

# UNIVERSITY OF ILLINOIS HERBARIUM, ITS HISTORY AND DEVELOPMENT SINCE 1868

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When the University of Illinois, then known as the Illinois Industrial University, was founded in 1868, Thomas Jonathan Burrill was appointed professor of natural history. It was under his direction that the University of Illinois Herbarium originated. In science courses in those days more emphasis was placed upon the collection and preservation of specimens and upon the arrangement of displays than at the present time. Logically, it followed that an herbarium—a collection of plant specimens for study—should develop.

Professor Burrill's collection of the flora of Champaign County, Illinois, made while he was superintendent of the Urbana public schools (1865-1868), formed the nucleus of the present herbarium. The only existing accession book (begun by Professor Trelease in 1923) states there were at that time 168,902 specimens in the herbarium. The majority of the specimens have been obtained by gift or by inter-institutional exchanges; however, there have been a few purchases, and collections have been made by members of the staff. At the present time the herbarium of the University of Illinois ranks fourth among the state university herbaria of the United

States, being exceeded in number of accessions only by the universities of California, Michigan, and Minnesota.

The history of the herbarium may be divided into three eras—the first (1868-1912) was that of formation and early development under Professor Thomas Jonathan Burrill; the second (1912-1926) was one of organization under the influence of Professor William Trelease; the third (1939- ) has been that of reorganization and modernization under the direction of Professor George Neville Jones.

Professor Burrill served the University of Illinois in various capacities from 1868 to 1912 from assistant professor to acting president. He gave the herbarium his personal collection which included some flowering plants of Champaign County, Illinois, but a greater number of the specimens were fungi. Not only are they the early collections of Burrill but also later, significant herbaria of his illustrious students, G. P. Clinton, F. S. Earle, A. B. Seymour, and M. B. Waite. It is due to the interest and influence of Burrill that an excellent collection of parasitic fungi has been accumulated. Tropical fungi from the Philippine Islands, Hawaii, and

Puerto Rico collected by Professor F. L. Stevens are contained in the herbarium.

The second period of development of the herbarium was effected under the direction of Professor William Trelease. Upon the retirement of Burrill in 1912, Trelease, who had achieved renown as the first director of the Missouri Botanical Garden, became professor of botany at the University of Illinois. During the time Trelease was at the university, exchanges of specimens were carried on with other institutions. By 1926 approximately 204,628 specimens had been accessioned.

In 1939, when the present curator, Professor G. Neville Jones, joined the department of botany, it became his task to reorganize the herbarium according to modern standards. The collection is housed in 172 standard steel cases in two rooms and a corridor in the fireproof wing of the Natural History Building. Within the past ten years the floor space occupied and number of cases used have been doubled. This period has seen the building up of exchanges and inter-institutional loans among other botanical institutions of the United States and other parts of the world. The herbarium has become an important functional unit of the division of biology.

The University of Illinois Herbarium, now totalling more than 400,000 specimens, is a good general collection. It is especially rich in representatives of the flora of the upper Mississippi Valley. Approximately one-fourth of the specimens are Illinois material which comprises the most nearly complete extant collection of Illinois plants, in-

cluding many rare species and some possibly now extinct in Illinois. In addition to this material there is good representation of cultivated plants and of the European flora.

The University of Illinois Herbarium is the repository of some very fine early collections. Many of the specimens date back more than 100 years, but the greater number of them were collected less than 75 years ago. In addition to Burrill and his students, some of the other early collectors whose material or part of it is deposited here are: S. B. Mead, whose very important collection of 18,000 sheets was acquired in 1951; F. Brendel, collected about Peoria for 50 years; H. N. Patterson, collected in Henderson County, Illinois; and J. Schneck, collected in Wabash County, Illinois. Later collections at the university are those of: E. J. Hill, whose herbarium of 16,000 specimens, included 5,000 bryophytes, from the Chicago area and Indiana, Michigan, Minnesota, Mississippi, and New York; W. S. Moffatt, 11,000 specimens collected in the Chicago area; Robert Ridgway, who collected principally in Richland County, Illinois; and Mrs. Agnes Chase, whose early collections were from the northern part of the state and consisted largely of grasses collected before 1900. Some other valuable collections are those of: G. P. Clinton; G. H. French; F. C. Gates, principally in Champaign County; H. A. Gleason; Elihu Hall, an early collector in Fulton County; F. E. McDonald, near Peoria; H. S. Pepoon, Jo Daviess County; A. B. Seymour; George Vasey—an outstanding pioneer in Illinois botany and the first

curator of the United States National Herbarium—who collected in various parts of Illinois, but principally in McHenry County; M. B. Waite; and John Wolf, an associate of E. Hall. At present not more than half of Illinois' 102 counties have been thoroughly botanized. Contemporary collectors, Virginius H. Chase of Peoria, E. W. and G. B. Fell of Rockford, George D. Fuller of Chicago and Springfield, and G. N. Jones are making valuable contributions from various localities. Many present and former students, including R. A. Evers, G. P. Sivert, and G. W. Winterringer have contributed their plants.

The University of Illinois has recently purchased the 40,000 specimen herbarium of Virginius H. Chase (a nephew of Mrs. Agnes Chase) of Peoria Heights, Illinois. The Chase herbarium is the last of the larger private herbaria in Illi-

nois not yet turned over to a university or museum and represents the residue of a much larger collection distributed through 50 years to several of the larger herbaria of the United States. About one-third of the specimens were collected in Illinois. The specimens are of exceptionally high quality and scientific value.

Today the University Herbarium furnishes reference material for research, serves as repository for type material entrusted to it, preserves data on original flora and vegetation, and provides material for study of geographical distribution of species. Moreover, it furnishes an identification service to the citizens of the state, whether scientists or amateurs. The facilities available offer opportunities for taxonomic research in almost all groups of plants.