Rhododendrons. In the Arboretum June is Rhododendron time and by “Rhododendron” is meant the familiar group with large evergreen foliage. A few early sorts blossom in late May but from the beginning until mid-June is their real season in this part of the world. With their bold evergreen foliage and large clusters of handsome flowers Rhododendrons rank among the noblest plants found in the northern temperate regions. In Bulletins of previous years much space has been given to discussing them. Unfortunately only a few species and a limited number of garden hybrids can be successfully grown in the Arboretum. In this connection it should be remembered that the latitude of Boston is about the same as that of Rome, Italy. The climate of the two places, however, is very, very different, yet it must be remembered that at the spring solstice the sun is equally high in the heavens in both places and its direct warmth equally great. Usually the ground hereabouts is firmly frozen until April and in consequence the roots of plants are unable to function. The sun's rays cause excessive loss of water from the leaves by transpiration and, since the roots are unable to draw moisture from the earth, the inner tissues of the leaf collapse and death ensues. The fact that New England has virtually no native broad-leaved evergreens indicates clearly that the climate is unsuited to the growth of such plants. Its unsuitability is further emphasized by the fact that, although the northern parts of the world have been ransacked in quest of plant material, very few broad-leaved evergreens have been found that are able to withstand the severe climatic conditions.

Situation. Bearing in mind the latitude and the strength of the sun's rays in March it should be obvious to thoughtful people that if they are to have any success with broad-leaved evergreens, and with Rhododendrons in particular, they must be planted in a situation protected from the morning sun; in other words a northerly or westerly slope should be chosen. In the Arboretum they are planted under the lee of Hemlock Hill, but even in this favorable position they suffer more or less every season. A cool acid or neutral soil rich in humus is demanded, and a mulch of Oak leaves is necessary throughout the winter. But the practice of heaping mulch upon mulch over a period
of many years is to be condemned, since rain-soaked leaves form a
dense mat through which no air can penetrate and the soil in conse-
quence becomes sour. Rhododendrons are surface rooting plants and
their root system is a multitudinous network of fibres. Always near
the surface roots should be fed and nurtured if healthy plants are to
be maintained. From the fact that they have a fibrous root system Rh-
ododendrons can be moved with safety up to almost any size always
provided they be not allowed to suffer lack of water afterwards.

The Lacewing Fly in recent years has become a bad pest on ever-
green Rhododendrons as well as on Laurel (*Kalmia latifolia*). This
insect infests the under surface of the leaves and can be controlled by
spraying with Sunoco Oil in the proportion of one gallon to seventy
gallons of water applied after the Flies hatch out, which is usually
about the end of May or beginning of June. The solution should be
applied through a fine nozzle under strong pressure taking care that
the spraying be done from below upwards. If the infestation is bad a
second spraying should take place within ten days of the first. In
August another spraying may be given to take care of stragglers hatch-
ing out a second brood. The third spray should be stronger (one to fifty).

Hybrids. Most of the evergreen Rhododendrons with bright colored
flowers are hybrids of mixed parentage, but those which are hardy here
have either the native *R. catawbiense* or *R. maximum* as the dominant
part parent. A baker's dozen of the best of these hybrids is: with
red flowers—Atrosanguineum, Charles Dickens, H. W. Sargent; with
reddish flowers—Caractacus; with rose-colored flowers—Roseum elegans,
Lady Armstrong; with pink flowers—Mrs. Charles Sargent, Henrietta
Sargent; with dark purple flowers—Purpureum grandiflorum, Purpureum
Elegans; with light purple flowers—Everestianum; with white or nearly
white flowers—Album Elegans, Album Grandiflorum, Catawbiense
Album. Earlier than these to blossom are the so-called Caucasian
Hybrids of which Mont Blanc, Boule de Neige, Coriaceum, Glenynanum
and Cassiope, all with white or nearly white flowers, are growing in
the Arboretum. More attention ought to be paid to the Caucasian
Hybrids since they are of good habit and very hardy.

