# The Chrysler Herbarium

The Chrysler Herbarium or (CHRB) is the last internationally recognized research herbarium still in existence in the state of New Jersey. It contains approximately 130,000 plant, algal, moss and lichen specimens that have been accumulated over the last 200 years. The collection is worldwide in scope with emphasis on New Jersey. This unique collection is an invaluable documentation of flora of the Northeast. Rare and endangered plant species of New Jersey are mapped by county. The **Douglass College, Willowwood Arboretum, Rutgers Camden, Rutgers Newark** herbaria and a portion of the former Princeton University herbarium have been incorporated by CHRB. A CHRB herbarium cabinet with pressed scientific specimens



## The History of the Herbarium Collection begun in the 1880's



Forming the core of the herbarium is a set of New Jersey plant specimens amassed by Nathaniel Lord Britton (later Director of the New York Botanical Garden), during the period in which he served as the state botanist of New Jersey. (1881-1888). He collected primarily in the northern part of the state and enriched his collection through gifts and exchange with many notable botanists of that time, building up a collection of 4450 unique specimens.

Nathaniel Lord Britton

RUTGERS UNIVERSITY HERBARIUM Helonias bullata L. Princeton Junction. LEGIT. a. C. akgar.

## David E. Fairbrothers curates herbarium from 1954-1988

The next great era of growth of the herbarium was under the leadership of David E. Fairbrothers. During this period the collections more than tripled to over 120,000 specimens, documenting the rich flora of New Jersey.

## **Rare and Endangered Species**

Dr. Fairbrothers and other researchers used Chrysler herbarium specimens to produce the first state list of Rare and Endangered Plants the in the United States (1973). This publication was significant in helping persuade the United States Congress to enact the first U.S. Endangered Species Act in 1973, plus the Congress request for publication of the Endangered and Threatened Plant Species of the United States in 1975.

Information obtained from the Chrysler Herbarium's New Jersey specimens is especially important for the conservation of rare plants such as Knieskern's beaked-rush and the bog asphodel. The bog asphodel is found in pine barrens bogs and flowers in June and July. This globally imperiled species is found almost exclusively in New Jersey. New Jersey represents the global stronghold for another rare plant, the swamp pink, harboring more than 70 percent of the world's population of this species. The herbarium provides critical records needed to assess the status of plants in New Jersey and the United States.



Dr. David E. Fairbrothers





#### Herbarium of the Geological Survey of New Jersey. N. L. BRITTON, Botanist, 1881-1888.

This specimen of Helonias bullata, collected in Mercer Co., is from the N.L. Britton Collection of New Jersey Plants. It was collected by A.C. Apgar in May 1883. This species is listed as an endangered species in New Jersey

### Dr. Minton A. Chrysler expands collection during 1920's

In 1923 Dr. Minton A. Chrysler transferred from the University of Maine to Rutgers. Shortly after his arrival Dr. Chrysler and Dr. A.P. Kelley discovered the N.L. Britton Collection of New Jersey Plants, the Byron Halsted Collection of American Weeds, and the A.C. Cuthbert Collection (750) stashed away in attics of University buildings.

In 1928 the botany department acquired the valuable collection of P.D. Knieskern, (3500 specimens). This collection of specimens provides many of the first records of the New Jersey flora.

By 1940 the herbarium had grown to 40,000 specimens. The collections not only consisted of New Jersey plants but also of plants from the Caribbean, Central America, western North America and Europe collected during field work by members of the botany department.



#### Left: Dr. Minton A Chrysler

Center: A specimen of Delphinium collected in 1842 from the P.D. Knieskern collection. Right: Rutgers Botany Dept. 1956 (Left to right) M.A. Johnson, J.E. Gunkel, E.T. Moul, M. Buell and D.E. Fairbrothers

The bog asphodel (Narthecium americanum)

# Current and Future Uses

The Chrysler herbarium is undergoing a period of renewed activity. The hiring of a director and collections manager now allows access for the greater scientific community. Currently a federal work study student is gaining experience and providing help to organize and update the collection.

The future of the herbarium is of great consequence for New Jersey and its residents. The collections in the herbarium are extremely valuable records of the unique plant life that occurs in New Jersey. These collections can be used as a resource to create a cleaner, healthier environment for current and future generations. They will provide resources for scientific study in a multitude of fields such as taxonomy, ecology and medicine. An herbarium is a unique collection that should be treasured, protected and utilized.

#### CONTACTS

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