

Otis Freeman Curtis

February 12, 1888 — July 4, 1949

Otis Freeman Curtis, Professor of Botany at Cornell University, died unexpectedly and suddenly on July 4, 1949, while on vacation at Chatham on Cape Cod, Massachusetts. He is survived by his wife, two sons, a daughter, six grandchildren and two sisters.

Dr. Curtis was born in Sendai, Japan, on February 12, 1888, where his father, a minister of the Congregational Church, was active in missionary work. He left Japan at the age of seven and received his education in various parts of the United States, finally entering Oberlin College in 1907 and receiving from Oberlin the A.B. degree in 1911. While at Oberlin he came under the influence of Susan Percival Nichols and Frederick O. Grover, Professors of Botany in that institution, who undoubtedly stimulated young Curtis to enter the field of botany. At Oberlin he held the Oberlin Alumni Magazine Scholarship and during the summers of 1911 and 1912 the Oberlin Botanical Fellowship at the Marine Biological Laboratory at Woods Hole, Massachusetts.

Dr. Curtis entered Cornell in 1912 with his major in what was then the Department of Plant Physiology and which in 1913 became a part of the newly created Department of Botany in the College of Agriculture at Cornell. He obtained the Ph.D. degree from Cornell in 1916. In 1913, while still a graduate student, Curtis became an Instructor in Plant Physiology. He continued in this position until July 1917 when he was made an assistant professor. He became Professor of Botany in 1922, a position which he held until his death. During the year 1926 Dr. Curtis was an exchange professor at the University of Leeds (England) and in the summers of 1930 and 1931 he was a nonresident Professor of Botany at Ohio State University.

At Cornell teaching occupied a large share of Dr. Curtis' time, nevertheless, through great diligence he published about thirty papers dealing chiefly with vegetative reproduction, translocation, temperature and water relations of plants. The name of Dr. Curtis is generally associated with the subject of translocation of solutes in plants. His monograph on the subject brought together in one volume a critical appraisal of the work of others, a summary of his own contributions, deductions concerning the tissues involved and the mechanism involved in translocation. This monograph redirected research in this important field. He pioneered also in emphasizing the relation of re-radiation and the relative non-importance of transpiration in controlling the temperature of plants.

For many years Dr. Curtis, as senior author, and Dr. Daniel G. Clark had been working on a textbook on Plant Physiology. Fortunately, shortly before the death of Dr. Curtis the manuscript was completed.

While contributions of Dr. Curtis to the advancement of knowledge in plant physiology were numerous and important, it is probable that his greater contributions were in teaching. Alternating for many years with Dr. Lewis Knudson in teaching an advanced course in plant physiology which ran throughout the year, he taught anywhere from thirty to sixty graduate students who majored in the plant sciences and soil technology. These men, now scattered throughout this country and in foreign lands where many hold responsible positions in the field of science, recall with pride their association with Dr. Curtis. Throughout his teaching he stressed the dynamic use of factual material in the solution of problems rather than memorizing facts. In his conferences with students he emphasized the importance of critical reading and of analyzing and evaluating the evidence for or against an hypothesis. He took special delight in arousing a group of students to an argumentative discussion of a particular problem. His ideal for teaching was epitomized in his presidential address to the American Society of Plant Physiologists in 1938 which bore the interesting and revealing title, "Education by Authority or for Authority?" As a result of his teaching methods, graduate students during and after their days at Cornell were often heard to say "He taught us to think".

In addition to his duties within the Department of Botany Dr. Curtis devoted many hours to important committees of the College of Agriculture and the University. Committee work to Dr. Curtis was a serious and important phase of university work and he devoted effort to whatever problem was under consideration. At the time of his death he was Chairman of the University Committee on the "Evaluation and Improvement of Instruction", a subject in which he was greatly interested. For many years he was a valuable member of the General Committee of the Graduate School and for the last five years served as secretary of the Graduate School. He took an especial interest in the Graduate School; perhaps because of the fact that in addition to three or four graduate students who majored with him each year there were from forty to sixty graduate students who were registered with him for a minor subject.

It is needless to add that the passing of Dr. Curtis has left a void in the Department of Botany, and his loss is felt by a host of devoted friends in the University. Rarely does one find a man with such high ideals and with such a desire to serve. In this sudden and unexpected passing of Dr. Curtis, Cornell University has lost one of its most earnest and devoted scholars and the field of botany one of its outstanding scientists. Internationally recognized as a leader in his field, his passing at the height of his power is especially regrettable.

C. W. Jones, Lewis Knudson, L. H. MacDaniels