Many of the Rhododendrons in the collection at the base of Hemlock Hill are now in flower and can be most easily reached from the South Street entrance. Owing to the heat and drought of May the flowers are smaller than in more favorable seasons and they will probably not last long in good condition.

The variety of these plants which can be successfully grown in this climate is not large, and they are mostly derived from a few species. The most important of these species are three Rhododendrons of the eastern United States—Rhododendron catawbiense, Rhododendron punctatum and Rhododendron maximum. The first grows only on the high summits of the southern Alleghany Mountains where it sometimes covers enormous areas, but is rarely found much below an altitude of five thousand feet. This plant is very hardy and in cultivation forms a broad, low bush; it grows slowly, however, and the flowers are of a rather disagreeable purplish rose color. It is most interesting for the part which it has played in the production of the principal race of garden Rhododendrons. Several plants are now in flower along the drive not far from the South Street entrance. The second species, Rhododendron punctatum, is also a native of the southern Appalachian region where it grows at much lower altitudes than Rhododendron catawbiense. It forms a dense low bush with small leaves thickly covered on their lower surface with dark dots, and small, reddish purple flowers in small compact clusters which are a good deal hidden by the young branches which, growing before the flowers open, overtop them. This plant, of which there are good specimens in the collection, will not be in bloom for several days. There are two hybrids of this species known in gardens as Rhododendron Wilsoni or arbutifolium, and Rhododendron myrtifolium. The former is a cross with the alpine Rhododendron ferrugineum and the latter with the alpine Rhododendron hirsutum. In habits and foliage they are handsomer plants than their American parent, and are useful for small gardens and for the margins of beds of larger plants; they will not be in bloom for several days. Rhododendron maximum, the third of the American species, is found occasionally in New England swamps and is very common along the borders of streams in mountain valleys south of New York, often growing to the size of a small tree and sometimes forming impenetrable thickets of large extent. This is the latest of the Rhododendrons to flower here and will not be in bloom for several weeks. The flowers and the flower-clusters are much smaller than those of Rhododendron catawbiense and, like those of Rhododendron punctatum, they are hidden by the branchlets of the year which surround and rise above them. A hybrid of Rhododendron maximum and Rhododendron catawbiense and, like those of Rhododendron punctatum, they are hidden by the branchlets of the year which surround and rise above them. A hybrid of Rhododendron maximum and Rhododendron catawbiense, raised in England and known as Rhododendron delicatissimum, is in this climate one of the most beautiful and desirable of garden Rhododendrons. It has white flowers tinged with pink, which appear after those of most of the other catawbiense hybrids have passed. Another English hybrid of the same parentage, Rhododendron Wellesleyanum, is less hardy here than either of its parents; and among a large number of seedling plants of Rhododendron maximum crossed with some of the red-flowered catawbiense hybrids, raised near Boston, only a few have been able to bear the cold of the New England winters. Other species in the collection are the
European *Rhododendron ferrugineum* and *Rhododendron hirsutum*, the Japanese *Rhododendron brachycarpum* and *Rhododendron Metternichii*, the first with yellow and the other with rose-colored flowers. Several plants of a hybrid of this last crossed with garden hybrids of *Rhododendron catawbiense* have proved hardy in the Arboretum and promise to be valuable additions in the collection. *Rhododendron ponticum* of southern Europe and Asia Minor is hardy only in sheltered positions and is not a desirable plant for this climate. In England it is the common *Rhododendron* of parks and game preserves. *Rhododendron caucasicum* is an early-flowering species from the Caucasus, with compact clusters of yellowish white flowers. There are several hybrids and varieties of this handsome plant in cultivation which have proved hardy in the Arboretum and deserve to be better known here than they are at present. The flowers of many of these have already faded, but a plant called *coriaceum* at the front of the group, just beyond the turn from the Valley Road into Hemlock Hill Road, gives a good idea of the plants of this parentage.

The large plants in the collection are all hybrids of *Rhododendron catawbiense* and it is these hybrids which are generally planted in American gardens. They are of different parentage and have been obtained by crossing *Rhododendron catawbiense* with *Rhododendron maximum*, *Rhododendron ponticum*, and with *Rhododendron arboreum*, and other species with highly colored flowers from the Himalayas. A large number of these hybrids are cultivated in Europe, but only a few of them in which the blood of *Rhododendron catawbiense* predominates are really hardy in New England.

