

## Annual Report 1916-1917

## To THE PRESIDENT OF THE UNIVERSITY:

SIR,

I have the honor to submit the following report on the progress and condition of the Arnold Arboretum during the year ending June 30, 1921.

The unusually mild winter during which a temperature of zero was recorded only twice at the Arboretum, followed by several days of summer temperature during March, forced into bloom several plants three or four weeks before their normal time of flowering. The hot March days were followed by severe frosts which destroyed flowers already open and injured a few flower buds.

The March frosts were followed by frosts in April and May, but these were not severe in the Arboretum and did less damage here than in other parts of the country, especially in the middle and southern Atlantic states. Thanks to the mild winter and the abundant rains of the autumn, many trees and shrubs have bloomed unusually well; the foliage on all trees has been abundant and well colored, and conifers and broad-leaved evergreens have not for a long time been in better health.

In July the Assistant Director left the Arboretum for a two years' journey in Australasia, India, and eastern and southern Africa. The object of this journey is to enable Mr. Wilson to become acquainted with the vegetation of regions before unknown to him, to bring the Arboretum into closer relations with botanical and forest establishments in the Southern Hemisphere, to become personally acquainted with the men who direct these establishments, and to obtain material for the herbarium and library of the Arboretum. During the past academic year Wilson after a short stay in England has visited all the Australian Provinces, Tasmania and the two islands Of New Zealand. He has been well received by forest and other officials who have acted as his personal guides in his forest expeditions and have made this journey pleasant and profitable. With their assistance he has been able to send home a large amount of material which will greatly increase the importance and value of the Arboretum collections. Late in June he sailed for Singapore on his way to India which he reached on the 20th day of July. The library contains 33,633 bound volumes, 7,400 pamphlets and 7,326 mounted and arranged photographs, 715 bound volumes, 400 pamphlets and 2,781 photographs having been added during the year. During the year the herbarium has received

larger accessions than in any previous year in its history, 12,186 specimens having been mounted and incorporated. Among the more valuable specimens added to the herbarium are several Chinese collections of 3,000 specimens, a collection of 622 plants of Formosa made by E.H. Wilson during his last journey in eastern Asia, 1,845 Philippine plants, 216 Himalayan plants, and 2,500 North American plants. A collection of 10,000 specimens of trees and shrubs cultivated in Europe made by the late H. Zabel, the well known Swiss dendrologist and superintendent of the Botanic Garden in Zurich, has been purchased during the year but has not yet been added to the herbarium. This collection contains the types of the large number of hybrid and other interesting plants described by Monsieur Zabel. During the year 14,776 duplicate specimens have been sent to twenty-two botanical establishments. From its earliest days the Arboretum has not lost an opportunity to introduce from foreign countries trees and other plants which might increase the value of American forests and the beauty of American parks and gardens. Several hundred species have first been cultivated in this country at the Arboretum, and hundreds of thousands of plants raised in the Arboretum nurseries from these introductions have been widely distributed in most of the countries of the Northern Hemisphere. This introduction and distribution of new plants has been one of the important contributions made by the Arboretum to the welfare of the country. By the rulings of the Federal Horticultural Board of the Department of Agriculture it has been necessary to stop this work, for it is no longer possible to import the seeds of trees and shrubs or to import living plants unless they are subjected at Washington to a treatment which practically insures their death, or if plants survive the Washington inspection they must be placed under a quarantine which makes it impossible to use them for several years. During the year 3,375 plants (including grafts and cuttings) and 265 packets of seeds have been distributed as follows: To the United States, 1,613 plants and 156 packets of seeds; to Canada, 49 plants and 11 packets of seeds; to Great Britain, 1,713 plants and 89 packets of seeds; to France, 9 packets of seeds. There have been received 2,688 plants and 86 packets of seeds as follows: From the United States, 2,667 plants and 86 packets of seeds; from Canada, 15 plants; from Great Britain, 6 plants. The instruction in dendrology has been given in the Arboretum by Assistant Professor J. G. Jack who from April to June held weekly field meetings attended by twelve students. Seven special students from the Bussey Institution worked in the Arboretum during the year; of these four were American, one a Philippine, one a Chinese, and one from Japan. During the year the Arboretum has published a Monograph of Azaleas based on the material which has been gathered here for the purpose during the last ten years. In this publication the Old World species are described by Mr. Wilson who has seen the mall, with one exception, growing wild, and the American species by Mr. Rehder, the curator of the herbarium. Three numbers of the Journal of the Arboretum and seventeen Bulletins of Popular Information were published during the year. Without the interest and generosity of the members of the Committee appointed by the Overseers to visit the Arboretum and of other friends of the institution it would not be possible to maintain this department of the University and to carry on its scientific activities. To them is due the thanks of all students of dendrology and of all lovers of trees.

C. S. SARGENT, Director.