

Laurence Howland MacDaniels

October 21, 1888 — June 18, 1986

Dr. Laurence Howland MacDaniels, “Dr. Mac,” as he was known by all, was born in Fremont, Ohio. He earned the Bachelor of Arts degree at Oberlin College in 1912. While he entered Cornell in the fall of 1912 to pursue graduate studies, he had earlier visited the university as a member of Oberlin’s champion football team. He was subsequently elected to the Oberlin College Athletic Hall of Fame for his part in the team’s achievements. In his first year at Cornell he held an assistantship with the farm course in the Department of Entomology and in the next year one in botany. He served as an instructor in botany from 1914 to 1917. He received his doctorate in 1917. The title of his thesis was “*The Histology of the Phloem in Certain Woody Angiosperms.*”

From 1917 to 1919 he worked as a member of the Botanical Raw Products Committee of the National Research Council and for the Bureau of Aircraft Production, where his technical knowledge of wood structure enabled him to provide guidance in the selection of types structurally sound for propellers and other aircraft parts. In 1919 he returned to Cornell as an assistant professor of pomology and in 1923 was promoted to professor. He taught courses in pomology and conducted research on the basic aspects of the pollination of apples, tree wounds, and bracing and on the anatomical aspects of pollination and of flower and fruit abscission. In 1940 he was appointed head of the Department of Floriculture and Ornamental Horticulture, a position he held until his retirement in 1956, at which time he was appointed professor emeritus. During World War II, under Dr. MacDaniels’s leadership, the department focused its efforts on rubber production from American plant species, the use of plant materials for camouflage, and food production through the Victory Garden Program. Dr. MacDaniels was active in organizing the Victory Garden Council of Greater New York and served as the coordinator of the Victory Garden Program for the college.

A colleague of Liberty Hyde Bailey for many years, Dr. MacDaniels greatly admired “the Father of American Horticulture” and spoke often of his conversations and interactions with him. He worked closely with Dr. Bailey on many projects and served on the Bailey Hortorium Advisory Committee in its formative years. He was also a close associate and personal friend of Dr. Bailey’s daughter, Ethel Zoe.

Dr. MacDaniels took leave of the university from 1919 to 1921 and, with Mrs. MacDaniels, did relief work with Armenian refugees in Turkey through the American Committee for Relief in the Near East. During his sabbatical leave of 1926-27 he was associated with the Bishop Museum of Honolulu to make a botanical survey of the

distribution of the fe'i banana as it related to Polynesian migration. In 1949 he continued his survey in newly opened areas such as Caledonia, the New Hebrides, and Canton Island. The herbarium of the Bailey Hortorium was greatly enriched by his plant collections during this period. From 1943 to 1945, once again on leave, he served in the Beka Valley of Syria as director of agricultural extension for the Near East Foundation.

In retirement Dr. MacDaniels continued to be very actively involved in horticulture. From 1957 to 1959 he served as visiting professor of horticulture at the College of Agriculture, University of the Philippines at Los Baños. There he worked to improve fruit, vegetable, and ornamental crops and taught elementary horticulture. In 1960 he became the adviser for nut crops in the Technical Assistance Program for Yugoslavia with the objective of improving the culture of walnuts, filberts, almonds, and chestnuts. He returned to Yugoslavia for six months in 1961-62 as adviser for small-fruits production. There followed in 1964 a four-month assignment as a technical adviser for fruit crops on the Montana State University team at Patzcuao, Michoacan, Mexico, which had the mission of establishing an experimental and demonstration station for temperate-zone fruits. Subsequently Dr. MacDaniels was deeply disappointed when he was informed he could no longer receive foreign assignments because of his age. But he was by no means idle during the next twenty years, as attested by the three-page bibliography of articles appearing in scientific publications reporting on research done primarily on nuts and lilies during this period. During that time he was a pioneer and, until his death, the leading authority in the study of walnut allelopathy.

This chronology identifies only the major involvements of Dr. MacDaniels's long career. In his many capacities and roles he made outstanding, substantive contributions to his profession, to his university, to Ithaca, and, indeed, to the world community as a whole.

He was one of the few all-around horticulturists in the last twenty-five years. Whereas most faculty members, especially researchers, are increasingly specialized in one or so narrow aspects of horticulture, Dr. Mac was knowledgeable in garden flowers, trees and shrubs, turfgrass, weed science, greenhouse crops, fruits, vegetables, nuts, native plants, and taxonomy and in many other fields. He wrote articles in all those areas.