Species. North America is poor in species of evergreen Rhododen-
drons. In western North America there is one, *R. californicum*, found
from British Columbia to California but not hardy in the Arboretum.
In eastern North America *R. maximum*, *R. catawbiense*, *R. minus*, *R.
carolinianum*, *R. Chapmanii* and *R. loppomeneum* complete the list.
The last-named is a circumpolar plant which it has not been found
possible to cultivate in the Arboretum; *R. Chapmanii* is not hardy.
*R. maximum*, the Rose Bay, has handsome foliage, relatively small
pinkish blossoms and is an excellent woodland plant. *R. catawbiense*
is equally good in foliage and has larger flowers but the color is not so
pleasing. *R. minus* has small pink blossoms rather hidden among the
young growth.

*R. carolinianum*, the seventh, is a firstclass garden plant, hardy,
free-flowering and easily accommodated. Of twiggy habit it forms a
loose more or less rounded shrub with compact clusters of medium sized flowers varying from white through shades of pink to rosy purple. Planted thickly and allowed to form masses it is most effective, flowering profusely in late May and early June. Like others of the group having gland-dotted leaves, *R. carolinianum* can be rooted from cuttings; also it is easily raised from seeds.

*R. Smirnowii*, native of the Caucasus, is the only exotic species of broad-leafed *Rhododendron* thoroughly happy in the Arboretum. This is a singularly handsome plant with stout branches and 6 inch-long leaves, dark green above and densely clothed on the under surface with a white felt of hairs. The flowers, large and produced in broad pyramidate clusters, vary in color from rose-pink in the bud to pale pink when fully expanded. The presence of a felt of hairs on the underside of the leaves renders this plant immune from the attacks of the Lacewing Fly.

**Laburnum Watereri.** On Centre Street Path a tree of this handsome *Laburnum* is now laden with golden-yellow blossoms in pendant racemes 6 to 8 inches long. This *Laburnum* is a hybrid between the so-called Scotch *Laburnum* (*L. alpinum*) and the common *Laburnum* (*L. anagyroides* better known as *L. vulgare*). The Scotch *Laburnum* is characterized by smooth, bright green leaves and long racemes of yellow blossoms, and is perfectly hardy in the Arboretum. A large plant may be seen on the right just within the Forest Hills Gate. The Common *Laburnum*, which has smaller leaves, grayish on the underside, and shorter racemes of blossoms, has not proved so satisfactory. The hybrid *L. Watereri* is intermediate in character between its parents, and, fortunately, partakes strongly of the hardiness of its Scotch parent. *Laburnums* are small trees, which bear in profusion pendant racemes of yellow flowers. The genus is interesting not only on account of its beauty, but as the only endemic genus of trees Europe boasts.

**Neillia sinensis.** Among the Chinese shrubs on top of Bussey Hill and also on Centre Street Path this pleasing plant is blossoming freely. Of twiggy growth, with arching, ascending-spreading branches, it makes a rounded bush from 4 to 6 feet tall. It has ovate, long pointed, coarsely toothed leaves with prominent stipules and terminal racemes of pink blossoms. Introduced from the mountains of central China in 1907, it has proved floriferous in the Arboretum.

**Asimina triloba.** Slender trees of this interesting American plant are in full blossom on Centre Street Path. Of foetid odor the nodding lurid purple flowers, each about 1½ inches across, are produced on the naked stems, usually singly from the axils of the previous year's leaves. The fruit is oblong-cylindric, from 2 to 6 inches long, with a thin glaucous, yellowish skin, and edible pulp. The plant suckers freely and the tendency is to form small groves. The Pawpaw, to use its Indian name, is widespread from New York to Florida and west to Nebraska and Texas. It is interesting as the only member of the large family *Annonaceae* (Custard Apples) that can be grown in north temperate regions. Most of the members are tropical and yield highly appreciated fruits.

E. H. W.