George McMillan Darrow (1889-1983)

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George McMillan Darrow, America's foremost authority on small fruits, was born in Springfield, Vt., on 2 Feb. 1889. He received his undergraduate degree at Middlebury College in 1910 and continued his education at Cornell Univ., graduating in 1911 with an AM in horticulture. His entire professional career, spanning 46 years from 1911 to 1957, was spent with the U.S. Dept. of Agriculture (USDA). Darrow did find time to pursue graduate studies at Johns Hopkins Univ., where he received his PhD in plant physiology and genetics in 1927. By the time he returned from a short tour of duty with the army during World War I, Darrow already was acknowledged as the USDA's small-fruit expert. Beginning in 1928, he was the leader of small-fruit investigations for the USDA and in 1945 was appointed the administrative head of the Small Fruits Research Section, Plant Industry Station, Beltsville, Md.

George Darrow is most celebrated as the originator of superior small-fruit cultivars. Many of these introductions, e.g., 'Blakemore', 'Fairfax', 'Albritton', and 'Temple' strawberries; 'Van Fleet' raspberry; 'Brainard' blackberry; and 'Bluecrop', 'Berkeley', 'Coville', 'Wolcott', and 'Tifblue' blueberries, set new standards of varietal excellence for their respective species and were used widely as parents by other breeders. Strawberry and blueberry breeding work was enhanced greatly by the cooperative state-federal relationships established by Darrow. Frequently unappreciated, however, is Darrow's compelling interest in the range of variation in native American fruit species, and their domestication potential. Darrow's breeding success was undergirded by his broad understanding of natural species variation, his collection of diverse germplasm bases, and his extensive use of species hybridization and exploitation of polyploid forms. He also had a keen sense of which characteristics were vital to the commercial success of a clone or to its possibilities as breeding stock. His research on photoperiodism in strawberry led to a better understanding of the factors involved in the climatic adaptation of varieties. It showed that flower initiation occurs in most varieties only under medium or shorter daylengths. He presented his findings in the classical treatise *Response of Strawberry Varieties and Species to Duration of the Daily Light Period*, published in 1931. As testament to his outstanding leadership capabilities, Darrow organized teams to study red stele root-rot resistance, virus indexing, and certified plant production of strawberry. He also led blueberry species exploration and study teams.

Darrow's early studies of fruit handling, transportation, and cultural practices, and of climatic influences on fruit growth led him to write a definitive series of authoritative and concise farmers' bulletins on small-fruit domestication and production. A prolific writer, he eventually wrote more than 200 research or review articles, bulletins, and book chapters. Darrow's outstanding descriptions of fruit genus variation, elite cultivars, potential parents, and comprehensive breeding aims and breeding program synopses appear in the classic 1937 *USDA Yearbook of Agriculture*. Henry A. Wallace, former secretary of agriculture and former vice president of the United States, encouraged Darrow to write *The Strawberry: History, Breeding, and Physiology*, published in 1966. This monumental monograph soon became a classic.

Darrow continued to write, mostly about small-fruit breeding opportunities, summaries, and varieties, and plant exploration, for many years after his retirement in 1957. During that time, Darrow began breeding daylilies. He introduced 59 varieties, which are registered with the American Hemerocallis Society. His introductions begin with the name Olallie, which was the name of his farm in Maryland. After his eyesight began to fail in 1979, Darrow's son Dan, and Dan's wife Ellen, began transporting the daylily collection to their farm in Vermont. Darrow's grandson Christopher continues to breed and market the Olallie daylilies. Darrow also established the first family pick-your-own strawberry planting in Maryland, propagated bamboo, and was an official USDA unpaid collaborator until 1973, helping with blueberry breeding and selection and seedling evaluations. He was a welcome, stimulating, and interested visitor to

his old workplace at Beltsville on a regular basis, even when he was unable to drive and had to be partially supported by others on his visits to the field. He took copious notes on selections and on discussions with the staff until he was too frail to leave his home. Even then, his successors visited him regularly and sent him reports because they valued his input. This is indicative of Darrow's influence and the value of his legacy. He set the tone of small-fruit investigations in the United States and, through his extensive correspondence and writings, was influential abroad even though his foreign travel was limited.

Darrow served horticulture in many ways, including as a member and officer in numerous professional societies. He joined ASHS in 1928 and was elected president of the Society in 1949. In 1965 he was in the first group to be named fellows of ASHS. He also was active in the Botanical Society of Washington, American Genetic Association, American Association for the Advancement of Science, American Horticultural Society, American Pomological Society, North American Strawberry Growers Association, and the American Hemerocallis Society. He received the highly coveted Wilder Medal from the American Pomological Society in 1948 for leadership in small-fruit development, and in 1952, he shared in a second Wilder Medal awarded to the USDA Small Fruit Unit for production of virus-free strawberries. The USDA presented him its Distinguished Service Award in 1954. He was the 1960 recipient of the Liberty Hyde Bailey Award of the American Horticultural Society. In 1962 he received an honorary PhD from North Carolina State Univ. for his work to improve the strawberry and blueberry varieties grown in that state.

George Darrow was one of those rare individuals whose keen intellect, considerable energy, and broad professional interests enabled him to master and help define a field as diverse as early twentieth century American pomology. Moreover, his personal charisma, utter trustworthiness, boundless enthusiasm, love for young people, and excellent communication skills enabled him to talk to farmers, write, and plan and execute research programs. His legacy to modern horticulturists includes 1) superior small-fruit germplasm—both cultivars and elite parents; 2) comprehensive and insightful writings about the botany, genetics, ontogeny, anatomy, pathology, and physiology of fruit and ornamental plants; and 3) research, teaching, and extension ideas. For those of us whom he influenced when we were young, it is our continuing privilege to have worked with and enjoyed the inspiration of one of the "horticultural giants" of the twentieth century.

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