The Arboretum is often asked for a list of the varieties which can be grown here. The following which can be seen in the collection either as large or small plants have been the most successful in the neighborhood of Boston: *album elegans*, *album grandiflorum*, *atrosanguineum*, *bicolor*, Charles Bagley, Charles Dickens, *delicatissimum*, Edward S. Rand, *Everestianum*, F. L. Ames, H. W. Sargent, Hannibal, Kettle-drum, King of the Purples, Henrietta Sargent, Lady Armstrong, Mrs. Millner, Mrs. Charles Sargent, Mrs. Harry Ingersoll, *purpureum elegans*, *purpureum grandiflorum*, *roseum elegans*, Sefton.

Like most plants of the Heath Family to which the Rhododendrons belong, it is impossible to cultivate them in soil impregnated with lime. The area in the eastern states, therefore, where they can be successfully grown is comparatively small.

The Laurels (*Kalmia latifolia*) will be in bloom before the end of another week. They are planted beyond the Rhododendrons at the northern base of Hemlock Hill and furnish the last and one of the most beautiful of the yearly flower shows of the Arboretum.

The Inkberry (*Ilex glabra*), which is planted in a large group on the right-hand side of Hemlock Hill Road and opposite the Laurels, will soon be in bloom. The flowers, like those of all Hollies, are small and are arranged in small clusters in the axils of the leaves, and the small, black fruit, which does not fall until spring, makes but little show. The value of this plant is not in its flowers or fruits but in its compact habit and its shining persistent leaves which make it one of the very best of the broad-leaved evergreen shrubs which can be grown in this climate. The Inkberry is common in sandy soil and in the neighborhood of the coast from Massachusetts to Louisiana. It is very hardy and is not planted as often as it should be when hardy evergreens are needed. An-
other black-fruited evergreen Holly, *Ilex crenata*, a native of Japan, is more often found in gardens. This is an upright growing plant sometimes becoming a small tree, and varies considerably in the size of its leaves. It is hardy only in favorable positions, and during the last winter the plants with broad leaves suffered severely while the narrow-leaved plants were uninjured. This is interesting because the two forms were raised from seeds collected in one locality in Japan. A number of plants of *Ilex crenata* can be seen on Azalea Path.

Large plants of the Golden Chain, *Laburnum vulgare*, are occasionally seen in the neighborhood of Boston where this handsome European tree has long been planted. It is not very hardy, however, and succeeds only in sheltered positions. A better plant for this region is the so-called Scotch Laburnum, *Laburnum alpinum* of the mountain region of central Europe. This is a large shrub or small tree blooming about two weeks later than *Laburnum vulgare*, and the bright yellow flowers are produced in longer clusters than those of the other species. It grows rapidly and is perfectly hardy. A large plant now in full bloom can be seen close to the Shrub Collection on the Forest Hills Road. This is perhaps the most desirable yellow-flowered shrub or small tree which is hardy in this climate, and it is unfortunate that a plant of this character, which is so generally cultivated in Europe, should be so little known in American collections.

The largest, one of the handsomest and hardiest of the Diervillas, *Diervilla japonica*, a native of the elevated regions of central and northern Japan, is now in flower in the Shrub Collection. It forms a bush ten or twelve feet high and wide, with stout arching stems, and flowers which are rose color, pale yellow, dark red or nearly white on the same branch or on different branches of the same individual, the light-colored flowers often becoming rose color in fading. This is another plant which is too little known in American gardens.

*Rosa Arnoldiana* is in flower in the Shrub collection. This is a hybrid between *Rosa rugosa* and *General Jacqueminot*, one of the red-flowered Hybrid Perpetual Roses, and was raised several years ago at the Arboretum by Mr. Dawson. It bears some resemblance to an English Rose known as *Carmine Pillar*. It is a much hardier plant, however, with handsomer foliage, and the equally large flowers are of even a deeper crimson color. The flowers which are produced in clusters open in succession and when cut last a long time in good condition. This plant is of special interest to the students of Roses who are trying to produce a better race than now exists for our northern gardens, for it furnishes another proof of the value of *Rosa rugosa* as an element in such a race.

An illustrated guide to the Arboretum containing a map showing the position of the different groups of plants has recently been published. It will be found useful to persons unfamiliar with the position of the different groups of plants. Copies of this guide can be obtained at the Administration Building in the Arboretum, from the Secretary of the Massachusetts Horticultural Society, 300 Massachusetts Avenue, Boston, from The Houghton, Mifflin Company, 4 Park Street, Boston, and at the Old Corner Bookstore, Bromfield Street, Boston.

The Arboretum will be grateful for any publicity given these Bulletins.