He was a prolific author but probably best known for the book on plant anatomy co-authored with Dr. A. J. Eames, *Introduction to Plant Anatomy*, which was first published in 1925 and completely revised in 1954. It was the standard text and reference book on the subject for many decades and remains a major reference. Dr. Mac's research of 1921-25 led to several classic *Cornell Bulletins* and *Memoirs* based on his studies of the histology of the tree crotch, tree-pruning wounds, effects of spiral ringing on solute translocation, tree bracing, wound treatment,

and related matters. He wrote hundreds of articles in refereed journals, the trade press, and garden magazines. His “A Study of Cultivars in *Bougainvillea* (Nyctaginaceae),” published in *Baileya* in May 1981, when he was ninety-two, is a classic.

In 1940 Dr. MacDaniels was elected president of the American Society for Horticultural Science. His presidential address, “Some Social Implications of the Scientific Method,” should be required reading for all horticulture faculty and graduate students. It is as timely today as it was then, when he wrote about “the sense of responsibility among scientists for the social order.” He emphasized his “belief that the method of science or the scientific approach is useful and effective in interpreting phenomena in all fields of human knowledge and endeavor and will aid in the solution of all problems with which the human race is confronted.” He expounded on the scientific method and wrote in relation to ethics, “The qualities of honesty, loyalty, truth, decency, kindness, unselfishness, and the like are constructive in their effort upon individual and social life and in the long run will make for a better society than their destructive counterparts.” Certainly Dr. MacDaniels’s life exemplified that philosophy.

As an academic administrator, Dr. MacDaniels was highly effective and provided outstanding leadership in program development. He was proud of his role in guiding the transition of floriculture and ornamental horticulture from the status of a gardening art and craft to that of a respected branch of plant science. He recruited new faculty members with strong training in plant physiology and related biological sciences. He introduced courses in horticultural taxonomy and applied plant physiology and worked diligently to garner sufficient funding to support his faculty members with the most modern laboratories and equipment. He developed a strong working relationship with the Bailey Hortorium and sought to achieve optimal interaction among all horticultural departments at Cornell.

Dr. MacDaniels chose to teach the introductory course in floriculture and ornamental horticulture during his entire tenure as department head. He found teaching at that level to be most stimulating and an excellent means of remaining abreast of developments in the field. In his course he stressed horticulture as a science and quickly introduced his students to the scientific method through laboratory experiments and projects that took them into the research literature. He was a warm and understanding teacher, equally able to discuss a complex theory of plant growth and development or to demonstrate a simple garden practice. And he enjoyed as well the lighter side of his relationship with students. Alumni regularly ask if Dr. Mac still played his guitar and sang folk songs and ballads at department get-togethers. Remembered by all were the Sunday evening socials at the MacDaniels’s home, where all were invited to gather to make chocolate candies and to discuss in a most understanding and concerned manner one or more major world concerns. Both Dr. and Mrs. MacDaniels had serious concern for,

and understanding of, students' situations and often made major efforts, using their personal resources, to ease difficulties.

Though he focused his attention on the horticultural sciences, Dr. MacDaniels contributed substantially in many other areas of the university. He was president of the Cornell chapter of the American Association of University Professors and of the Cornell Library Associates. He served on the University Committee on Physical Education and Athletics, chaired the Advisory Committee for the Bailey Hortorium, and served on the Campus Trees Committee. He was involved with the Cornell Plantations in many capacities spanning more than four decades. In 1942 he served as chairman of the Administrative Committee and in subsequent years as member, chairman, and consultant. He was a moving force in the Cornell Plantations Natural Areas Committee's selection and acquisition of ecologically valuable areas. Through his efforts the A. J. Eames Memorial Bog was purchased and given to the Cornell Plantations. In 1973, on the occasion of his eighty-fifth birthday, a fund-raising drive was initiated by friends to obtain a natural area in his honor, to be known as the L. H. MacDaniels Botanical Sanctuary. To that end Allan Hosie and Pauline Bird Treman and Caroline Cooley (the widow of Robert E. Treman) donated property to the university in the Coy Glen Gorge and gave instructions to keep their ninety acres forever wild, managing it only with suitable scientific practices. The area had been used by Dr. MacDaniels and others at the university to study its geological features, mosses, bryophytes, the American hackberry, scarlet oaks, lilies, orchids, and more than 380 other species of plants that are growing in its gorge and that can be found on no other Cornell property. Donations from friends were to help purchase additional adjacent parcels of land to help protect the entire site, but the project has never been fully realized because of reluctance on the part of some private owners to sell or donate their adjacent land. An inveterate plantsman, Dr. Mac greatly enhanced the Cornell Plantations' plant collections through the years, and he was responsible for assembling the Class of 1901 Memorial Cornell Plantations Nut Tree Collection.

