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### ALBERT FREDERICK HILL (1889-1977) AND ECONOMIC BOTANY

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Dr. Albert F. Hill died at his home in Surry, Maine, on March 20, 1977. His long and intimate association with the Botanical Museum of Harvard University contributed substantially to the pre-eminence that this institution enjoys in the field of Economic Botany. The following notes, based on my personal discussion with Dr. Hill in 1967, and read at a meeting of the Society for Economic Botany, are offered as a tribute to and an appreciation of his outstanding contributions to this interdisciplinary field of botany and to the Museum.

There is probably no name better known in contemporary economic botany than that of Albert F. Hill. Yet, beyond a few colleagues and students at Harvard University, he is not personally known to many. A most modest scientist, he almost never attended meetings and congresses. Ted, as he was known to all of his friends, said to me when he was asked to address the annual meeting of the Society for Economic Botany, of which he had been president in 1966-1967: "While I am supposed to be an authority in economic botany, except perhaps for nomenclature, my contributions are virtually non-existent. Because, in our 'new society', it is thought improper to reminisce, I cannot prepare a respectable presidential address for the honour that the Society for Economic Botany has just given me. I regret that I cannot attend your meeting, but I would rather do nothing about an address than to make remarks for the sake of making remarks and knowing that I had contributed nothing. I do, nonetheless, deeply appreciate the honour and thank you for thinking of me in this way".

Ted's assertion that his "contributions are virtually non-existent" constitutes a major understatement. His contributions are, to be sure, often more or less recondite and perhaps not

ALBERT FREDERICK HILL  
1889-1977

Born Dresden, Germany, September 4, 1889. A.B., Dartmouth College, 1910. A.M., Harvard College, 1911; Ph.D., Yale University, 1921. Assistant Botanist, Harvard, 1911-1913; Assistant Curator of Botanical Collections, Yale, 1914-1935, Instructor in Botany, 1918-1927, Assistant Professor, 1927-1934; Assistant, Harvard, Botanical Museum, 1935-1939, Research Associate, 1939-1957. American Association for the Advancement of Science; Botanical Society; Ecological Society; New England Botanical Club. President, Society for Economic Botany 1966-1967; Fellow, Linnean Society (London). Systematic, geographic and economic botany and ecology.



widely recognized. Since I have been asked to say a few words about our outgoing president, I take this opportunity of telling you about Albert F. Hill, the man, and Albert F. Hill, the economic botanist. I do so humbly and mindful of the great debt that I, as only one economic botanist, owe to him for his friendliness and help during our association in my days as a student and, subsequently, as a staff member at the Harvard Botanical Museum.

Born 88 years ago in Dresden, Germany, of American parents, Ted was nine months old when he came to the United States. Before he was two, his father died, and he grew up in his grandparents' home in Attleborough, Massachusetts, attending public schools there. Upon graduation from the Attleborough High School, he matriculated at Dartmouth College, majoring in botany, in which field he had long fostered a childhood interest. He earned his A.B. *cum laude* with departmental honours in botany in 1910. Dartmouth, at that time, had four great teachers of botany, former students of Prof. Roland Thaxter, the Harvard mycologist. Ted fell under the tutelage of Prof. George R. Lyman, who later joined the United States Department of Agriculture in Washington and to whom Ted owed much of his later success.

He thought of doing graduate work at Cornell University but finally took an Austin Teaching Fellowship at Harvard, attracted by another great teacher, Prof. Merritt L. Fernald, under whose direction he did research on the coastal flora of eastern Massachusetts. In 1911, he earned his A.M. at Harvard and became an assistant in Fernald's course. During his last two years as a graduate student, he served as assistant curator of the New England Botanical Club Herbarium.

In 1914, Ted went to Yale as curator of botanical collections, and, shortly thereafter, he began teaching field botany, followed later by a course in taxonomy. He also taught the course in elementary biology for five years at the Sheffield Scientific School at Yale. During this period, he was put in charge of the library in the Botany Department and was given the administration of the herbarium and the teaching of Prof. Nichols' elementary botany course.

It was during this time that Ted decided to finish his doctorate, so long delayed by teaching and administrative duties at Yale. Ecology was emerging as a distinct field and it appealed to him, although his first interests had been in plant distribution. His

Ph.D. was awarded in 1921 on a thesis dealing with the vegetation and ecology of the Penobscot region of Maine.

Ted's interest in economic botany began specifically during his teaching of elementary botany at Yale, when he included two or three lectures on food plants. Both Prof. Nichols and he felt that a course devoted to useful plants might be of value, and they worked up notes for it which were filed away and forgotten. Eventually, he did institute a course as a seminar, albeit in general education. It began with six students the first year, the second year it had eight or ten, and the third year fifteen registered.

It was then that he saw the need for a reference book, a manual or some kind of text to leave the lecturer freer to develop his subject in lectures more fully and more personally. Ted used to reminisce that "fools rush in where angels fear to tread", but he resolved to write a text, even though almost immediately the great difficulties of such an undertaking became apparent.

