Evergreen Rhododendrons. The plants called Rhododendrons which have been chiefly cultivated in Massachusetts during the past fifty or sixty years have been imported from England, where they have been immensely popular, and are usually called "Catawbiense Hybrids." They are hybrids of the Appalachian R. catawbiense which is perfectly hardy in New England, with handsome foliage and rather unattractive pale purple flowers, and primarily with the scarlet-flowered Himalayan R. arborescens. Hundreds at least of these hybrids and varieties have been raised in Europe and many can be grown in this region. They require, however, specially prepared soil, frequent and copious watering, mulching with leaves, and spraying to protect them from the attacks of the lace-leaf fly which left to itself turns the leaves brown and finally kills them. The plants are all grafted, and the only Rhododendron which has yet been successfully tried for this purpose is R. ponticum of the Black Sea region which is not hardy in New England. The wood of the two large-growing eastern American species which should be the natural stock for these hybrids is not available for this purpose as it is too hard. Some of these hybrids if well taken care of here live for many years, but die sooner or later owing, it is now believed, to the tenderness of the stock on which they have been grafted. It looks now as if plants obtained by layering branches of the plants grafted on R. ponticum would be the only way to secure permanent plants of the Catawbiense Hybrids. As it is there are no shrubs on which so much money has been spent in New England with such meagre and unsatisfactory results. The handsomest species of Rhododendron flowering in the Arboretum is the Caucasian R. Smirnowii,
which is now covered with large clusters of pink flowers. It is a large vigorous shrub which has been growing here for several years and has never suffered from cold nor failed to bloom. When the plant is fully exposed to the sun, however, the leaves often drop and their edges fold, and it does better in partial shade. The leaves are pale grayish green above, and below are thickly covered with pale felt which successfully protects them from the attacks of the lace-wing fly. The flowers are of good size and of pleasant shades of pink, and are borne in large clusters. As compared with the dark green leaves of *R. catawbiense* those of this species are less attractive. Several hybrids of *R. Smirnowii* with varieties of *R. catawbiense* have been raised in Europe, and there are a few of these in the Arboretum collection. They have proved to be good garden plants here, flowering rather earlier than *R. Smirnowii* itself and producing larger pink flowers; they have never been injured in the Arboretum, but as there is only a trace of the felt left on their leaves they will probably suffer from the attacks of the lace-wing fly.

The four species of eastern North America, *R. minus*, *R. punctatum*, *R. catawbiense* and *R. maximum* are perfectly hardy. The first is a dwarf plant from the high Appalachian Mountains with rose-pink flowers, and one of the handsomest of the dwarf Rhododendrons which can be grown in this climate. It has only been recognized in recent years but is becoming popular and can now be found in large quantities in several North American nurseries. There is a white variety which is a much less attractive plant. *R. punctatum* blooms later than the so-called Catawbiense Hybrids, and although a larger plant than *R. carolinianum* with slightly larger pink flowers is not as good a garden plant for the flowers, like those of *R. maximum*, are hidden by the shoots of the year which rise above them. Comparatively few seedlings of *R. carolinianum* have ever been raised and apparently not much attention has been paid to selecting from the plants growing on the high Appalachian peaks individuals with flowers of unusual colors. It is perhaps the hardest of all Rhododendrons; the habit is excellent, and the leaves are handsomer than those of the other hardy species. Improvement in the color of the flower is all that is needed to make it a first-rate plant for this climate. Experiments with seedling plants of this species are certainly worth making. *Rhododendron maximum* is the most northern of the eastern North American Rhododendrons and is not rare in some parts of New England. In the valleys of the southern mountains it is sometimes a bushy tree up to forty feet in height, but in the north it is much smaller, and is distributed in isolated stations from Nova Scotia through New England and eastern New York to Pennsylvania; from Pennsylvania southward along the Appalachian Mountains it is very abundant at low altitudes, often covering the slopes of narrow valleys with impenetrable thickets. The flowers are white or pale rose color and produced in rather compact clusters which as the flowers do not open until late in June or early in July are a good deal hidden by the branches of the year which rise above them. The long comparative narrow leaves sometimes a foot in length make this Rhododendron valuable in a climate in which few broad-leaved evergreen plants can be successfully grown.
Rhododendron caucasicum is a dwarf, white-flowered species which is still little known in this country. The variety called Boule de Neige is much used in Europe as a stock plant for its varieties and hybrids, and is growing in the Arboretum. Another variety or hybrid about which we practically know nothing beyond the fact that it is hardy and one of the most beautiful of all dwarf Rhododendrons is called Mont Blanc. The flowers of this are pink when they open but soon turn pure white. In 1908 the Arboretum imported from T. J. Seidel, the well known nurseryman at Schwepnitz, near Dresden, a set of Rhododendrons which are the most promising hybrids which have ever been in the Arboretum where practically nothing is known about their origin except that they show evidences of the blood of *R. caucasicum*. They are dwarf compact plants which bloom every year a week or ten days earlier than the Catawbiense Hybrids and are perfectly hardy. No indication of their parentage is given in the names which are: Adalbert, Adam, Alarich, Albert, Annedore, Arno, Attila, August, Anton, Bella, Bismarck, Boule de Neige, Calliope, Daisy, Desiderius, Diana, Donar, Echse, Eli, Eva, Fee and Viola. We do not know of any plants under these names except those in the Arboretum, and an effort will be made to find out from the raiser their parentage. Although much smaller both in the size of the flower-clusters and that of the plant, they are much more satisfactory in this climate than any of the Catawbiense Hybrids. Unfortunately they can no longer be imported from Europe, but it may be possible to obtain stock on which they can be propagated, and of course good varieties may be obtained from seeds. On the whole this race is the most promising for New England and best worth the attention of growers. Many of the varieties are still in flower and others are fading.

