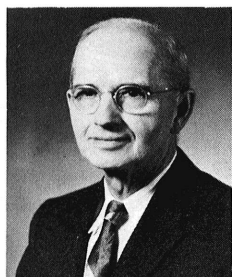


## Samuel George Lehman (1887-1973)

Robert Aycock and Arthur Kelman



Samuel George Lehman, an authority on diseases of cotton and soybeans, died in Raleigh, North Carolina, on 27 August 1973. He was born 25 March 1887 near Defiance, Ohio. He was one of six children (four sons and two daughters) born to George Nathaniel Lehman and Mary Partee Lehman. He spent the first 23 years of his life on a farm with his parents. His

elementary education was obtained in a one-teacher school near his birthplace. He spent two years at Defiance College, Defiance, Ohio, and then taught for three years in nearby country schools of Defiance County.

In September, 1910, he enrolled at Ohio University (Athens) and graduated from that institution with the degree of Bachelor of Science in Education in 1915. He came to Raleigh in September, 1915, as a graduate student and instructor in the Department of Botany of North Carolina State College of Agriculture and Mechanical Engineering (now N.C. State University). He received an M.S. in Botany from N.C. State College in June, 1917, and his Ph.D. degree in Plant Pathology and Physiology from Washington University (St. Louis) in 1923. His professor at Washington University was Dr. Benjamin M. Duggar.

His entire scientific career except for a one-year leave of absence to complete research on his doctorate at Washington University was spent at N.C. State University. During this period he taught a broad range of courses in botany, mycology, and plant pathology. He was also a member of the staff of the North Carolina Agricultural Experiment Station from 1923 to 1954 when he retired.

His research interests were mainly directed to the cause and control of diseases of cotton, soybean, and tobacco. The results of his research were published under more than 60 titles. Dr. Lehman was the first to demonstrate that suitable exposure of cotton seeds to dry heat would free them of internal infection by the cotton anthracnose fungus. He was also the first to show that the lesion nematode (*Pratylenchus* sp.) was the primary causal agent of the brown root rot disease complex of tobacco in North Carolina. The full significance of his work on this disease in 1931 was not recognized for many years. In a comprehensive study of tobacco mosaic published in 1934, he showed that the virus survived the winter in tobacco roots, thus providing an important source of

primary inoculum. He tested several hundred chemical compounds experimentally to determine their value in control of seed-borne diseases of cotton, soybeans, and corn. The most effective of these materials became widely used in general farm practice in the southern United States.

His career was characterized by complete dedication and conscientious effort toward his teaching and research responsibilities. He was a leader in the application of statistical design for seed treatment analysis; all his field experiments were thoughtfully planned and completed with meticulous attention given to detail and accuracy.

In any review of the early literature on soybean diseases in the United States, key papers by Dr. Lehman will be noted on the following diseases: *Pythium* root rot, bacterial pustule, downy and powdery mildews, anthracnose, pod and stem blight, frogeye leaf spot, purple seed stain, and *Septoria* brown spot. A number of these papers include the first detailed description of the causal organisms on soybean in the United States.

Dr. Lehman was a long-time member of the Botanical Society of America, The American Phytopathological Society, The American Association for Advancement of Science, and the honorary fraternities of Sigma Xi and Phi Kappa Phi. On two separate occasions (in 1926 and 1942) he served as President of the Southern Division of The American Phytopathological Society and also as a representative of the Southern Division on the Council of APS (1947-1948).

His graduate students included the following: R. G. Henderson (M.S. 1928), George Fowler (M.S. 1939), William F. Alston (M.S. 1941), Robert Aycock (M.S. 1942), Harry Murakishi (M.S. 1945), Arthur Kelman (M.S. 1946), and J. H. Graham (Ph.D. 1950).

His hobbies consisted of vegetable gardening, flower culture, collecting fungi, and wood-shop work. After retirement from teaching and research, he added a new kitchen and bathroom and dining areas to his home, doing the masonry and carpentry work himself.

He was a deacon in the local congregation of the United Church of Christ and served as secretary of the Business Board and clerk of congregational meetings for several years.

He was married on 22 August 1916 to Audrey Gibson of Athens, Ohio. Mrs. Lehman followed him in death on 7 October 1973. They are survived by a son, John Robert; two daughters, Carolyn Dean, and Mrs. Donna Lehman Heiser; five grandchildren; and a brother, Mr. B. C. Lehman of Cincinnati, Ohio.