

Henry T. Skinner: Horticulturist Extraordinaire

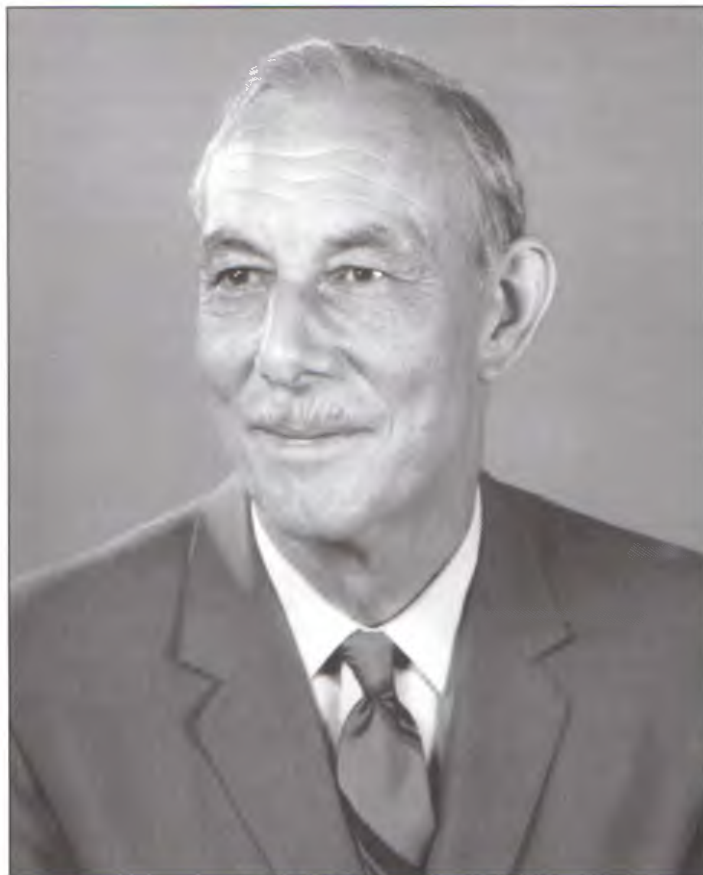
Barbara L. Bullock—Washington, D.C.

Editor's Note: As Presented at the National Convention of the Azalea Society of America, Asheville, North Carolina, May 1, 2008.

About seven months before writing this paper, John Brown contacted me to see if I would give a presentation about the second director of the National Arboretum, Dr. Henry T. Skinner, for the May "Honor the Greats 2008" ASA National Convention in Asheville, North Carolina. Having only a passing knowledge of Skinner's work with native azaleas, I willingly accepted as the research required would broaden my knowledge of azaleas, particularly with the natives of eastern North America.

I began to research the topic which included memoriams, published papers, speeches, and historic photographs. I visited some of the locations most likely to have collections of Henry T. Skinner (HTS) plants. It has been a very interesting project for me. I have come to learn that Dr. Skinner was a modest gentleman with a slight English accent and a wonderful sense of humor. During his career, he received numerous awards and medals from domestic and foreign organizations for his achievements in horticulture. He was responsible for introducing numerous plants, including 'Cornell Pink', a pink form of *Rhododendron mucronulatum*. Dr. August E. Kehr wrote, "Among the specialists in the native Eastern rhododendrons and azaleas, Dr. Skinner stood at the apex."¹

*The Boxwood Bulletin*² included a brief overview of Henry Skinner's life, which reads in part: "Born at East Sutton, Kent, England, in 1907, Skinner attended the Wisley School of the Royal Horticultural Society from 1923 to 1926, immigrated to the United States in 1927 to become a student assistant at the Arnold Arboretum of Harvard University from 1927 through 1929 where he studied under the famed plant explorer E. H. Wilson. He was an instructor of horticulture at Cornell University, Ithaca, New York from 1931 to 1940, earning both his Bachelor of Science and Master of Science degrees in 1936 and 1938 respectively from Cornell in Horticulture. While at Cornell, he concentrated on the development of their tree and shrub collection. During this period and while at the Morris Arboretum, Skinner began researching his interest in azaleas native to the southern Appalachian Mountains and Eastern United States—collecting and studying their classification. In 1940, he became curator of the Morris Arboretum, University of Pennsylvania in Philadelphia, where he served for three years. Becoming a naturalized United States citizen in 1943, he served in the U. S. Air Force from 1943 to 1945. Following World War