Starting with the limited facilities then available at Yale, he prepared five or six chapters, submitting them to one of his former professors, Prof. Edmund Sinnott, who was an editor for McGraw-Hill Company. These preliminary chapters pleased all concerned, and the publishers pressed for completion.

At that time, for personal reasons, Ted came to Harvard, where he met Prof. Oakes Ames who was in charge of the oldest course in economic botany in the United States, which had been taught since 1876. As a basis for this course, the Botanical Museum had extensive library, herbarium, and plant products collections. He had not known of these facilities but immediately sensed the value of them for the preparation of his projected textbook. Ames made it possible for him to finish the book by appointing him to the staff of the Museum. As a result of this appointment and Ted's own persistence, the book that has made *Hill* a household word in economic botany saw the light in 1936.

Many of the publisher's staff felt that this text was destined to be a "dud". The first year, however, showed otherwise, when sales greatly exceeded expectations. Progress was steady and startling. A second edition was published in 1952. Shortly thereafter, a less expensive English edition was published in Tokyo for sale to students in the Asiatic countries. And most recently, an Arabic translation appeared in Cairo, and an edition in Spanish was issued in Barcelona.

Notwithstanding the appearance in 1952 of another good text, the demands for "Hill" have increased over the years, and it is now selling more than ever before and has become the major text in this field in English. Ted's greatest influence in this fast growing field of economic botany has undoubtedly been this scholarly text. Who can tell how many of the recently proliferating college courses in this discipline were inspired by the final availability of a good textbook? A thorough, inclusive, laconic, and decidedly practical production, it is designed for the serious student of plants and their effects upon human affairs. There is, of course, no way precisely to measure its effect in establishing this new interdisciplinary field, but one may safely assert that it has been a major contribution.

Rather wistfully, Ted often said to me: "Never has it been my good luck to carry out any special research in my field". This may be true, but over the years he has been one of the busiest men in economic botany. Nomenclatural and taxonomical problems in preparing his textbook led to several papers in the *Botanical Museum Leaflets of Harvard University*, of which he was the editor for a number of years.

The availability for the first time of a truly international, standardized set of rules of botanical nomenclature meant that sundry, well established but incorrect names of economic species had to be studied; and with Prof. Ames, Ted Hill felt most strongly the need for putting economic botany firmly in line with the new nomenclature. For a number of years, he served on the nomenclature committee of the *United States Pharmacopoeia*; he was responsible for the nomenclature of the encyclopaedic *Wealth of India*: he checked for accuracy the technical names in Edition II of *Standardized Plant Names*. For six or seven years he served as associate editor for the journal, *Economic Botany*; more recently, he was a member of the editorial board for five years; and for many years he held a place on the editorial board of *Rhodora*. During all of these years, he actively reviewed botanical books for *Quarterly Review of Biology*.

In the meantime, his multitudinous duties at the Botanical Museum grew to include many time-consuming tasks in the library, the herbarium, and the products collections. He was appointed, first part-time and then full-time, librarian of the Oakes Ames Library of Economic Botany. Over the many years that Ames, and then Prof. Paul C. Mangelsdorf, offered Har-

vard's course in economic botany, Ted was close to the students in their preparation of the exhaustive term papers required in the course. Finally, when Prof. Mangelsdorf took half a year's leave in the 1940's, Ted taught the whole course, thereafter continuing to share the teaching with Prof. Mangelsdorf until his retirement in 1958. Long after his retirement he continued to offer a number of lectures in the course.

Ted was married to the late Julia Faulkner in 1934 until her death in 1949. During this period, they lived happily with their books in an apartment near the Botanical Museum in Cambridge and spent summers in their beautiful home, "The Carrying Place" in Surry, Maine, to which Ted retired as his permanent residence a few years ago. He filled his days as never before with multitudinous interests ranging from horticultural clubs and Grange to local history, Boy Scouts, to serving on the board of a New England private preparatory school, to duties connected with local botanical societies and to editorial work on *Economic Botany*, *Rhodora*, and the *Botanical Museum Leaflets*. He kept up an active membership in the American Association for the Advancement of Science, the Botanical Society of America, the Society of American Plant Taxonomists, Sigma XI, Gamma Alpha, the Josselyn Botanical Society of Maine, the American Institute of Biological Sciences and the New England Botanical Club, the treasurership of which he held for more than twenty years. He was elected a Fellow of the Linnean Society of London in 1972.

He kept well abreast of world affairs and progress in botany. His knowledge of current literature was astounding. On his frequent trips to Cambridge, he still had time for friends, colleagues and students. Coming from an unusually long-lived family, he looked forward to many years of activity and productivity, and he was not disappointed in this hope. His record of accomplishments is truly outstanding, even though it cannot wholly be measured in tangible units.

One of Ted's non-botanical pursuits was the study of Shakespeare, and even after his retirement north to Maine, he remained an active member of Cambridge's Shakespeare Society. I have often heard him quote in casual conversation a snatch from the great English master, but now it is my turn to say that every time that I think of what Ted Hill has done for economic botany and the Botanical Museum I recall a passage from *King Henry VI* that seems to epitomize his contributions: "Sir, he made a

chimney in my father's house, and the bricks are alive to this day  
to testify it''.