Lonicera Maximowiczii var. sachalinensis. Although this shrub has been known to science for a number of years, it was introduced into cultivation by Wilson who collected seeds at the base of the Diamond Mountains in northern Korea in August, 1917, where it grows as a shrub four or five feet high with erect branches. It is distinguished from the better known *Lonicera Maximowiczii*, which is widely distributed through northeastern Asia and has been an inhabitant of the Arboretum for many years, by its leaves which are bright red as they unfold and glaucous and glabrous on the lower surface. Last year it had a few flowers but this year the plant in the Shrub Collection is covered with its scarlet, long-stalked flowers which will be followed by red fruit. This as it is growing this year is one of the handsomest of the new introductions and a plant which should be known to the lovers of beautiful shrubs.

Lonicera Maackii, which is a native of northern China, is covered just now with its large white flowers, and in bloom is a handsomer plant than the variety *podocarpa* discovered by Wilson in western China. This is almost a tree with small white flowers but brilliant red fruit which ripens while the leaves are still green in the autumn, the green leaves making a beautiful contrast with the fruit, and for autumn decoration make it one of the most desirable of all fruit-bearing small trees or shrubs. The largest plant in the collection is among the Chinese plants on the southern slope of Bussey Hill.
Another Asiatic Honeysuckle, *Lonicera Morrowii* of the Amour region in eastern Siberia, is a plant of great decorative value if sufficient space for its development can be provided for it. It has gray-green foliage, comparatively large yellowish flowers and bright red fruits. It is largely planted in the Boston Parks and in Franklin Park there are specimens which are twenty feet across and probably ten or twelve feet high. Like other Bush Honeysuckles, *L. Morrowii* hybridizes easily with other species, and most of the plants raised from seeds now sold by American nurseriesmen under this name are hybrids of this species with *L. tatarica* and are erect-growing plants of little value for those who want plants with the peculiar habit of *L. Morrowii*.

**Two trees** which add beauty and interest to the Arboretum at this time are two Viburnums, the eastern American Viburnums, *V. prunifolium*, which is already dropping its flowers, and *V. Lentago*, a bush-like tree sometimes thirty feet high. Not many small trees are more useful than these American Viburnums for the decoration of American parks and gardens, and nurserymen fortunately recognize this fact and now grow them in large quantities, especially *V. Lentago* which is the more northern species of the two. The flowers of *V. prunifolium* are whiter than those of *V. Lentago* which are faintly tinged with yellow, but the flower-clusters and leaves of the latter are larger. *V. prunifolium* is more apt to grow with a single trunk than *V. Lentago* which is often a large arborescent shrub and is a more southern species.

**Magnolia Watsonii** is a shrub first found in a Japanese nursery and is unknown as a wild plant. Its relationship is with *M. parviflora*, a small Japanese tree which grows as far north as Korea. The Arboretum has plants raised from seeds gathered in Korea by Wilson which have not yet flowered but which ought to be harder than the Japanese plant which is not very satisfactory here. *M. Watsonii* has usually not been hardy in the Arboretum but this year there is a plant on Hickory Path near Centre Street covered with blossoms which are extremely fragrant, differing in this from *M. parviflora*, and in its larger flowers and shorter flower-stalks. When better known it may prove to be only a variety of *M. parviflora*.

**Daphne genkwa** is one of the beautiful shrubs discovered by Wilson in western China. It is not a success in eastern Massachusetts but this year there is a plant in the Arboretum with a few flowers. On Cape Cod and Long Island it grows into a fine shapely round-topped bush with bluish fragrant flowers which are followed by yellow fruit. It is still very rare in gardens. If the fruit on the few plants known in the United States is distributed in good hands it should in the course of a few years be common on Cape Cod and southward.