▲ Dr. Henry T. Skinner

Photo Courtesy United States National Arboretum

II, he returned to the Morris Arboretum, married the former Anne Wood in 1951, and earned his doctoral in biology from the University of Pennsylvania in 1952. He joined the U. S. National Arboretum (USNA) as Director that same year on September 29 at the age of 45."

During the next 20 years, Skinner saw unprecedented growth at the USNA. Through the efforts of present day boxwood curator, Lynn Batdorf, we now have a chronology of events of the National Arboretum spanning decades.³ Following is a brief listing of some of the highlights of Skinner's tenure at the USNA:

- 1952 The paving of 4.5 miles of road; a pond was added in Asian Valley.
- 1953 The addition of nearly 300 *Ilex* species and cultivars; the Plant Records Office begins accessioning plant materials.
- 1954 The addition of 37 *Rhododendrons*, 19 *Buxus* and many azalea species from the Morris Arbo-



Photo Courtesy United States National Arboretum

▲ The USNA Morrison Garden was dedicated May 3, 1954.

return; 85 cultivars of azaleas propagated from F. P. Lee's personal garden in Bethesda, Maryland; more than 100 hybrid azaleas collected from Walter Allen, Summerville, S.C., and Kingsville Nursery; the Morrison Glenn Dale Azalea Garden was completed and dedicated. In reference to the newly completed Morrison Garden, Skinner remarked, "It will be of immeasurable value for continuous reference for azalea growers the world over."⁴

- 1956 Sixty-seven cultivar azaleas received from England, (Knap Hill, Mollis, and Ghents) from Knap Hill, Sunningdale, and Goldsworth nurseries.
- 1958 The USNA Herbarium was founded; volunteer service was established.
- 1959 The asphalt paving of all 9.5 miles of road was completed; the grounds were opened to the public on weekdays year round and on weekends during peak months.
- 1960 Completion of a 5-acre boxwood collection designed by Skinner; 4-acre Fern Valley was dedicated.
- 1961 New green house complex was completed; the Administration Building was completed and dedicated by 1964.
- 1967 Grounds open seven days a week; beginning of the Washington Youth Garden; new water lines and drain tiles on Mount Hamilton (Azalea Collection).
- 1969 For the 10th anniversary dedication of Fern Valley Nature Trail, the entrance planting is redesigned by Skinner, who in his graduate school years wrote: "Only through a clear appreciation



Photo Courtesy United States National Arboretum

▲ Fern Valley, April 1959.

of that design which takes into account the laws of rock distribution and occurrence, as well as habits and uses of plants, can nature's unity, simplicity, and ultimate beauty be truly reproduced in the garden."⁵

- 1971 The Azalea Loop trail display was increased to 1,900 plants; the Frederic P. Lee Memorial Garden was dedicated.
- 1972 A severe frost damaged a large portion of the camellias after a warm 78°F December day.

