Japanese Azaleas. The flora of Japan contains many species of Azaleas, and in early spring their brilliant flowers enliven innumerable hillsides. Many species and varieties are favorite garden plants in Japan, and Japanese gardens owe much to these plants. In distribution the Azaleas of Japan are generally southern, and only a few species are found in the northern part of the empire. All of the species will probably flourish in the southern United States; and many of them will succeed as far north as Long Island and possibly in Newport, Rhode Island. Of the sixteen Japanese species three are well established and hardy in the Arboretum; a northern species, *Rhododendron* (all Azaleas are now called *Rhododendrons* by botanists) *Albrechtsii*—related to our *Rhodora* but with red flowers, judging by the climate of the region in which it grows, should also be hardy here. This handsome plant, however, which was first raised at the Arboretum twenty-five years ago, has not been a success here. Another northern species, *Rhododendron Tschonoskii*, with the smallest flowers of any Azalea, is an old inhabitant of the Arboretum but is without value as an ornament of gardens. Two beautiful Azaleas from the mountain forests of central Hondo, *Rhododendron Rehderianum* and *R. pentaphyllum*, have not yet been sufficiently tested in the gardens of this country; they may be expected to be able to bear the cold of Massachusetts winters, but appear difficult to establish. Another Japanese Azalea, *R. mucronatum*, generally known as "Azalea ledifolia" or as "Azalea indica alba," has been seen in American gardens for the last eighty years. It is very often found in the old gardens of the southern states; it is hardy and often cultivated on Long Island, and occasionally lives for many years in sheltered positions in eastern Massachusetts. The three Japanese species, which have proved themselves,
after a trial of twenty-five years, to be perfectly hardy and first-class garden plants in eastern Massachusetts are *R. Kaempferi*, now considered a variety of *R. obtusum, R. japonicum* and *R. reticulatum*, better known as *R. rhombicum*. The first of these plants is the only red flowered Azalea which is hardy in this climate. Thousands of seedlings have been raised in this country in recent years and it will soon become common in eastern gardens. It has been largely used in the Arboretum, and late in May and in the early days of June its flowers furnish the most surprising and spectacular display of the year. The flowers are delicate, however, and when fully exposed to the sun lose their color; and this Azalea gives most satisfaction when it is planted in the shade of trees or on the northern border of a wood of conifers. In the Arboretum the most successful group of this Azalea is behind the Laurels (Kalmia) and in front of the Hemlocks at the northern base of Hemlock Hill. The plants bloom a week later than those in more exposed situations and their flowers last much longer in good condition. The tallest plants in the Arboretum are now eight or nine feet high and although growing in complete shade never fail to flower.

**Rhododendron japonicum** has been growing in the Arboretum as long as Kaempfer’s Azalea, and by many persons it is considered a handsomer plant. It is a round-topped rather compact shrub usually not more than three or four feet tall, with flame-colored flowers three inches across. It is only in recent years that the value of this plant in American gardens has been recognized, for it was long supposed, in the Arboretum at least, to be one of the numerous forms of the short-lived and usually unsatisfactory hybrids sent to this country chiefly from Holland and known commercially as “Azalea mollis.” A beautiful yellow-flowered variety of *R. japonicum* (var. *aureum*) has been found in Japan, and a few plants have reached the United States, where two years ago it flowered for the first time in a Massachusetts garden. This plant promises to be an important addition to the number of hardy Azaleas which can be grown in this climate. A handsome race of hybrid Azaleas was obtained several years ago in Europe probably by crossing *Rhododendron japonicum* with the yellow-flowered Azalea of eastern China, usually known as *R. sinense*. To this race of hybrids the general name of *R. Kosterianum* has been given. The best known plant of this hybrid origin is probably the one called “Anthony Koster.” It is a handsome plant, but not always entirely hardy in this climate where it is usually short-lived. About eight years ago T. D. Hatfield, gardener of the Hunnewell Estate at Wellesley, Massachusetts, crossed *R. japonicum* with *R. sinense* raised from seeds collected by Professor Sargent in Japan with *R. sinense* raised from seeds collected by Mr. Wilson in eastern China. There can be no doubt about the parentage of this plant. This new Azalea, which has been named *R. Kosterianum,* “Miss Louisa Hunnewell” bears large clusters of orange-colored flowers which open as the leaves unfold; the plant is perfectly hardy, and the flower-buds were not injured by the exceptionally severe winters of 1917-18 and 1919-20. If anyone in the United States has raised a handsomer shrub it is unknown to the Arboretum. During the last seventy-five years several hundred different hybrid Azaleas have been made in Europe and the United States; accurate and reliable records of
the parentage of these hybrids, however, have not been kept, and published statements of their parentage are often mere guesswork. Certainly many of these hybrids have been obtained by crossing not only species but hybrids. This mingling of plants, themselves often of unknown or uncertain origin, has produced difficulties of determination which no amount of study will probably ever overcome; and of all hybrid Azaleas the parentage only of this Wellesley plant is really known, a fact which certainly adds to its value and interest.

