

PIONEER LEADERS IN PLANT PATHOLOGY: CYNTHIA WESTCOTT, PLANT DOCTOR

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Cynthia Westcott, a New Englander, was born and raised in North Attleboro, a small town in Massachusetts. She was born on June 29, 1898, with a proud ancestry whose maternal lines traced to Roger Williams and whose paternal lines traced to Stukely Westcott, a companion of Roger Williams in settling Rhode Island in 1636. Her early interest in the outdoors and plants was enhanced by two farms owned by the family. One farm was located about a mile from their home in North Attleboro, and the other, on Chopmist Ridge, was located 30 miles away in Scituate, Rhode Island. To reach Chopmist Ridge the Westcotts took a train to Providence, then a long streetcar ride to the village of Scituate. From Scituate they hired a rig at the livery stable to drive another hour to reach the farm. The trip was made on weekends, and during the winter soapstones were required to prevent freezing.

The Chopmist Ridge Farm consisted of 300 acres and Cynthia loved every inch of it. Here she could lie for hours listening to the winds sighing through the pine trees; this was her early initiation to nature. She acquired her love for roses from the great fragrant bunches of hybrid perpetuals that a neighbor brought whenever she was sick as a child, usually during the last week or two of school. But sickness did not interfere too much with school, since she was valedictorian of her North Attleboro High School class in June 1916. Her first exposure to lime sulfur, which became so important to her as dormant sprays in her plant doctoring experiences, was its use for dipping goats on their farm in the spring.

Cynthia Westcott's dream was to go to Wellesley. Her intent was to major in German and Latin; however, two sciences were required and Phila Helt, her high school English teacher (a graduate of Wellesley in 1913) encouraged her



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to choose botany as one of these courses. She did so and fell under the tutelage, inspiration, and guidance of Dr. Margaret Ferguson. This freshman course that stimulated her interest in botany was the most enticing she had ever experienced, and she was lost from the fields of language.

Cynthia Westcott knew she wanted to continue in advanced studies at Cornell University because Dr. Ferguson had received her degree from that university in science. However, only a few women were conducting graduate work at that time and Cornell had few assistantships available for women. Cynthia taught science for one year at Northboro High School in Massachusetts and finally received an assistantship offer in Cornell's department of plant pathology. Since the Cornell botany department had none to offer, she took it. Thus, her entry into plant pathology was pure chance, but she was soon hooked on plant pathology through the influence of Professor H. H. Whetzel, head of the department of plant pathology, whose advice and encouragement she greatly respected, and Dr. Louis M. Massey, who was chairman of her graduate committee. Professor Whetzel offered her a full-time job as a research assistant on funds provided by the Heckscher Research Foundation.

Cynthia was the only woman in a department of 40 men and "she rather liked that" (2). She was assigned jobs that were normally assigned to women in those days: responsibility for the materials room, preparing tea each afternoon, and packing picnics for collecting trips. But Cynthia Westcott used all these experiences to prepare herself for her profession. Her responsibility for the materials room required her to prepare microscope slides for "Prof" Whetzel's famous course in plant pathology as well as to dry, press, and preserve specimens. For study each student chose fifteen diseases representing all types of plant pathogens. Cynthia became familiar with many times that number while making the specimen preparations and mimeographing sheets on the life histories of organisms and the symptoms and control of the diseases they cause. The laboratories were located in the basement of Bailey Hall, where the Cornell University auditorium of 3000 seats was located. Practice on the organ often interrupted lectures and shook glassware; "when the organ was played, dust fell down from the ceiling and contaminated the cultures." Thus, cleaning procedures were difficult. These experiences served her well in preparing and stimulating her to become a plant doctor par excellence.