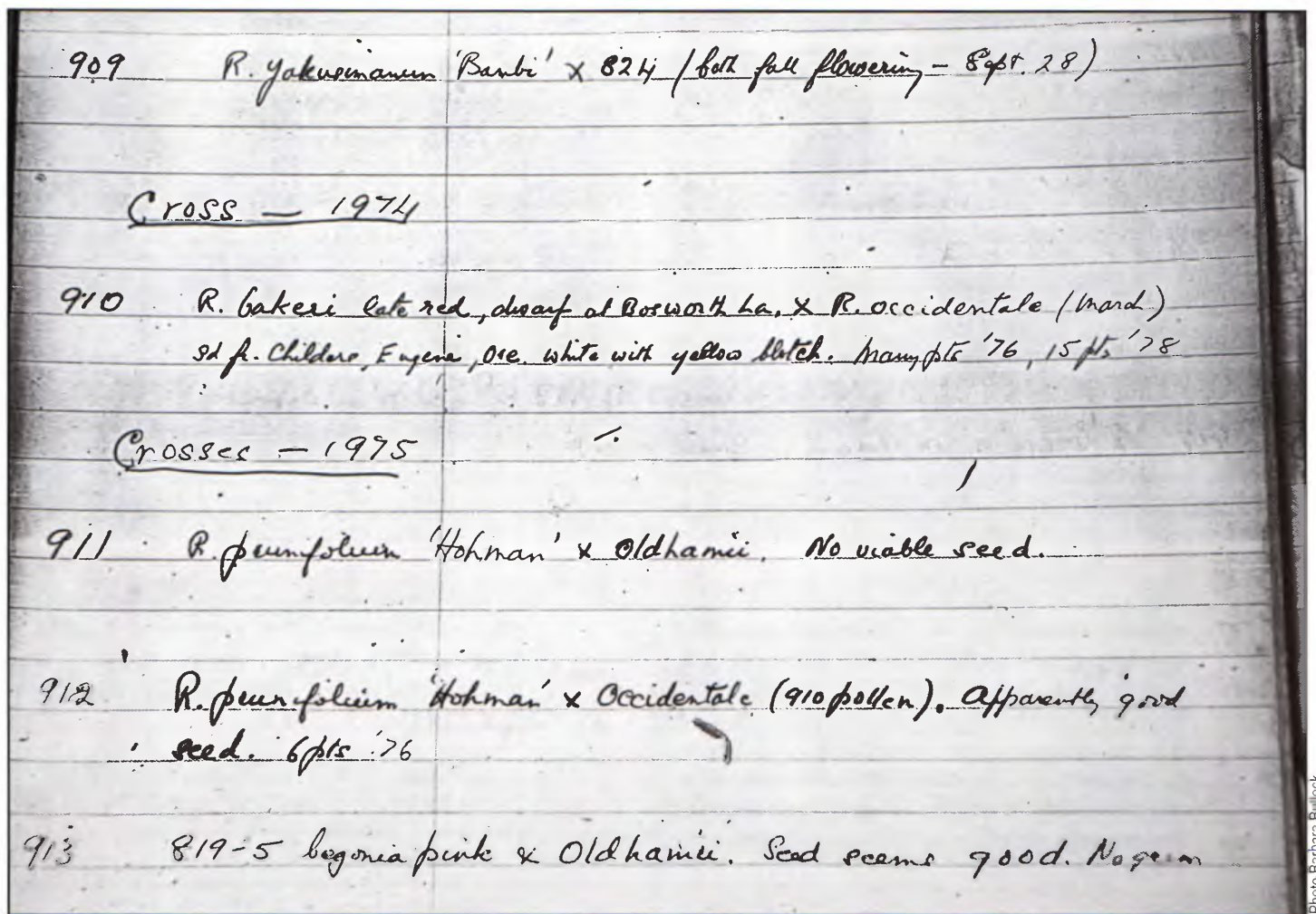
Throughout the years, Skinner surrounded himself with qualified staff whose names are well respected in the horticulture field, such as William Kosar, Gene Eisenbeiss, Fredrick G. Meyer, Theodore Dudley, Frank Santamour, William Ackerman, and Donald Egolf.

*The Boxwood Bulletin*⁶ also includes one of the more comprehensive listings of Dr. Skinner's contributions to horticulture. "He was renowned for his pioneering work on the taxonomy, breeding and distribution of native American

▼ The USNA administration building opened in 1961.



Photo Courtesy United States National Arboretum



▲ An excerpt from Skinner's stud book which is archived at the Morris Arboretum.

azaleas. He designed that gardener's mainstay, the U.S. Department of Agriculture (USDA) Hardiness Zone Map, developed in 1960. In a career spanning 60 years, he published more than 250 research and educational papers in technical journals and periodicals."

