H. L. Lyon, Scientist and Civic Leader

On 15 May 1957 Hawaii lost, through the death of Harold Lloyd Lyon, a great leader in agriculture, forestry, and civic improvement.

Born in Hastings, Minnesota, in 1879, Dr. Lyon received his Ph.D. degree in botany and plant pathology from the University of Minnesota in 1903. He joined the botany staff of his alma mater in 1901 and soon advanced to the rank of assistant professor. While botanizing in the northern wilderness of Minnesota and Canada, he developed a keen interest in the ecological factors that control the survival of species.

In 1907 Lyon joined the Experiment Station of the Hawaiian Sugar Planters' Association, a union that proved to be of great mutual benefit. In this young territory he found opportunities to use his talents in many varied applications of a sound scientific training. One of his first assignments, on reaching Hawaii, was to ascertain, if possible, the reasons for the dramatic decline of the native forests on the steep watersheds of the islands. It became apparent to him, in the course of this study, that the highly specialized indigenous species were no longer able to thrive under the altered ecology that had been brought about by the introduction of cattle, goats, pigs, and aggressive grasses. To provide a basis for reforestation, Lyon developed a plant introduction program, in the course of which more than 8000 plant species were brought to Honolulu from other tropical regions and tested, in trial plantings, under the varied climatic and soil conditions of the islands.

To implement this program of plant introductions, Lyon enlisted the aid of friends throughout the world, and he himself traveled extensively into the rain forests and tropical jungles. On most of these trips he was accompanied by his wife, who was also a dedicated botanist and humanitarian. By 1930 it had been demonstrated that enough trees and shrubs had been introduced and tested to enable the foresters to select plants appropriate for planting in any area of these islands where there were denuded watersheds.

Crises resulting from destructive sugar-cane diseases have occurred at some time in almost all important sugar-producing areas. In 1910, Lyon began his study of Fiji disease, in Fiji and in Java, and gave the first accurate description of its nature. He published several detailed papers on major cane diseases and was one of the first to appreciate the potentialities of wild relatives of sugar cane in breeding for disease resistance. This program was augmented in 1926 by the addition of a geneticist to the station staff. From this beginning has grown one of the most successful cane-breeding programs in the world. As a further protection against new diseases, a substation was established in 1946, in American Samoa, for testing new Hawaiian varieties of sugar cane for resistance against diseases that are foreign to Hawaii.

As an organizer and administrator, Lyon's influence has been broad. In 1914 he organized a program of research for the Association of Pineapple Canners, which led to the establishment of the present Pineapple Research Institute. He helped to organize the Hawaiian Botanical Society, the Pacific Orchid Society, and the Hawaiian Academy of Science.

In 1930 he accepted the position of director of the Foster Gardens, a botanical garden and park bequeathed to the city and county of Honolulu. During the preceding 12 years he had had much to do with the landscaping of the area and the planting of new importations. This garden now has by far the largest and best orchid collection of any public institution in America.

In 1919 Lyon began the planting of a 124-acre tract, purchased by the Hawaiian Sugar Planters' Association, at the head of Manoa Valley. In 1953 this arboretum was donated by the association, at Lyon's suggestion, to the University of Hawaii. In his will, Lyon provided that the proceeds of his estate should eventually be used for the maintenance and development of the Manoa arboretum. The board of regents of the University of Hawaii recently voted to rename the area the "Harold L. Lyon Arboretum." They also adopted the following resolution: "Future generations of students and natural scientists will remember him with gratitude, as will the citizens of the Territory, who are indebted to him for the preservation of the moisture-retaining watershed and the beautification of the Islands that he loved."

In 1936 he accepted the directorship of the Experiment Station which he had joined 29 years earlier. Probably no man has ever stepped into the top position of a research organization with a more well-rounded knowledge of the work he was to direct.

Lyon's breadth of interest is indicated by the titles of his more than 50 publications, which discuss cane diseases, garden crops for Hawaii, exotic trees in Hawaii, methods in plant physiology, and so on. Like so many busy men, he found little time for polishing finished papers, and much of his work and thought was never recorded beyond the stage of handwritten notes or mimeographed copy for presentation to local organizations.

He believed that the library is the essential core of all institutions of learning and gave much time to assembling a fine collection of botanical works. In recognition of his sustained support, the new library building at the Experiment Station is dedicated to Harold Lloyd Lyon.

Among the honors conferred on Lyon were the honorary degree of doctor of science, by the University of Hawaii; the Outstanding Achievement medal, by his alma mater; and the George Robert White medal of honor, by the Massachusetts Horticultural Society.

Age brought no diminution in Lyon's enthusiasm for new projects. In his last printed paper (1956) he wrote, "These Islands should have many gardens. Obviously the master plan for our enterprise should include numerous gardens on each and every one of the inhabited islands in our territory . . . located at all elevations from sea level to 10,000 feet. Such a group of gardens would afford a greater abundance and a larger assortment of plant material for research and educational purposes than could be assembled anywhere else in the United States." The greatest satisfaction of his later years came from observing the successes of the plants to which he had devoted his life—sugar cane, pineapples, orchids, and the host of trees, shrubs, and vines which are contributing so much to the economy and the beauty of the islands.

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