The third Japanese species which is now well established in the Arboretum is *Rhododendron reticulatum*, the oldest name for the plant more generally known as *R. rhombicum*. This plant is common over a large part of Japan, growing on open wind-swept hillsides, on the borders of the forest and in the shade of thick woods. The flowers are deep magenta color, red-purple or rose-color, and do not harmonize with those of several other Azaleas, but when *R. rhombicum* is isolated or planted with white-flowered plants it is when in flower one of the most beautiful and distinct of all hardy Azaleas. A white-flowered form (var. *albiflorum*) is known to Japanese botanists but this plant, which is said to be rare, is not in gardens.

**Early-flowered American Azaleas.** Before the flowers of *Rhododendron Vaseyi* have entirely faded those of the two most widely distributed species of eastern North America, *R. nudiflorum* and *R. canescens*, begin to open. These plants are common from New England to Texas; they have pink, very fragrant flowers which open before and as the leaves emerge from the bud, and very similar in general character, will perhaps sometime be considered varieties of one species. They have been planted in considerable numbers in the Arboretum and grow equally well in open borders or in the partial shade of woods. Before their flowers fade those of the flame or yellow-flowered Azalea (*R. calendulaceum*) of the Appalachian Mountains, the most splendid of American Azaleas, will begin to open.

**The Rowan Tree,** as the European Mountain Ash (*Sorbus Aucuparia*) is often called, has certainly not before in the Arboretum been more thickly covered with its wide clusters of white flowers or appeared to be in a most satisfactory condition. The largest and best of the Arboretum trees were sown by birds; there are several of these trees in different parts of the Arboretum and others are constantly springing up. Handsome at this season of the year, they are more beautiful in the autumn when the branches bend under the weight of the clusters of scarlet fruit which birds eagerly seek. Several plants of a Chinese Mountain Ash, *Sorbus discolor* (sometimes called *S. pekinensis*) in the group of these plants on the left hand side of the Valley Road near the Swamp White Oaks, now covered with flowers, show the ornamental character of this tree at this season of the year. This Mountain Ash is a tall, slender, hardy tree with leaves composed of narrow, long-pointed leaflets pale on the lower surface, broad open clusters of snow-white flowers, which are followed by small yellowish white fruits in drooping clusters. *Sorbus alnifolia* is also very full of flowers; it is a common Japanese tree, one of the species of an Old World section of the genus with
simple leaves, that is leaves not divided like those of the Rowan Tree
into numerous leaflets, which in Japan sometimes grows to the height of
sixty feet. In the Arboretum, where this tree has been growing for
twenty-five years, there are shapely pyramidal specimens from twenty
to thirty feet tall. The leaves are dark green, three or four inches
long, and nearly full grown when the flowers open; these are small and
arranged in compact six- to twelve-flowered clusters, and are followed
by small, scarlet and orange fruits which remain on the branches after
the leaves fall and until eaten by birds. There is a specimen of this
Sorbus near the Cherries on the right hand side of the Forest Hills
Road. The species and varieties of Sorbus were first planted in a group
in the Arboretum on the bank above the Shrub Collection near the For-
est Hills entrance. Several of these trees, including the eastern Amer-
ican species, are still growing here; but as this bank was too hot and
dry, and not large enough for more than a few plants, another plan-
tation of Sorbus has been made in the cooler ground by the Meadow
Road. The plants grow better here but the group, like most of the
large groups of trees in the Arboretum, requires more room for a
proper display of all the interesting species and varieties. Mountain
Ashes (Sorbus) suffer severely from the attack of scale insects and
can only be kept in good condition by the annual use of the sprayer.

Rosa omeiensis has opened its flowers this year several days before
R. Hugonis and R. chinamomea which are usually the first Roses to
flower in the Arboretum. This Chinese Rose, which is common on the
mountains of western China, gets its name from Mt. Omei, one of the
sacred mountains of the Empire, where it is common. It is a hardy,
fast-growing shrub with erect stems covered with bright red prickles,
white fragrant flowers hardly more than an inch in diameter, and bright
red fruit on elongated fleshy, yellow stalks. On its native mountains
it sometimes grows to the height of twenty feet. Judged by the way
it has grown in the Arboretum, this Rose should make an excellent
hedge for New England gardens.

Aesculus georgiana is covered again with its compact clusters of large
red and yellow flowers. This southern Buckeye has not been injured
by the severe winters of 1917-18 and 1919-20, and is certainly one of
the best new plants which have been brought into our gardens in re-
cent years. When first discovered it was believed to be confined to the
neighborhood of Stone Mountain in central Georgia, and to be always
a shrub in habit, but is now known to range northward in the Pied-
mont region to North Carolina, and often to grow into a small tree.
The oldest plants in the Arboretum are beginning to assume a treelike
habit, and in the parks at Rochester, New York, Aesculus georgiana
is a shapely small tree with a straight well developed trunk. Many
other Horsechestnuts and Buckeyes are now in flower; and the large
group of these trees and shrubs on the right hand side of the Meadow
Road is just now one of the most interesting and attractive in the
Arboretum.