*The Holly Society Journal*⁷ stated that Dr. Skinner conducted controlled hybridization with numerous holly species while curator at the Morris Arboretum (1940-1952) which resulted in the holly introductions, *Ilex* 'Lydia Morris' and *I.* 'John T. Morris' named after the founders of the Morris Arboretum. Skinner appreciated the importance of holly as a landscape plant, and always promoted its use in the environment. His foresight and vision was responsible for the holly research program at the USNA with William Kosar and then Gene Eisenbeiss as principal investigators. The authors of *The Holly Society Journal* article suggest, "There is absolutely no question that Dr. Skinner made the National Arboretum what it is today—a leading institution for collections, hybridization, and basic research. While serving as Director of the U. S. National Arboretum, Dr. Skinner brought the Arboretum into national and international focus and fame." Henry Skinner retired from the USNA December 15, 1972.

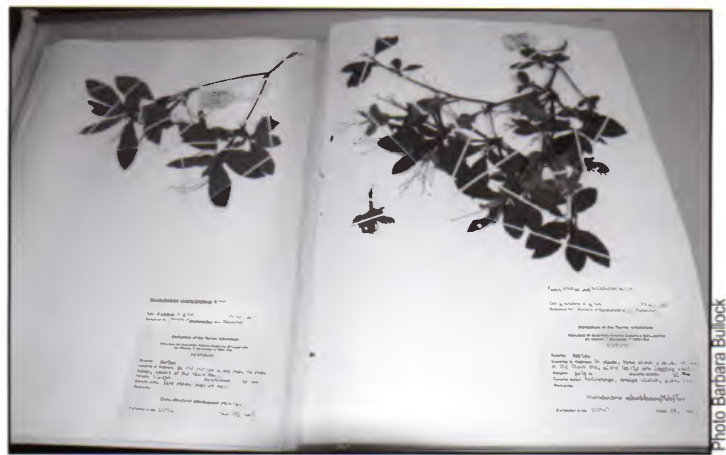
In his memoriam to Dr. Skinner, "Azalea Classic,"⁸ Dr. John Creech reflects on some of the characteristics of his

former colleague and neighbor as both men found serenity in retirement among the mountains and hillsides of Hendersonville, North Carolina, after serving as directors of the USNA. He writes: "Dr. Skinner distinguished himself by developing the research and educational programs of the National Arboretum, including the acquisition of the famous Gotelli dwarf conifer collection, Fern Valley, and the development of the beautiful administration building. Under his leadership, the National Arboretum grew from infancy to a mature institution of national and international stature. Dr. Skinner rarely allowed the ups and downs [of his position] to affect his wry sense of humor and patience."

Creech writes "Prior to [Skinner's] death, he was still carrying on breeding and selection of deciduous azaleas [in Hendersonville] and apparently planned to name some of his most outstanding seedlings." Many of his azalea crosses never made it to the distribution phase, but thanks to his many articles on the native azaleas, the American public is aware of the wealth and beauty of our own native azaleas growing around us. His studbook is available both in its original form at the North Carolina Arboretum and as a copy which I saw at the Morris Arboretum should anyone wish to replicate some of his crosses. The book contains notes and results of crosses which Skinner made from as early as



▲ Skinner's herbarium collection is housed at the Morris Arboretum.



▲ Skinner cataloged more than 8,000 herbarium specimens.

on the section *Pentanthera* in 1993¹⁰.

Dr. Kron's research reveals that some of the assumptions made by Skinner in his field studies may have been incorrect, possibly due to preferential collecting, particularly with the species *R. cumberlandense* and *R. calendulaceum* and with *R. austrinum* and *R. canescens*. Throughout Skinner's writings, emphasis was placed on natural inbreeding among native species resulting in natural hybrid swarms. While this may have been the case in some instances, Kron's research demonstrates through field studies and careful examination of dried specimens, that most species are phenologically and/or ecologically isolated within a local geographic area. We now understand that in some cases hybridization was not necessarily the reason for the observed variation. There was not as much hybridization as previously assumed. Sometimes a variation is due to just forms or variants found within a species. Regardless of the changes in classification, Dr. Skinner provided invaluable documentation of the variation of form and color in the native azaleas. His herbarium collections alone have benefited taxonomists and horticulturists alike.