Her abilities to entertain were built into a device for teaching as well as socializing called Rose Day, which the Plant Doctor held each year. On Rose Day Cynthia opened her gardens to the public to view her test plots and admire her roses during their peak of bloom. She served punch and cookies for her guests, who sometimes numbered more than 700. Cynthia Westcott learned to be a businesswoman during those years at Cornell. She lived for a time in the Sigma Delta Epsilon house, the graduate women's scientific sorority. It was there she planted her first rose garden and her first test garden for sprays and

dusts. It was there also that she hung a fine Cape Cod hammock on the porch. She had purchased the hammock out of her meager graduate assistant's salary of \$750.00 a year and then proceeded to rent it—so many hours in the hammock in exchange for so much garden work.

A close friend of Cynthia Westcott at Sigma Delta Epsilon was Irene Dobroscky, an entomologist. Irene was a lively graduate student whose study of the insects in bird nests necessitated their climbing trees to collect specimens. Irene later became Cynthia's business partner in plant doctoring.

Cynthia's research for her doctoral dissertation related to brand canker of roses caused by *Coniothyrium wernsdorffiae* and she was awarded her Ph.D. degree from Cornell University in 1932. However, she soon learned that there were few, if any, jobs available for women. She finally took a part-time assistantship as a bacteriologist with the New Jersey Experiment Station at Rutgers University. In her spare time, she took courses at Rutgers, one of which was on microbiology taught by Dr. Selman Waksman. Soon she fell again under the influence of her highly respected "Prof" Whetzel, who strongly encouraged her to go into practical plant doctoring. Her good friend Irene Dobroscky did not have a permanent job either, and in 1933 they decided to open a partnership as plant doctors at 96 Essex Avenue, Glen Ridge, New Jersey. The first plant doctoring was done at the Campus Inn for Dr. Waksman, and thus it could be said that the discoverer of streptomycin was the Plant Doctor's first client. The business was operated as a medical doctor's was in those days. She made house calls to diagnose problems, treating roses and other ornamentals in her clients' gardens. During winter months she wrote, lectured, and traveled. In 1934 Irene Dobroscky took a job with the Pennsylvania Salt Manufacturing Company and Cynthia Westcott continued as a Plant Doctor until retirement in 1962, when she moved to a retirement community near Croton-on-Hudson, New York. During her 30 years as a Plant Doctor she gave nearly 1000 lectures, traveling to every state in the United States and collecting specimens along the way.

The specimens provide mementos of the many marvelous places she visited. In Cynthia Westcott's own words, "I like my specimens, for I've had so much fun getting them. The aphids on oleander recall a lovely week in Savannah. They were from the patio of the comfortable Hotel de Soto, headquarters while I taught a short course, had a wonderful Sunday at Wild Heron Plantation, saw Judge Solomon's camelias. The bagworms came from dead evergreens put out for the trash man to collect on a sidewalk in Houston. The earwig is my memento of a beautiful garden in Seattle; the cottony-cushion scale is from a rose bush beside a lake in Winter Park; the rose rust means happy days in California" (4).

Cynthia Westcott had a great love for Cornell and for her beloved "Prof" Whetzel. She felt that a basic ingredient of a good plant pathologist is recogniz-

ing how to learn from plants. She said, "I think there has not been a day in all the years I have been working in gardens when plants have not taught me something" (4). In the dedicatory statement to "Prof" Whetzel in her *Plant Disease Handbook*, she said, "He taught me how to learn from plants and sent me forth to doctor them" (3).

Among Cynthia Westcott's famous clients were Helen Hayes, the Maxwell Andersons, and the Milton Caniffs. She taught garden courses at Macy's, special clinics at Bambergers, and special courses at the New York Botanical Garden and the Brooklyn Botanical Garden. Her articles appeared in numerous garden magazines; she wrote regular columns in the *New York Times* and *Home Garden* and contributed to the book published by *Home Garden* entitled *Ten Thousand Garden Questions Answered*. Clients were often referred to her by her many friends and colleagues associated with experiment stations and universities around the country. In the midst of her busy schedule, in 1943 Cynthia Westcott was called upon by the U.S. Department of Agriculture to work temporarily in Mobile, Alabama, on a devastating disease of azaleas, called azalea flower spot, caused by *Ovulinia azaleae*. The disease had become economically important throughout the South, and nurserymen as well as merchants were suffering because of its serious effects on tourism. Congress had allocated a special appropriation for this work, since Dr. D. L. Gill had gone into the army during World War II and Dr. J. F. L. Childs had been transferred to work on citrus in Florida. Someone had to carry on work on this azalea disease, and Dr. Cynthia Westcott was highly recommended by her professional colleagues. When she finished her degree at Cornell and took their exam, the Civil Service had indicated that there was "little or no demand for female eligibles"; now 11 years later they were calling on her for help.

