



## IN MEMORIAM

John Tucker  
Professor of Plant Science & Center for Plant Diversity  
UC Davis  
1916 - 2008

John Tucker, born January 7, 1916, is remembered fondly by many of our botany alums for his plant taxonomy course which he taught for 40 years until his retirement in 1986. Hundreds of students passed through this taxonomy course, and he was responsible for training several generations of northern California botanists in plant identification. His personal passion was oak, a group that he began to study as a teenager and continued to work on until he passed away on July 5, 2008, at the age of 92. A few months before his death, he had finished a new version of the oak treatment for the upcoming revision of the Jepson Manual: Higher Plants of California. At the time of his death, he was working on a manuscript to describe northern California populations of Shreve's Oak (*Quercus parvula* var. *shrevei*), a species whose characteristics and distribution had held his interest for more than a decade. Many people benefited from John's expertise and sent him oak samples in letters or brought oak samples to the herbarium for him to identify. He was generous with his time and always glad to look at any oak from anywhere.

John grew up in Santa Barbara, California and credited Maunsell Van Rensselaer, Director of the Santa Barbara Botanic Garden, who during its early years encouraged his interest in botany. John had long had an interest in trees, and he obtained a botanical assistant position at the garden after coursework at Santa Barbara State College and the University of Idaho – a position he returned to during summer vacations until 1942. John had thought that he might earn a degree in forestry, but Van Rensselaer noted John's careful horticultural, botanical, and plant collecting skills and encouraged him to get a degree in botany instead. With that advice, John continued on to UC Berkeley, where he earned a bachelor's degree and a doctorate, both in botany, in 1940 and 1950, respectively.

His collection notebooks from his senior year at UC Berkeley in 1940 already emphasized oaks, with long entries describing the appearance of each one. He was sometimes frustrated in his attempts to gather more information while out in the field with Ledyard Stebbins, his genetics teacher. On one excursion in San Luis Obispo County west of Santa Margarita, he commented "Stebbins and Walters were so intent in their chase after peonies that I didn't have time to stop and collect or get more dope on [the hybrid blue oaks that held his interest]."

His Ph.D dissertation, under the guidance of Herbert Mason, Ledyard Stebbins, and Adriance Foster, dealt with the evolution and relationships of scrub oak (*Quercus dumosa*) and related species, including hybridization between scrub oak and grey oak (*Quercus turbinella*), and the parentage of Alvord's oak (*Quercus x alvordiana*). On sabbatical leave in 1955-1956, John began to study variation in hybrid oak populations in the southern rocky mountain region, an extremely difficult task.

To say that John's studies of oak taxonomy were detailed is an understatement. During his numerous field expeditions, especially within California and the southwestern U.S., John described oak populations from an ecological, geological, historical, and taxonomic viewpoint. He collected flowers to look at chromosome counts, acorns to analyze their chemistry and viability, and seemingly endless population samples to look at leaf surfaces and architecture. Everything was documented with careful notes. He collected pollen and

crossed oaks and then collected acorns to examine acorn viability and subsequent progeny – techniques more easily applied to annual plants rather than slow- growing trees like oaks.

John emphasized careful research habits in his interactions with students. Jack Maze, one of John's Ph.D. students recalls, "One thing that soon became clear was that John had definite and clearly defined ideas about the nature of botanical research. He demanded, not by edict but by example, that I be able to defend what I did, how I did it and why I did it. ... Or John demanded, again by example, that I try to attain the same high level of scholarship he expected of himself." Students John advised, either as a major professor or as a committee member, included: Jack Maze, Gilbert Muth, Rodney (Rod) Myatt, Irfan Batat, Darwin Dailey, Bijan Dehgan, James Eckenwalder, Andrew Hendry, Deborah Green, Ann Johnson, Paul Opler, William Thompson, Robert Schlising, Donald Santana, Kenneth Renney, and Theodor (Ted) Niehaus. The list is notable including a number of entomology students.

John also served as an unofficial committee member for dozens of students, such as Helen Kennedy, a Botany Department Ph.D. student, who found him available for discussions in the herbarium or his office late in the evening. Helen recalls, "One night he got out his pictures from his field work in the tropics to show me. This was when I was thinking of applying to OTS (Organization for Tropical Studies) to take the Tropical Ecology course. He insisted I apply and showing me his pictures definitely clinched it. It was that course that shaped my subsequent doctoral research and love of Marantaceae, which has continued my whole career. ... He will be missed by so many of us whose lives and careers were enhanced by his influence."

John did not have the luxury of focusing exclusively on research and students. While still a graduate student at UC Berkeley, he was hired as director of what was then the UC Davis Botany Department Herbarium. At that time the herbarium housed 9,400 specimens in just six wooden cases. In 1951, he initiated an exchange program for trading extra specimens with other institutions, and under his leadership, the collection expanded dramatically. In the mid-1950s, the collection moved to a small temporary building with a metal roof, and John sweltered in the Davis summer heat. In 1961, the herbarium moved to a new home in Robbins Hall, a space that John designed. Upon his retirement in 1986, the Botany Department Herbarium was officially named the J. M. Tucker Herbarium to honor his 39 years as director. The J. M. Tucker Herbarium is now incorporated into the UC Davis Center for Plant Diversity herbarium which includes nearly 300,000 specimens from all over the world in a wonderful, new, temperature- controlled space for which John provided the lead gift.

In addition to directing the herbarium, John was hired to do plant identifications for UC Cooperative Extension, a task he did alone until 1953, when he hired June McCaskill to help him. In addition to plant taxonomy, John also taught courses in general botany and poisonous plants – courses in which hundreds of students per year enrolled. In his first two decades, he also had to collect all the plant material for his courses, something few UC professors still have to do. He was very active on committees and took his campus service very seriously.

His exemplary service record is partly what led to John becoming director of the UC Davis Arboretum for 12 years (at the same time as he was herbarium Director). This new administrative task was extremely time-consuming, basically another unpaid, half- time job on top of his other duties. John took the task on because he loved the Arboretum and had been involved with it since the early 1950s. In 1962, he established an oak grove near the western end of the Arboretum, planting acorns that he had collected from around the world. Today the Arboretum is home to 574 oak trees, including a number of native California oak species, and is recognized as a national resource.

During his career, John published numerous scientific papers and received a number of honors and awards, including a Guggenheim Fellowship in 1955. He was selected as a fellow of the American Association for the Advancement of Science and the California Academy of Sciences. He also was a member of the American Institute of Biological Sciences; American Society of Plant Taxonomists; Botanical Society of America; California Botanical Society; International Association for Plant Taxonomy; Sigma Xi Honor Society; and Society for the Study of Evolution.

He was preceded in death by his wife of 46 years Katrine June Petersen Tucker (June), his son Chris, his brother Robert, and two sisters Viola Valenzuela, and Helen Reid. He is survived by his daughter, Carolyn Tucker, son, Peter Tucker, and grandson Carson Mack; sister Mary Kraft; and brothers Glenn Tucker, Ken Tucker and his wife Shirley, and Stanley Tucker and his wife Marion.

Ellen Dean  
Dan Potter  
Michael Barbour