Dr. Skinner credited Dr. W. H. Camp as well as Dr. J. R. Schramm, director of the Morris Arboretum, as being largely responsible for the initiation of the venture. ('Camp's Red' is discussed in following paragraph.) Skinner began his travels on March 17, 1951 by driving south to Florida to begin his collection of the Florida Pinxter or Hoary Azalea, *R. canescens*, through Alabama to collect the yellow Florida Azalea, *R. austrinum*. Then he traveled west to Texas in hopes of collecting the pink azalea, *R. alabamense* only to find new forms of the Swamp Azalea, *R. viscosum*, and then turned around and went back into Georgia for later blooming forms. This was the method and structure of his travels for the next 21 weeks.

By mid-April, he had traveled up into the hills of central Georgia and collected the Oconee Azalea, *R. flammeum*, and into the coastal plains of South Carolina where he found the southern reaches of the Coast Azalea, *R. atlanticum*. Then he drove northward up the coast to Williamsburg, Virginia, where he discovered and collected the Pinxterbloom Azalea, *R. periclymenoides*. From there he went upland into

1939 until his death in 1984, and includes his work with hollies, boxwood, azaleas, and other genera. The current Morris Arboretum curator, Tony Aiello, recently sent a copy of the studbook to the USNA.

For the Love of Native Azaleas

While studying at the University of Pennsylvania and serving as curator of plant collections at the Morris Arboretum, Skinner undertook a monumental trip to study at close hand all of the eastern North American azaleas in their native habitats. His trip is chronicled in its entirety in the *Morris Arboretum Bulletin*⁹, and reprinted in *The Azalean* in 1986, Vol. 8, numbers 1 and 2. It is also available on-line at the University of Virginia Web site (see endnote).

For 21 weeks in 1951, Skinner drove a Chevrolet delivery truck more than 25,000 miles in pursuit of native azaleas. From this major field study, more than 8,000 herbarium specimens and 500 living plants were collected. The herbarium specimens are now mounted and stored at the Morris Arboretum. Many of these have been annotated by Dr. Kathleen A. Kron while conducting research for her definitive work



Photo Courtesy United States National Arboretum

▲ Skinner, right, at a December 1959 tree planting at the US National Arboretum.

the Blue Ridge Mountains of Virginia to seek darker forms of *R. periclymenoides* by mid-May. He then drove south again to re-collect later forms of previously collected species. On his return to the mountains of Virginia, he collected the Roseshell Azalea, *R. prinophyllum* and headed west into West Virginia to collect more. He headed back north towards Delaware to collect more *R. atlanticum* and by May 21, back to Philadelphia for three days of rest.

Back on the road, he collected the Flame Azalea, *R. calendulaceum*, in West Virginia, North Carolina, Kentucky, Georgia, and Tennessee, stopping from time to time to collect more specimens of earlier species. He found the Cumberland Azalea, *R. cumberlandense* on Gregory Bald, recorded in one of the few mentions of an actual overnight hike away from his truck that he undertook. I found this passage quite enjoyable to read having been there myself. He called the azaleas on Gregory Bald “bewildering and almost unbelievable.”⁶

He wrote: “within this marginal region between trees and grass sod supports a peripheral band of a bizarre collection of azaleas—thousands of plants in every imaginable hue from pure white to pale yellow, salmon yellow, clear pink and orange-red to red.” It is no wonder so many of us have made the trek to Gregory Bald to see these azaleas for ourselves.

From his Kentucky collections, he found some of the best reds of the Cumberland Azalea, which is discussed in Fred Lee’s *Azaleas*¹¹: “‘Camp’s Red’ is the name given for a group of plants on the summit of Big Black Mountain in Kentucky, named in honor of Dr. Wendell H. Camp, who was among the first to recognize the distinctiveness of the

red azalea of the Cumberland Plateau, *R. cumberlandense*, and whose 1936 specimens from this location are now in the herbarium of the New York Botanical Garden.” Dr. Skinner wrapped up his trip by collecting specimens of the Smooth Azalea, *R. arborescens*, the Plumleaf Azalea, *R. prunifolium*, and the Swamp Azalea, *R. viscosum*. Other azalea species that Skinner collected were *R. serrulatum* and *R. oblongifolium*, which Kron has now merged in with *R. viscosum*.¹² An extensive Web site full of information on Henry T. Skinner, his breeding notes, and the details and transcript of his azalea travels is well worth visiting.¹³ American Rhododendron Society members Dr. Sandra MacDonald and George McLellan contributed heavily to the content of the site, and their help was invaluable in gathering information for this article.

