on the Geneva campus as he walked to his office from his home almost every afternoon as recently as two years ago.

In 1972, in recognition of his outstanding research on grapes, Shaulis was named a Fellow of the American Society of Horticultural Science, the most prestigious award of that organization. In 1997, 19 years after he retired from the Station, this distinguished scientist was the recipient of the Merit Award given by the American Society for Enology and Viticulture, also the highest award of that society. He was also the recipient of Merit Awards of the Society of Wine Educators, the American Wine Society, the New York State Wine and Grape Foundation, and the National Grape Cooperative, and received the award for Outstanding Achievement from the Eastern Section-ASEV.

Shaulis was a member of the American Society of Horticultural Science, the American Society of Agronomy, the Soil Science Society of America, and the American Society of Enology and Viticulture of which he was made an honorary member.

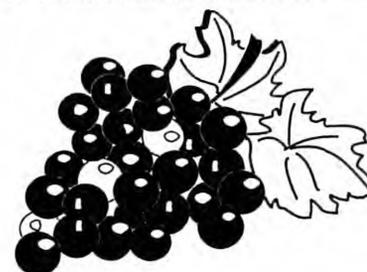
In addition to his extraordinarily active career in research and extension, Shaulis served

on the Board of Education for the Geneva City School District in the 1960s, and was a member of the Zion Lutheran Church from 1944 until his death.

Shaulis is survived by two daughters, Catherine Santomartino of Scotia and Margaret Harty of Sodus; three grandchildren; and three great-grandchildren. He was predeceased by his wife of 55 years, Lillian on July 30, 1996.

A memorial service will be held on Friday, January 21, at 10 a.m., at the Zion Lutheran Church, 18 Snell Road in Geneva. The Reverend Dan Hoffman will officiate. Funeral arrangements are being handled by the Devaney-Bennett Funeral Home

In lieu of flowers, friends may make contributions to the Nelson J. Shaulis Fund for the Advancement of Viticulture, c/o Mr. John Murphy, Cornell University Foundation, 102 Prospect Street, Ithaca, NY 14850, or to the Zion Lutheran Church Mission Endowment Fund, 18 Snell Road, Geneva, NY 14456.



Trade Reports From The 2000 NYS Hort Show

Faced with a glut of apples on the market worldwide, the mood of apple growers at the New York State Horticultural Society's Annual Meeting and Trade Show held last January 12 and 13 in Rochester, NY, was somewhat glum. Some talked about getting out of the business, while others are looking to diversify into stone fruit or added-value products.

About 250 people attended the show. The leadership of the Hort Society is actively trying to improve attendance for next year and looking for alternative sites or partners.

The trade show was limited this year, as it ran for one day, from 3-7 p.m., with about 30 exhibitors participating. A social hour held at the same time was a new and welcome addition to the schedule. The format is similar to the one used at the Hudson Valley fruit school.

In the darkened educational rooms, Northeast fruit growers attending the Lake Ontario Fruit School listened attentively as Cornell University extension educators (CCE) and researchers reported trials, tribulations, and successes in last season's test plots. The following are some of the take-home messages on plant protection, cultural practices, and fruit handling.

DISEASE MANAGEMENT

Dave Rosenberger, Cornell plant pathologist at the Hudson Valley Lab in Highland, presented research results on two new apple fungicides, Sovran and Flint, that should be available in the next growing season for managing apple scab, powdery mildew, black rot, sooty blotch, and flyspeck diseases. He advised growers on the most cost-effective way to use these new products, but warned that "mis-use could lead to rapid development of fungicide-resistance."

INSECT MANAGEMENT

David Kain, entomologist at the NYSAES, reported that populations of the American plum borer have been building up in western New York tart cherry orchards for the past 20 years, or so, because shaker

damage has allowed them entry. "They are the prevalent borer in that crop, contributing to about a 33 percent decrease in the lives of the trees," he said. The American plum borer is also important in peaches with cankers. "We are now finding them moving out of tart cherry trees and into dwarf apple trees through burrknobs," said Kain.

