

BILLIE LEE TURNER – FEBRUARY 22, 1925 – MAY 27, 2020

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The plant systematics community lost an icon with the passing of Professor Billie Lee Turner on May 27, 2020 at the age of 95. Billie's life and scientific career reflected his Texas origins. Born in Yoakum, Texas on February 22, 1925, Billie spent his early years in Sanderson, which is situated in the Trans-Pecos region. The family moved to Galveston, and finally settled in Texas City in 1939 where Billie graduated from high school as valedictorian in 1943. He subsequently enlisted in the Army, was quickly promoted to second lieutenant and joined the 15th Air Force division in Italy during World War II. He served as a navigator on B-24s and was awarded a purple heart. He ended his military service in 1947 and started his academic career at Sul Ross State University in Alpine, Texas. He initially intended to study law but changed his major to Botany after taking a course from Barton Warnock, a well-known expert on the West Texas flora.

During the next six years Billie completed three degrees, BS in Biology at Sul Ross State University (1949), MS in Biology at Southern Methodist University (1950) and a Ph.D. in Botany at Washington State University (1953). His first academic position was as an instructor at the University of Texas at Austin in 1953 where he was hired as tenure track Assistant Professor in 1957. One year later after the publication of two books including a treatment of the *Legumes of Texas* Billie was promoted to Associate Professor with tenure. Two years later he was promoted to Full Professor.

Billie's plant systematics career was on the cutting-edge of new developments starting with using chromosome numbers and subsequently chemosystematics to classify plants and examine evolutionary relation-

ships. He especially championed chemosystematics with Ralph Alston, Jeffrey B. Harborne and Tom Mabry. These collaborations resulted in two widely utilized books *Biochemical Systematics* (1963 with Alston) and *Plant Chemosystematics* (1984 with Harborne). Always a visionary, in a 1969 article published in *Taxon* (Volume 18, Issue 2, pp. 134-151) Billie predicted that protein sequencing and DNA studies would be important in the future for resolving phylogenetic relationships in plants. Billie was an avid and early supporter of my efforts to use DNA data to resolve relationships including investigations of his favorite family Asteraceae.

Billie's influence on the field of plant systematics was immense as he trained over 60 Ph.D. students, many of which have gone on to very successful academic careers. His students also trained numerous plant systematists and one could argue that Billie's training influenced the field in the United States more than anyone else. I am an academic grandson of Billie's since I completed my dissertation under the supervision of Todd Stuessy, one of his numerous Ph.D. students. In addition to his own students, during past 55 years Billie also positively influenced students of other plant systematics faculty at UT-Austin, including Marshall Johnston, Beryl Simpson, Jose L. Panero and myself. During that time UT-Austin produced 160 Ph.D. graduates in plant systematics.

Billie's research productivity was incredible with over 700 scientific articles during his seven decade career. During this time Billie named over 1,400 plant taxa including new combinations. Most of his work focused on two angiosperm families, Asteraceae and Fabaceae. In addition to many articles on

these families he produced two books, one on *Legumes of Texas* and the second a 27 volume (1996-2017) series on Asteraceae titled *The Comps of Mexico: A Systematic Account of the family Asteraceae*.

Billie's impact on the plant systematics program at the University of Texas at Austin went well beyond his publications and training of students. He was instrumental in the rapid growth and international reputation of the University's herbarium (TEX/LL). When he became Director of the herbarium in 1967 the collection had 200,000 specimens and it had grown to one million by the time he retired in 1998. During this time he was responsible for the move of the herbarium to the UT Tower where it is now housed over nine floors, the renaming of the facility to the Plant Resources Center (PRC), the acquisition of the Lundell herbarium and two endowed positions in Systematic Botany, the Lundell Chair and the S.F. Blake Professorship. In his honor the facility was renamed the Billie L. Turner Plant Resources Center in 2017.

I first met Billie as a Ph.D. student in the late 1970s when he gave a seminar to the Botany Department at Ohio State University. I remember talking to him about my thesis project on a genus in the Asteraceae and he provided excellent advice and encouragement. The second time I met him was in 1988 when Billie invited me to give a seminar on the molecular phylogeny of Asteraceae to the Botany Department at UT-Austin. While having coffee with him and Ted Delevoryas at the Texas Union he told me that he was going to hire me as soon as a position was available. Two years later he called me and invited me to apply for an open position and I jumped at the opportunity to join Billie and others in the Botany Department at UT-Austin. During my 30 years at UT-Austin I have been honored to have Billie as a colleague, mentor and friend. His influence and support enhanced the success of my research, administration and teaching. Although Billie is not with us any more, his memory, vision and influence remain very alive at UT-Austin and across the plant systematics community.