Conclusion: “Azaleas have few rivals as subjects”¹⁴

Few of Skinner’s introductions exist today. I personally saw planted groupings of his plants at both the Tyler and Morris Arboretums in Pennsylvania. At the Morris, a sign is erected honoring the former staff member for his contributions. It describes Skinner’s legacy as identifying for the rest of us the versatility and expanse of the eastern North American azaleas.

To David Leach, a respected authority of Rhododendron, Skinner wrote: “It has been fascinating in the extreme to follow species after species through its entire range and watch the transition of characters from one point to another.” In the same letter regarding a lost cultivar of *R. calendulaceum* ‘Michaux’s Yellow’ he wrote: “It would seem a foolish task to seek something under the name ‘Michaux’s Yellow’—nearly all the early large-flowered forms [of *R. calendulaceum*] of the Southern Smokies are good—name one of them any name at all and reproduce it.” In other words, as Henry Skinner knew then, the original ‘Michaux’s Yellow’ was lost as are most of Skinner’s selections today.

Still all is not lost. As long as growers continue to raise azaleas from seed collected from the flowering azaleas of the southeastern United States, beautiful forms will exist. Dr. Skinner wrote in the opening lines of his dissertation: “Azaleas have few rivals as horticultural subjects because of their wide color range and profuse bloom, as well as their relatively easy culture on suitably acid soils [...] the native American azaleas have a range of variation which, in its potentialities, is unequalled in any of the exotic groups.” Many of these potentialities are being realized through the hard work and breeding efforts of the Beasleys, the Dodds, the Mezitt family (Weston Group), the late Gene Aromi, and the Arnesons (whose hybrids I picked up at the Rockville ASA Convention in 2006), as well as others. Dr. John Creech’s final words for Henry T. Skinner seem fitting to be placed here, “We will miss his presence sorely, but the many contributions he made to American horticulture will command our attention for many years to come.”¹⁵

Editor’s Note: Vivian Abney is working toward re-introducing some of Dr. Skinner’s selections at East Fork Nursery.

Barbara L. Bullock is the curator of *Azaleas and Rhododendrons* at the U. S. National Arboretum in Washington, D.C. She was a speaker at the 2008 ASA National Convention.

