

One of Pittier's greatest accomplishments was the National Herbarium at Caracas. For its establishment and recognition he labored tirelessly. To demonstrate its usefulness as a foundation for later work on the plants of the country, he published, with the help of the material deposited there, a manual of Papilionaceae, one group of Venezuelan Leguminosae.

His publications number more than 300 books and pamphlets on botany, agriculture, geography, and ethnography. He held active or honorary membership in various scientific and geographical societies, including the Venezuelan Society of Natural Sciences.

Until his death, at 93 years of age, Henri Pittier, the indefatigable botanizer was still held by the spell of the flora and forest of Venezuela.

HENRY PITTIER IN WASHINGTON

Agnes Chase

HENRY PITTIER was appointed Special Agent in Botanical Investigations in Tropical Agriculture in the Bureau of Plant Industry, United States Department of Agriculture, January 21, 1905, the title changed to Botanist on November 1, 1912.

Much of Dr. Pittier's time, while he was in the Department of Agriculture, was spent in botanical exploration of Central America and northern South America, giving special attention to those plants from which rubber or other economic products might be obtained. His field books for this period, most of them preserved in the United States National Herbarium, show that at least half of his time was spent in the field. He explored Guatemala from April 13 to July 6, 1905, then spent a few weeks in Mexico, returning to Washington in late August.

Pittier's interest was primarily in forests and the time between his exploring trips was spent in the study of his many collections of specimens of trees.

Before the year 1905 ended Pittier was again in the field, this time in Colombia in the Cauca Valley and up on the paramos of the Central Cordillera where he was from December 1905 until late February 1906. He then spent a short time in Venezuela and Panama before returning to Washington.

The same year of 1906 saw him in Colombia again, this time mostly up the Magdalena river and in the western Andes where he spent the time from June 6 to July 17. Allowing himself barely the time to work up his collections in Washington, he made his third trip for the year 1906 into Latin America; this time into Guatemala and continuing on into Honduras, El Salvador and Costa Rica. The trip lasted until March 1907.

Pittier remained in Washington most of the time for the next two years, working up collections of plants he had made in Central America before coming to Washington and those which he made in 1905 and later. Most of his papers during this time were published in the Contributions from the United States National Herbarium. In volume 12 (part 4) 1908, he published the results of several years field study of the species of *Sapium*, the sap of certain species of which yields rubber. The next paper, in the same volume, part 5, 1909, concerns trees of Colombia and Central America, including a revision of *Carpotroche* (a genus related to the tree of Burma from which chaulmoogra oil is obtained), describing three new species. In volume 13 (part 4) 1910 are studies in Magnoliaceae, Euphorbiaceae, Asclepiadaceae, Solanaceae and Cucurbitaceae, with two new genera. In volume 13 again (part 7) is a "Preliminary Treatment of the Genus *Castilla*", one of the earliest known genera of rubber-producing trees, with descriptions of six new species. Still in volume 13 (part 12) are treatments of the genera of the Moraceae (to which *Castilla* belongs), with a key to eight genera and the species of each, and on trees and woody plants in Rosaceae, Sterculiaceae, Guttiferae and Sapotaceae.

In 1910 Dr. Pittier was in charge of the botanical portion of the Biological Survey of the Panama Canal Zone for the Smithsonian Institution, and in 1911, 1912 and parts of 1914 and 1915, he was again in Panama. He was in Costa Rica in 1911, in Guatemala in 1919, and in Venezuela in 1913, 1917 and 1918. The results of this work were published in the Contributions from the United States National Herbarium in volumes 18 (parts 2, 4, 5, 6) and 20 (parts 2, 3, 12), all on trees and woody plants of the regions explored, except one on the Cucurbitaceae. The papers included revisions of several important economic genera, among them *Lonchocarpus* (source of rotenone, a fish poison and now used in insect control).