Cynthia Westcott accepted the challenge. She was able to culture and identify the fungal pathogen in the disease and to develop a chemical treatment that saved the blooms. She was one of the first plant pathologists to control a disease with the new class of fungicides, disodium ethylene bisdithiocarbamates, now known worldwide as Zineb and Maneb. Equally important as solving the problem, she communicated to the public the procedures for control. "Prof" Whetzel praised her in a letter concerning her success, "It is with a good deal of pride that I learned that one of my old students and assistants has put it over the boys who have heretofore worked on azalea blight. The Cornell training does show up, doesn't it? Your personal experience as a practical plant pathologist has also greatly contributed to your success on this problem. It is not enough to solve a problem of this kind. You have the spirit and technique for getting your solution before the public; that is quite as important as the research work itself" (4).

Articles have been written about the Plant Doctor in *Mademoiselle*, *Reader's Digest*, and *This Week*, the Sunday magazine in newspapers all over the

country. *The New Yorker* honored her with one of their famous profiles in 1952. J. G. Horsfall & E. B. Cowling honored her as well by dedicating Volume 4 of their book, *Plant Pathology: An Advanced Treatise*, to her. Their dedicatory comments read: "To Cynthia Westcott, the prototype practitioner of plant pathology, and all others who have made plant pathology useful" (1). Cynthia Westcott willingly shared what she learned from plants with the public in several books: *The Plant Doctor*, *Anyone Can Grow Roses*, *Are You Your Garden's Worst Enemy?*, *Garden Enemies*, *The Gardener's Bug Book*, and *The Plant Disease Handbook*. She also wrote her autobiography, *Plant Doctoring is Fun*.

Cynthia Westcott was a member of numerous professional societies and organizations, including the American Phytopathological Society, the Entomological Society of America, the American Association for the Advancement of Science, Sigma Delta Epsilon, and the American Horticultural Council. The Northeast Division of the American Phytopathological Society honored her with their Award of Merit in 1969, and the American Phytopathological Society appointed her a Fellow in 1973. She served on the Board of Directors of the American Horticultural Council, on the Board of Directors of the National Council of State Garden Clubs, and as Director-at-Large and Consulting Rosarian of the American Rose Society. Her interests were broad but her love centered on roses. The Garden Club of New Jersey gave her its horticulture award for 1956, a silver medal, for "promoting the rose and its culture all over the United States." In 1975, the American Rose Society honored her at their national convention with a presentation called "This is Your Life, Dr. Cynthia Westcott," and the Jackson and Perkins Company named a hybrid tea rose "Cynthia" in her honor. Rose Day, a special day each year when she opened her home and office at Glen Ridge to the public, endeared her to many. She freely shared her knowledge and her hospitality with the general public and, in her words, "what she learned about gardens, she taught to gardeners throughout the country." Cynthia Westcott, the Plant Doctor, died on March 22, 1983, in North Tarrytown, New York. However, she will long be remembered for her dedicated efforts to help people keep plants healthy.

Literature Cited

1. Horsfall, J. G., Cowling, E. B. 1979. *Plant Disease. An Advanced Treatise*, Vol. 4. New York: Academic. 466 pp.
2. Houser-Shea, J. 1980. Cynthia Westcott, the plant doctor. *Cornell Countryman*. 77:10-11
3. Westcott, C. 1971. *Plant Disease Handbook*. New York: Van Nostrand Reinhold. 843 pp. 3rd ed.
4. Westcott, C. 1957. *Plant Doctoring is Fun*. New York: Van Nostrand Reinhold. 280 pp.