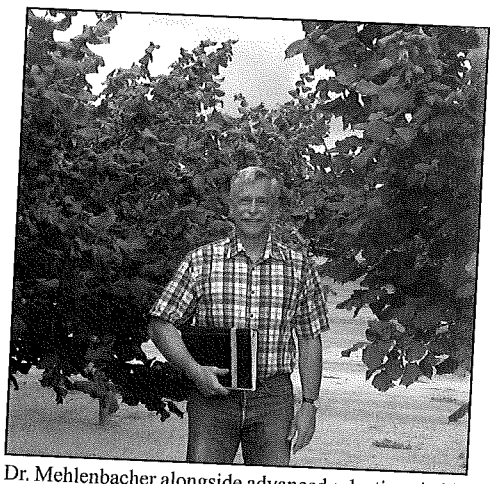
Dr. Shawn Mehlenbacher
2012 Wilder Silver Medal Recipient

Dr. Shawn Mehlenbacher, Oregon State University, has been awarded the 2012 Wilder Medal by the American Pomological Society for his contributions to hazelnut genetics and cultivar development. The Award was presented at the APS Annual Meeting in Miami, FL August 2, 2012.

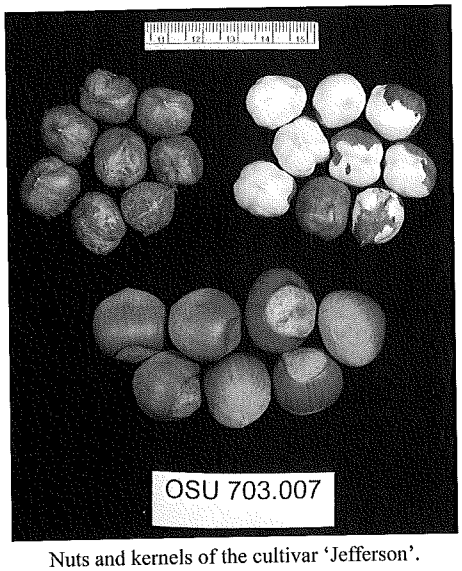
Dr. Mehlenbacher took over the leadership of the Oregon State University hazelnut breeding program in 1986 after a short but productive four-year stint at Rutgers University. Since that time he has developed a program that previously had done some interesting work on incompatibility and disease resistance in hazlenuts and has taken it to entirely new levels with exceptional work in genetics, disease resistance, incompatibility and more importantly the development of cultivars with a vital impact on the commercial industry. The success of the program under Dr. Mehlenbacher's leadership has led to the position becoming an endowed position; a strong indication of the respect that he has engendered. The hard-driving Oregon State University program is the preeminent hazelnut breeding program in the world.

Oregon produces nearly 100% of the hazelnuts produced in the USA and the USA is the third highest producer of hazelnuts in the world. Eastern filbert blight (EFB) is a devastating disease that had been slowly spreading in the Willamette Valley and that the industry had targeted as a disease of critical importance. In order for the industry to remain viable, it was essential that first tolerant and later resistant cultivars be developed for growers. Early in Dr. Mehlenbacher's career in hazelnuts, resistance had been identified in germplasm but it was in genotypes with poor commercial horticultural quality. Dr. Mehlenbacher took a multi-track approach to answer this threat. He began a traditional breeding effort with the known sources of resistance, worked to identify new sources of resistance, and worked to develop tools to incorporate resistance as quickly as possible. He was one of the first perennial horticultural crop breeders to employ marker-assisted selection in his program. He first developed the tools to screen using markers for resistance and then proceeded to implement them in his program. This has led to a tremendous amount of filbert blight resistance in his program's germplasm.



Dr. Mehlenbacher alongside advanced selections in his hazelnut breeding program.

Overall, Dr. Mehlenbacher has released 23 hazelnut cultivars from his work at Oregon State University and three apple, one apricot and six peach cultivars related to his previous position at Rutgers University. 'Tonda Pacifica' hazelnut, released in 2010 for planting in other countries where EFB is absent, has exceptional kernel quality. 'Jefferson', released in 2009 for the in-shell market, is now the most widely-planted cultivar in Oregon with upwards of 10,000 acres (4000 ha) planted in the past 4 years. 'Yamhill', released for the kernel market in 2008, continues to perform well and is prized by Ferrero for use in their chocolate products.



Nuts and kernels of the cultivar 'Jefferson'.

Due to the confidence that the growers feel with these new resistant cultivars, the industry is expanding at about 3,000 new acres (1200 ha) per year. 'Jefferson' was released with pollinizers 'Eta' and 'Theta'. 'Santiam' and 'Yamhill' were released for the kernel market. Additional pollinizers include 'Gamma', 'Delta', 'Epsilon' and 'Zeta'. The most recent releases (2012) are 'Dorris' and two pollinizers 'York' and 'Felix'. All have complete resistance to EFB. For several years 'Lewis' was widely planted by growers, even where EFB is present and it is still the second most important cultivar in Oregon. Growers who planted 'Clark' have also been pleased with its performance. 'Sacajawea' has excellent kernel quality but has not been widely-planted as other cultivars with complete EFB resistance are now available. 'Lewis', 'Clark' and 'Sacajawea' have quantitative resistance to EFB.

