William Cowperthwaite Snyder, 1904-1980 S. N. Smith, A. H. Gold, and J. R. Parmeter



June 4, 1980, was a typically busy and happy day for Bill (Professor W. C.) Snyder. He had just returned from four months of travel to Central America, Brazil, Taiwan, and Korea, where he had been invited as a consultant on diseases of cereals, coffee, bananas, and ginseng. On his return to the Department of Plant Pathology in Berkeley, he was bursting with enthusiasm and research ideas. After visiting with friends and colleagues, he and his associates reviewed the results of experiments on

methods to test the susceptibility of banana cultivars to newly discovered strains of the banana wilt *Fusarium* and made plans to examine cultures of *Fusarium* and other fungi they had recently obtained from coffee in South America.

Bill then lunched with another former student and now manager of a large banana plantation in the Philippines; they discussed new Fusarium isolates found attacking previously resistant banana cultivars in that country. He also arranged for and attended a meeting between university officials and a young Central American woman who wanted to study chemical engineering at Berkeley.

After this full day, Bill spent some time gardening and then had a joyous reunion with his family, which had assembled to welcome him back from his months of travel. That night, near the end of his ninth year as an Emeritus Professor, Bill died quietly in his sleep.

In many ways this last day epitomized Professor Snyder's life, his devotion to his family and his students, his enjoyment of and sensitivity to friends and colleagues, his engrossing interest in plant pathology, and his career-long interest in the genus Fusarium were always evident. His innovative research, his service to his department and to his profession, and his wide travels brought him numerous honors, but it is his qualities as a man that remain most vivid in the memories of his students, colleagues, and friends.

William Cowperthwaite Snyder was born July 26, 1904, in Berkeley, California. He attended Berkeley public schools and then the Davis and Berkeley campuses of the University of California. After receipt of a B.S. degree in 1927, he went to the University of Wisconsin where he studied with J. C. Walker. For his thesis, he studied the wilt of peas caused by the fungus then known as Fusarium orthoceras v. pisi. His demonstration that the fungus spread faster in some soils than in others was one of the earliest recorded observations of disease suppressive and conducive soils.

After completion of the Ph.D. in 1932, he obtained a position with the Department of Plant Pathology at the University of California in Berkeley, and he married Alice Lindberg, whom he had met in Wisconsin. In his new job, he was responsible for diagnosis and control of vegetable diseases, which soon involved further collections of Fusarium spp. Several isolates, two of which caused a root rot of squash, were sent to Dr. H. W. Wollenweber for identification. The squash isolates were identified by Wollenweber as two distinct species, despite the fact that the two isolates caused the same disease and could be mated. His interest in the genus Fusarium whetted, Bill obtained a National Research Council Fellowship to study for one year in Wollenweber's laboratory at Berlin. During that year, the Snyders lived in Wollenweber's home. Through the day, Bill studied the large culture collection. In the evenings, Dr. Wollenweber and Otto Reinking discussed their pending monograph Die Fusarien which was published in 1935. Bill felt privileged to have had such a learning experience and greatly admired the man who brought the genus Fusarium out of chaos by orderly collection and study of

When he returned to Berkeley, he began a collaboration with H. N. Hansen that was to last over 25 years, until Dr. Hansen died in

1960. During these years, they and their students studied literally thousands of isolates. A variety of techniques were developed to analyze variability, genetic studies were undertaken, distinctions were made between compatibility and sex, heterothallism, and the genetic basis of nonallelic sex characteristics was demonstrated. These studies led eventually to the conclusion that the number of Fusarium species should be reduced to nine.

Concomitantly with these taxonomic studies, Bill and his many students were exploring new areas of pathogen biology and epidemiology: the basis of crop rotation effects, the effects of crop residues and soil amendments on pathogen survival, factors affecting propagule conservation and germination, and other aspects of pathogen biology that could be brought to bear on the development of controls. These studies and continuing collection of Fusarium spp. took Bill and his students to many parts of the world. Wherever he traveled, he made friends. He was especially interested in seeking out promising and deserving young scientists and arranging for them to further their education at Berkeley or elsewhere. Many plant pathologists around the world owe their careers to Bill's persistence in recognizing and encouraging talent.

Professor Snyder received many honors and awards in his lifetime. Space permits listing only a few (President: Pacific Division, APS 1949; APS 1959; Pacific Division, American Association for the Advancement of Science 1967-1968; Chairman: Department of Plant Pathology, UCB 1962-1970; Vice-President: Eighth International Botanical Congress 1954; APS 1958; International Congress of Plant Pathology 1968-1969; Representative: Western to American Mycological Society 1949-1950; APS to National Research Council 1961-1964; Pacific Division APS 1965-1968; APS to Pacific Science Congress 1966; Ruth Allen Award, APS 1968-1969; Certificate of Merit: Caribbean Division, APS 1972; and Mediterranean Society of Plant Pathology 1972). He will be remembered as a warm and stimulating friend and as a major figure in the development of modern plant pathology. He is survived by his wife, three daughters, and six grandchildren.

The 20th meeting of the Caribbean Division of APS (a division he helped found) was dedicated to the memory of Bill Snyder. The feelings of the group were expressed by the poem written and delivered by Dr. E. E. Trujillo (an English translation is given here).

I

You departed in silence
Without even Good-bye
You light and hope
Of the sick plants
You incomparable teacher that framed
The Philosophy of your science
Throughout the corners of the world

II

And you journeyed into silence
In this your last trip
As plant pathologist of space
Leaving in this Caribbean Division
A void so huge...
That nobody can fulfill

III

But we rejoice in the memory
That you are eternal
Because your ideas will be seeded
Diligently by all your students
Spreading them throughout the four cardinal points
So that you will be immortal
And as you journey in the silence
We say to you good-bye.