References

- (1) Kehr, Dr. August E. "In Memoriam, Dr. Henry Thomas Skinner 1907-1984;" *Journal American Rhododendron Society*, vol. 39, No. 1, Winter 1985.
- (2) Author unknown. "Henry T. Skinner," *The Boxwood Bulletin*; April 1985, Vol. 24, No. 4, p. 116.
- (3) Batdorf, Lynn, *Chronology of the U.S. National Arboretum: 1899 to 2007*. Distributed at a volunteer recognition luncheon January 29, 2008; soon to be on the USNA Web site: www.usna.usda.gov
- (4) Skinner, Henry T., *Dedication of the Morrison Azalea Garden*, May 3, 1954, transcript.
- (5) Skinner, Henry T., "The Rock Garden," *New York State College of Agriculture, Cornell Extension Bulletin* #403, 1959, 2nd reprint.
- (6) Author unknown, "Henry T. Skinner," *The Boxwood Bulletin*; April 1985, Vol. 24, No. 4, p. 116. Dr. Skinner was a Charter Member of the American Boxwood Society and a Director from its founding in 1961 to 1979.
- (7) Eisenbeiss, G. K. and T. R. Dudley, *The Holly Society Journal*, Vol. 3, No. 1, Winter 1985; Dr. Skinner started the world-class holly collection at the U. S. National Arboretum.
- (8) Creech, John L., "Azalea Classic," Dr. Henry Skinner (1907-1984) *The Azalean, Journal of the Azalea Society of America*; Vol. 8, No. 1, March 1986, retired National Arboretum Director (1973-1980).
- (9) Skinner, Henry T., "In Search Of Native Azaleas," *Morris Arboretum Bulletin*, Vol. 6, No. 1 & 2, January and April 1955.
- (10) Kron, Kathleen A., "A Revision of Rhododendron Section Pentanthera," *Edinburgh Journal of Botany*, 50 (3): 249-364. 1993. See pp. 329-333.
- (11) Lee, Frederic P., *Azaleas*, Van Nostrand Co., by the American Horticultural Society, 1958, 1965 2nd Ed. Pages 191-205 Chapter on the native species edited by Henry T. Skinner, see page 195.
- (12) Kron, Kathleen A., "A Revision of Rhododendron Section Pentanthera," *Edinburgh Journal of Botany*, 50 (3): 249-364. 1993. See pp. 329-333.
- (13) University of Virginia Web site; contains useful information on Dr. Henry T. Skinner. <http://etext.virginia.edu/collections/projects/rhodo/skinner/introduction.html>
- (14) Skinner, Henry T., Graduate Thesis, *Character Patterns In the Early Flowering Azaleas of the Southern United States*, 1952.
- (15) Creech, John L., "Azalea Classic," Dr. Henry Skinner (1907-1984) *The Azalean, Journal of the Azalea Society of America*; Vol. 8, No. 1, March 1986, retired National Arboretum Director (1973-1980).

Remembering Chinese Horticulturist T.L. Huang

Tadeusz Dauksza —Orland Park, Illinois

T. L. Huang (September 1906 – March 2005) was a senior horticulturist of China best known for ornamental plant breeding. He was a consultant for the China Flower Society, and a member of the Mei Flower (Plum Blossom), *Calycanthus* (in America, *Chimonanthus praecox*) and American Camellia Society.

T.L. Huang was born in Zhejiang Province. He moved to Shanghai along with his father, also another famous horticulturalist in China. In 1908 his father, Y.Y Huang, founded Huang's Plant Farm. T.L. Huang served as the farm's director from 1924 to 1956. During this period, he became an expert in the study of plant horticulture, including the collection, hybridization, and culture of many popular and rare ornamental plants. Cross-breeding on azalea and chrysanthemum was carried out at that time.

In 1948, he and his father published "HUA JING" which was the first monograph of landscape plants after the Qing dynasty in China. While in Shanghai, he also designed and constructed several beautiful private gardens for local celebrities and merchants.

Huang also worked in Longhua Nursery from 1953 to 1973 (which was reconstructed into Shanghai Botanical Garden in 1972). While at the nursery, he collected more than 100 species of native plants, including azaleas, camellias, and peonies. Unfortunately, most of the work with those collections ended with the Cultural Revolution.

Huang retired from Shanghai Botanical Garden in 1973. But his work in the horticulture continued until he passed away in 2005. Cross-breeding of camellias, azaleas, and cymbidiums fulfilled his old age. Many beautiful camellias and azalea hybrids were distributed not only in China but in America and other countries.

Little is known about the Huang evergreen azalea hybrids created by Mr. Huang because most of his work done before the Cultural Revolution in China was lost. One source of information is the documented observations of Col. Ronald C. Vines (Ret.), reproduced from his 1990 catalog on the Azalea Society of America Web site (<http://www.azaleas.org/index.pl/huang.html>). Col. Vines believed the Huang hybrids were the most important hybrid group of evergreen azaleas in existence, in terms of the diverse bloom size and type, foliage, and plant habit.

Pictures of a few Huangs being evaluated by Auburn University are shown on their www.ag.auburn.edu/landscape/Huangpage.html page.

The author expresses his appreciation for the contribution and research performed by Director Hu Yonghong and Ya-Li-Zhang of Shanghai Botanical Garden.

Tadeusz Dauksza is a member ASA Lake Michigan Chapter. His e-mail address is iltkyao@sbcglobal.net.