Art Agnello, entomologist at the NYSAES, reported how cover spray choices affect mite management. "Under moderate European red mite pressure, the respective effectiveness of control programs using prebloom oil, Apollo, or postbloom Agri-Mek was not affected by the use of pyrethroids vs. organophosphates during the rest of the season," said Agnello. He went on to report, that, after two years of these trials, there has been only marginal evidence that a seasonal Asana program will flare mites, and only at higher population pressures, so it should be possible to use a pyrethroid season-long in combination with any effective mite management program, provided that acaricides are rotated and mite levels are monitored on a timely basis. Pyrethroids were, however, associated with outbreaks of apple rust mite in some cases, particularly in the Hudson Valley.

THE REGULATORY CHALLENGE

New York apple growers are quite concerned about the future potential loss of an important class of insecticides currently widely used in New York orchards, the organophosphates. "Recent long-term studies were initiated in commercial orchards to determine if the obliquebanded leafroller and the rest of the insect and mite pest complex could be controlled by using new 'reduced risk' pesticides and no organophosphates," said Harvey Reissig, professor of entomology at the NYSAES. "Control of the entire insect and mite pest complex in the research blocks was comparable to that in the grower's standard program. Studies will be continued in these plots for at least two more years to determine if these programs can provide long-term sustainable control," he said. Also, the cost and economic returns to the growers will be cal-

culated for these new "reduced risk" pesticide programs and compared to that in the standard programs.

INTEGRATED PEST MANAGEMENT

Mike Hoffmann, the new director of the NYS Integrated Pest Management Program, provided a vision of the organization for 2000 and beyond that enhances and enlarges the IPM Program so that it may contribute even more to the well being of the citizens of New York. In some pest-crop situations in agriculture, he believes IPM may have reached a point of limited return for short-term investments in research and implementation.

"To make major strides in these situations, IPM needs to invest in more long-term and fundamental research that involves crop protection and production disciplines," he said.

FRUIT PROCESSING

There was standing room only for Bob Kime and Tracy Harris' talk about growers, entrepreneurs and companies using the Fruit and Vegetable Processing Pilot Plant at the NYSAES in Geneva for developing or improving food products or making small scale production trials. Attendees stayed for over an hour asking questions and tasting fruit wines, raspberry cider, and varietal dried apple slices including the white, non-oxidizing slices from Geneva's newest, but as of yet unnamed apple, NY674.

Randy Worobo assistant professor of food microbiology at the NYSAES updated the crows on the approval of new cider pasteurization technologies. "Besides pasteurization for apple cider, there is now ultraviolet light that is approved for use by NYS Ag & Markets. Preliminary research into sulfur dioxide and dimethyl dicarbonate indicates a good potential for achieving a 5-log reduction of *E. coli* O157:H7 in apple cider."

— L. McCandless

For more Trade Reports, access www.nysaes.cornell.edu/pubs/press/current/hort2000.html

CALENDAR of EVENTS

JANUARY 21-28, 2000

MEETINGS

Chairs' and Unit Leaders' Meeting

Date: Wednesday, January 26
Time: 3 p.m.
Place: Jordan Hall Staff Room

Chairs' Meeting

Date: Wednesday, January 26
Time: Immediately Following Chairs' and Unit Leaders' Meeting
Place: Jordan Hall Staff Room

SEMINARS

HORTICULTURAL SCIENCES AND PLANT PATHOLOGY

Date: Monday, January 24
Time: 11 a.m.
Place: Jordan Hall Staff Room
Speaker: Dr. William K. Hallman, Dept. of Human Ecology, Rutgers University, Princeton, N.J.
Title: "Consumer Apprehension to Biotech-generated Plants"

Co-sponsored by Horticultural Sciences and Plant Pathology, Geneva, and Plant Breeding and Biometry, Ithaca

LTC

January 26, 2000, 2-4 p.m.
 Dreamweaver Part II
 Site planning and management will be among the topics covered in this workshop.
 Jane Irwin - Instructor.

REMINDER

Research Proposals for the Apple Research and Development Program are due by Thursday, February 10. Send 20 copies to Mary Lou Dumbleton, Jordan Hall.

FITNESS

AEROBICS AT THE SAWDUST CAFE

Date: Every Monday, Wednesday and Friday
Time: 12:10 to 1 p.m.

This group uses the videotapes of the fitness expert "Gilad." VCR and tapes are provided by the Station Club. For more information contact Julie Kikkert at x2221 or jrk2@cornell.edu.

