Griffith Buck: Rose Hybridizer

Griffith Buck believed roses should be as easy to grow as dandelions. During his nearly 40 years at Iowa State he introduced 85 rose cultivars plus 15 geraniums and a heliotrope. His roses are on display in public gardens and enjoyed by home gardeners across the United States and in Canada.

It's hard to pinpoint exactly when Buck first started growing roses. He always credited his interest in roses to a series of letters he exchanged with a Spanish rose grower, Pedro Dot. The letters came from Dot's niece as part of Buck's high school Spanish class assignment to find

a pen pal. Each letter from Spain included a comment or question from her uncle about growing and hybridizing roses. "I had to learn about roses to



answer those letters," Buck said.

Following high school graduation, Buck earned a teaching certificate and waited for a school assignment because Iowa law required male teachers to be at least 21 years old. His classroom experience was later interrupted by World War II. After serving with the U.S. Army he enrolled at Iowa State and earned a B.S., M.S., and Ph.D. in horticulture.

Rose hybridizing at lowa State

The horticulture department Buck joined in 1949 had a 60-year history in rose hybridizing beginning with Joseph Budd in the 1870s and continuing with Thomas Maney and Emil Volz. Many of Maney's introductions were hardy enough for the Midwest but also retained the once-per-season blooming habit and height of their wild rose ancestors.

Building on his predecessors' work, Buck sought to develop cold-hardy, garden-size roses with repeating blooms in a variety of colors. He wanted Midwestern gardeners to have the flowers they admired in hybrid tea roses on plants that didn't need spraying or winter protection. Some have said that Buck was ahead of his time in anticipating today's desire for low maintenance roses.

Buck used the traditional hybridizing method of transferring pollen from one rose to another. To his young niece he explained his work as "playing bee." Some years he made as many as 600 different combinations, each one carefully



recorded in a notebook. From the thousands of unique seedlings that resulted, Buck choose those that appeared most promising. Some years he threw away more than he saved. Older plants were moved from the greenhouse to outdoor test plots. Plants that didn't succumb to frost, drought, or disease were further evaluated for flower and overall performance.

Setbacks ...

Like any researcher, Buck faced challenges. One of the earliest involved finding parent plants that produced enough seed to continue the study. The solution came as a gift plant from a German rose hybridizer. Weather and rabbits did their predicted damage. Visitors who helped themselves to rose hip snacks swallowed the seeds that might have produced desirable plants.

One challenge Buck faced required a series of doctor's visits. It began with a sneeze that became multiple sneezes. Anyone who has allergies might have anticipated the test results. When medical staff suggested Buck find a new hobby that didn't involve rose pollen, he asked for an alternative solution. As a result, he agreed to get shots three times a week, every week, from February through October for as long as he worked with roses. All rose hybridizers share the problem of turning a single unique and promising plant into the dozens needed to continue testing in multiple locations. A common solution involves grafting a bud from the original onto a similar plant called a rootstock. Microscopic research of plant cells helped Buck better understand grafting. He also introduced several rootstocks that were adopted by other growers.

... and Successes

Thirteen years after agreeing to "make new plants" Buck registered his first roses with the American Rose Society.

His 1973 patent for 'Red Sparkler' (originally named 'Rippled Velvet') was the first plant patent granted to Iowa State. It earned Buck an invitation to the National Inventors' Week Exposition



sponsored by the United States Patent Office—the first time plants were included.

Buck's second plant patent went to a bright pink rose he nearly threw away—'Carefree Beauty'TM.

In 1984, Buck filed a patent application for 'Blue Skies'. To many eyes it appeared more lavender than true blue but it was closer to blue than any hybridizer before him had produced.

A final challenge

Although Iowa State University discontinued rose hybridizing research following Griffith Buck's retirement in 1985, researchers and growers in Iowa, Minnesota, South Carolina, and Texas have cooperated to continue the work he began and have introduced six additional cultivars. Wondering what is around the corner keeps us going. There's no guarantee of success. If I could guarantee that, I wouldn't need to do the research. I'd already have the answer. It's the same in all fields of science. —Griffith Buck

Griffith Buck (1915-1991)

April 19, 1915—Born in Cincinnati, Appanoose County, Iowa

1932—Graduates from Rockford Senior High School, Illinois

1936—Joins American Rose Society

1936 to 1942—Teaches school in Appanoose County

1942 to 1945—Serves in U.S. Army

January 1946— Enrolls at Iowa State

1947—Marries Ruby Costello

1949—Joins Iowa State horticulture extension staff and restarts rose breeding program

1953—Earns Ph.D. from Iowa State

1962—Registers four rose cultivars with the American Rose Society

1963-76—Registers 28 rose cultivars and releases three geranium cultivars and a heliotrope

1977—Exhibits rose and geraniums at U.S. Patent Office's National Inventor's Exposition; registers 'Carefree Beauty'™

1978-1983—Registers 14 rose cultivars, including 'Blue Skies'

1984—Attends International Rose Propagation Seminar in Seville, Spain; meets Pedro Dot's son; registers 36 rose cultivars

1985—Retires from Iowa State; registers five rose cultivars

1988-89—Registers two rose cultivars

March 28, 1991-Dies in Ames, Iowa

For more information on Griffith Buck and other horticulture topics

Visit these Web sites:

ISU Extension Distribution Center www.extension.iastate.edu/store • See especially: *Caring for Roses in Iowa*, RG 310 (Offers tips for planting, watering, fertilizing, and general care)

The Garden Guide to Midwest Annuals and Perennials, PM 1966 (Includes photos of and information about 60 Buck roses)

The Griffith Buck Roses, RG 309 (Includes information about more than 30 Buck roses plus a list of potential mailorder sources)

ISU Horticulture Extension www.yardandgarden.extension.iastate.edu

ISU Horticulture History www.hort.iastate.edu/about/history.html

Reiman Gardens www.reimangardens.iastate.edu

Contact an Iowa State University Extension office All are listed at

www.extension.iastate.edu/ouroffices.htm

Call ISU Hortline:

515-294-3108 M-F, 10 a.m.-noon and 1-4:30 p.m.

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