

# Nelson J. Shaulis

*September 10, 1913 — January 15, 2000*

Nelson J. Shaulis was a renowned viticulturist at Cornell University's New York State Agricultural Experiment Station, in Geneva, New York. His extraordinary career had a profound impact upon the grape industry worldwide.

"Nelson Shaulis was one of the truly great minds in viticulture of the 20th century," said Hugh Price, Chairman of the Department of Horticultural Sciences at the Experiment Station.

*"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' long and distinguished career began at Penn State, where he graduated with a B.S. degree in Pomology in 1935, and a M.S. degree in Soil Science in 1937. He received his Ph.D. degree in Soil Science from Cornell University in 1941. He served as a Soil Conservationist with the USDA Soil Conservation Service from 1938-44 and as an Instructor in Pomology at Penn State. In 1944, he was appointed Assistant Professor of Pomology at Cornell's Agricultural Experiment Station in Geneva, and was awarded the title of Professor in 1948. He retired as Professor Emeritus of Viticulture in 1978, and remained very committed to viticulture until his death.

Shaulis' research on grapes in New York emphasized an integrative approach to optimizing vine growth and cropping via soil and canopy management. His research in New York was conducted primarily at the State Agricultural Experiment Station in Geneva, as well as Cornell's Vineyard Laboratory at Fredonia.

Experts in modern viticulture consider Dr. Shaulis the father of "canopy management", a term used in the industry for a spectrum of techniques to control shoot growth and leaf display to improve yield and quality. The core principle of canopy management is to ensure the exposure to sunshine of critical parts of the grapevine to achieve good yields and high fruit quality.

While working with the Concord grape, Dr. Shaulis observed that excessive shade inside canopies reduced grape yields and fruit ripeness. He discovered that by separating one dense canopy into two less dense ones, the vine could intercept more sunlight and fruit yields were therefore increased. Better sunlight distribution in the vine improved not only vine maturation, but also fruit quality.

This “Double Curtain” technique was first tested at Geneva in 1960, and four years later field trials with growers began. Although Concord belongs to the North American species *Vitis X Labruscana*, Dr. Shaulis’ discovery was quickly applied to vinifera grapes, the classical European variety. The principles elucidated by Dr. Shaulis form the basis of modern canopy management worldwide.

Dr. Shaulis also worked with Professor Shepardson of Cornell’s Department of Agricultural Engineering to develop the mechanical grape harvester. Today, harvesters modeled after the Cornell machine are in use around the world.

Dr. Shaulis was an outstanding integrator of knowledge. He looked beyond narrow fields of expertise and developed concepts on the proper siting of vineyards, the physiology of grapevines, mineral nutrition, rootstocks, and microclimates. He also developed standard terminology for viticultural terms, and insisted that terms be defined before discussions could proceed. He will especially be remembered for his precise way of thinking.

Shaulis’ research and extension efforts on grapes in the field of viticulture have had a lasting impact upon 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.”*

His contributions to world viticulture were recognized posthumously in June 2000, at an international conference on grape physiology held in Crete.

Because of his vast knowledge and intense research techniques, Shaulis was frequently called upon to assist or advise others throughout the world. In 1961, 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.

In 1972, Shaulis was named a Fellow of the American Society of Horticultural Science, the most prestigious award of that organization. In 1997, 19 years after his retirement, Dr. Shaulis 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 ASEV-Eastern Section.

Shaulis was a member of the American Society of Horticultural Science, the American Society of Agronomy, the

Soil Science Society of America, Sigma Xi and the American Society of Enology and Viticulture of which he was made an honorary life member.

“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”, stated James E. Hunter, Director of the Experiment Station.

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 leading member of the Zion Lutheran Church from 1944 until his death.

Shaulis—a devoted and loving husband, father, and grandfather—is survived by two daughters, Catherine Santomartino, of Scotia, New York, and Margaret Harty, of Sodus, New York; three grandchildren; and three great-grandchildren. He was predeceased by his wife of 55 years, Lillian, on July 30, 1996.

*Alan Lakso, Hugh Price, Bruce Reisch*