TAEKARDIO

Date: Every Monday and Wednesday
Time: Noon
Place: Jordan Hall Auditorium

"Bring a Friend Day" at Taekardio!! Monday, Jan. 24 and Wed., Jan. 26, noon both days--come and see/try out Taekardio, a fun way to exercise!! First two classes are free. \$20 for a six-week session which includes two classes per week at the Station and one class at the Geneva Martial Arts facility. Any questions, call Kathy at x2236.

SAVE THE DATE

Chuck Eckenrode's retirement party will be February 19, 2000, at the Geneva Country Club. Details to follow.

PEOPLE

Gary Howard, retiree of Horticultural Sciences, is presently undergoing chemo treatment at Strong Memorial Hospital. Nancy Smith Howard (his wife) who is an employee of Food Science and Technology is spending each day with him while at Strong.

For those of you who would like to send cards or well wishes, you can send them to Strong Memorial Hospital, c/o Gary Howard, 601 Elmwood Avenue, Rochester, NY 14642.

Their home address is 5069 Huron Street, North Rose, NY 14516.

CLASSIFIED

FOR SALE: 2 Port Mac USB Upgrade (designed for PCI based PowerMacs): \$40. Contact John Zakour x2249.

FOR SALE: 1990 Chevrolet Beretta, 116000 miles, no rust (spent most of its days in Florida) with A/C and cruise control. Just had checked out by a mechanic and said the engine is in good shape. Please contact soon if interested (x2407 or x2474).

FOR SALE: Honda Accord LX (1987, 134 k miles) runs smooth, and is in good condition. Automatic transmission, power windows & mirror, power & tilt steering, stereo, AC, and cruise control. New timing belt, four new tires, two new rear ball joints, one new front axle & control arm, new water pump, and new brakes. Price: \$2,000, or best offer. Contact 787-2344 (office), 789-0107 (home) or sej7@cornell.edu, and ask for Seong.

FOR SALE: Refrigerator and electric range and electric dryer. All in excellent condition. Call Nancy at x2313 or 789-5485.

CAR FOR SALE: 1990 Chevrolet Beretta GTZ, 115,000 miles, air, no rust. Car was checked out by a mechanic who said the engine is in good shape but the car needs a new timing chain and wheel bearing. Edmunds.com lists resale price at over \$3,000 but I am asking \$1,200 due to needed repairs. Please contact Tim at tlw10 or x2374.

Classified, continued

FOR SALE: Casio electronic keyboard with stand. Model CT 620. Full size keys. \$100. Contact John Ludwig at x2407, jwl2@nysaes.cornell.edu or 539-3155.

WANTED: Tops grocery tapes in support of Geneva High School's Marching Band/Color Guard. Please send tapes to Judy Birkett, Jordan Hall.

FOR SALE: Men's size 10 hockey skates. Never used, asking \$35, originally \$50 new. Contact Jim at jpe6@cornell.edu or ext 2378.

UPDATE

Date: Tuesday, February 15, 2000

Register no later than February 4 for the Greenhouse Management Update offered in Geneva. This year there will be two workshops offered from 8:30-3:30, in Jordan Hall Auditorium. DEC recertification credits will be offered for each session. Moderator will be Aimee Roberts.

Morning session (8:30 a.m.-noon)

Nutrient Management Workshop
 Introduction: (Mary-Lynn Cummings)
 Backflow Prevention (Barry Smith)
 Principles of Nutrient Management (Dr. Thomas Weiler)
 Calculating, Calibrating and Weighing Fertilizers (Andy Leed)
 Pesticide Injectors- A Crash Course (John Kumpf and Andy Leed)

Afternoon Session (1:30-3:30 p.m.)

Pest Scouting Workshop
 Introduction (Mary-Lynn Cummings)
 Principles and Identification (John Sanderson)
 Record Keeping Scouting Tour and Identification (Jana Lamboy)

Everyone should bring: current scouting forms (preferably filled out), a hand lens or tools currently being used for scouting, and ideas and questions we can share with each other.

The program is being set up and administered by Mary-Lynn Cummings, assistant director of occupational and environmental health, CALS, at Cornell.

This program is aimed at greenhouse personnel, and is separate from the annual pesticide update to be offered later in the spring. All Geneva personnel involved with greenhouse research or greenhouse project maintenance are encouraged to attend.

Registration (via phone or email) to Gary Chicoine (X2293, gdc2) no later than February 4. Questions also may be directed to Gary Chicoine.