Over the course of his career, Dr. Mehlenbacher has published extensively on breeding and genetics with over 85 refereed publications. These publications range from extremely basic pieces of research in theoretical and applied genetics to very applied work related to cultivar releases. His collaborative effort to sequence the genome of 'Jefferson' will soon be published and is eagerly anticipated. In addition, he has several book chapters and over 65 non-refereed publications. Over his career, Dr. Mehlenbacher has received nearly $US3.5 million dollars in grants, most of which have come from the hazelnut industry that recognizes the critical role his breeding program plays in their long term success. In addition, he was one of the leads on a USDA-SCRI specialty crop grant that was awarded $US1.4 million dollars to work on breeding improved hazelnuts for the entire USA.

Dr. Mehlenbacher is internationally recognized for his knowledge of breeding, germplasm and hazelnuts. He has hosted 10 scientists from China, India, Turkey, Italy, Romania and Korea in his laboratory. He has made extensive germplasm collection trips to Turkey and received valuable germplasm from the former Soviet Union based on relationships he had cultivated. These collection trips and exchanges have greatly thereby enhanced the *Corylus* collection at the USDA-ARS National Clonal Germplasm Repository.

Dr. Mehlenbacher is recognized by the Chilean hazelnut industry for having made a significant impact in its development. Since his first visit in 1995 that was supported by the Governmental Agriculture Foundation Office, he has been an advisor in the development of the hazelnut industry. He has visited Chile several times and his knowledge about the Chilean hazelnut Industry is outstanding. He has welcomed Chilean researchers and growers to visit the hazelnut breeding program in Corvallis, and always has had the time to receive them and host tours. There is no doubt that, the success of the hazelnut development in Chile is a result of his wise advice and counsel.

Dr. Mehlenbacher is also a major participant in the Hybrid Hazelnut Research Consortium, a joint effort organized by OSU, Rutgers University, University of Nebraska-Lincoln and the Arbor Day Foundation in order

to develop commercial hazelnut cultivars with extensive disease resistance and broad climatic adaptability. His contributions have been critically important for and instrumental in the rapid advancement of this effort.

Dr. Mehlenbacher exemplifies the ideals laid out by the American Pomological Society for the Marshall P. Wilder Award. He has "rendered outstanding service to horticulture in the area of pomology" for several reasons but particularly for his development of the most important hazelnut cultivars in North America and increasingly around the world. North America's hazelnut production is becoming overwhelmingly reliant on the cultivars developed in his program. His ability to utilize the field of genomics/marker assisted breeding within a traditional breeding program to more rapidly develop the critical cultivars the industry has clamored for serves as an example for all breeders. The fantastic progress they have made has the world beating a path to Dr. Mehlenbacher's door!

– Prepared by Chad Finn

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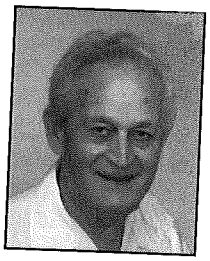
Obituary

Kessler, George M.

(1917-2012)

George Morton Kessler, Professor of Horticulture Emeritus at Michigan State University, died at his home in East Lansing, Michigan on June 21, 2012 at 94 years of age. George was a native of Philadelphia, and attended Temple University and Delaware Valley College of Agriculture and Science before enrolling in the horticulture program at Pennsylvania State University. On completion of his junior year in 1941, he served as a 2nd lieutenant in the Army Signal Corps in India, China, and Burma. Following the war he returned to Pennsylvania State University, where he was awarded a B.S. in 1946 and an M.S. the following year. He moved to Michigan State College in September of 1947, where he held a position as instructor in horticulture while working on a Ph.D. with Prof. Alvin Kenworthy. He was appointed Assistant Professor on completion of the degree in 1953, and Associate Professor in 1971. He advised students and taught courses in both the 2-year and 4-year programs for 29 years, retiring in 1982.



George edited the American Pomological Society's (APS) Fruit Variety and Horticultural Digest (the name was later changed to the Fruit Variety Journal) from 1956 to 1974. He served as Secretary-treasurer (1957-63) and President (1967-68) of APS, as well as a member of the Wilder Medal Committee, which is responsible for selecting recipients of this award for distinction in fruit breeding.

George married Esther Glass during a 10-day leave from army duties in 1943, and the couple were reunited following George's discharge in 1945. During 68 years of marriage, they reared two children – Marsha (Pattinson) and Frank– and enjoyed the company of five grandchildren and two great-grandchildren. Esther, who died in 2011, and George were active members of Congregation Kehillat Israel of East Lansing, and traveled widely, making several trips to Israel. George was a committed Labor-Zionist and Yiddish scholar, and a volunteer for Talking Books on the local radio station.

– Prepared by Frank Dennis, Jr.