Dr. Mac was a member of many honorary and professional societies, including the Cornell chapters of Sigma Xi, Gamma Alpha, Alpha Gamma Rho, Phi Kappa Phi, and Pi Alpha Xi. He was a fellow of the American Association for the Advancement of Science, the American Society for Horticultural Science, and the Royal Horticultural Society of London. He was president of the American Society for Horticultural Science in 1940 as well as a member of the Massachusetts Horticultural Society, the Botanical Society of America, and the American Society of Naturalists. He served as president of the Northern Nut Growers Association in 1951; helped found the North American Lily Society in 1947 and served as its first president from 1947 to 1949 and again from 1955 to 1957; and

was chairman of the Lily Committee of the American Horticultural Society from 1938 to 1946. He was a member of the New York Academy of Sciences.

In 1966 Dr. MacDaniels was the recipient of the Wilder Medal from the American Pomological Society. In 1979 he received the Land Award of the New York Nature Conservancy. On the occasion of his ninetieth birthday, in 1979, the Department of Floriculture and Ornamental Horticulture named its main classroom the L. H. MacDaniels Lecture Room. In 1980 he received the Lytell Lily Cup from the Royal Horticultural Society of London for the significant advancement of knowledge of breeding and cultivation of garden lilies. He was the first Cornellian and the third United States scientist to receive the award since its establishment in 1939.

At home in Ithaca both Dr. and Mrs. MacDaniels played major roles in the community. Mrs. MacDaniels was the first woman to serve on Ithaca's Common Council, initially in 1945 and again in 1948-49. Both were stalwarts of the First Unitarian Church. Dr. MacDaniels was also the chairman of the Council of Social Agencies and active in the Rotary Club, the Ithaca Garden Information Center, and Hospicare of Tompkins County. He was a charter member of the Ithaca Men's Garden Club and was active in founding the Senior Citizens Center, serving as a member of its first board of directors. He served on the Greenbelt Committee, the Circle Greenway Committee, the Area Beautification Council, and the New York Nature Conservancy. He was president of the Cayuga Lake Preservation Association, one of the groups credited with preventing construction of a nuclear power plant along the lake. He also served in an advisory role to many Ithaca officials and groups. In 1967 Dr. and Mrs. MacDaniels donated two acres on West Hill to the city of Ithaca for a park that now bears Mrs. MacDaniels's name.

Dr. MacDaniels's concern for protecting our natural resources led him to spearhead an effort to acquire as many as possible of the one hundred glens along Cayuga Lake for incorporation into the state park system. His concern for world hunger led him to assist in the establishment, in the 1970s, of the Cornell Tree Crops Program, which endeavors to research the feasibility of food production from nut and other tree crops grown on lands otherwise not suitable for agriculture. He donated more than twenty acres of land, along with supporting funds, to Cornell to establish the program.

Horticulture was both his professional and spare-time preoccupation. Gardening was his favorite hobby. His gardens on West Hill represent one of the finest plant collections in Ithaca. Ever generous with his plants, Dr. MacDaniels was the benefactor of many a beginning gardener and swelled mightily the offerings at the annual plant sales of the Ithaca Men's Garden Club. He was also an avid fisherman, pursuing his piscatorial activities in stream, lake, and deep-sea environs. An accomplished musician, he studied at the Conservatory at Oberlin and

sang in the Oberlin College Glee Club. He was a long-standing member of the choir of the First Unitarian Church of Ithaca and one of the most revered song leaders of the Rotary Club of Ithaca, where his direction of the club's members in "My Grandfather's Clock" became a Rotary tradition.

Dr. MacDaniels's colleagues, friends, and students knew him as a concerned and committed scientist, teacher, administrator, and humanist.

His concerns were genuine, his goals sound, his approach scientific, his standards lofty. Blessed with long life, he was able to touch many generations with his wisdom and very special insights. His impact on the university, on Ithaca and its environs, and on the profession and science of horticulture—indeed, on science and education in their broadest contexts—has been profound. Perhaps foremost among his legacies is that of an exemplary philosophy of life rooted in compassion for the human state, understanding of the role and potential impact of scientifically based knowledge, and commitment to take part actively in the issues that swirl in one's own time.

Raymond T. Fox, Robert W. Langhans, Richard M. Lewis, John G. Seeley, Carl E. Gortzig