In spite of the severity of the past winter and the injury which it caused, and of the drought of September and October which has been of exceptional length, the Arboretum on the whole does not look bad, and for lovers of plants there is much of interest to be seen here this year in the early weeks of November. The conifers, with few exceptions, are in good condition, although the leading shoots of a few species have been destroyed by a borer, the White Pine Weevil (Pissodes strobi). The species which are injured by this pest nearly every year in the Arboretum are the Himalayan White Pine (Pinus excelsa), the White Pine of western China (Pinus Armandii), the Oriental Spruce (Picea orientalis), and the Balkan Spruce (Picea omorika). The Balkan Spruce is the last European tree brought into cultivation; it is a beautiful, fast-growing and perfectly hardy tree which on the mountains of southwestern Europe sometimes grows to a large size and is highly valued as a timber tree. In this country, or at least in the Arboretum, it does not promise to become valuable as an ornamental tree unless the ravages of the White Pine Weevil can be stopped. There is no indication yet that many of the new Chinese conifers, especially the Pines and Spruces, will not flourish in this climate. The Larches are perhaps less promising, and the Firs, although some of them may prove hardy, grow badly in the nursery and do not give promise of much value here.

A few of the conifers in the Pinetum which are particularly interesting just now are the Colorado White Fir (Abies concolor), the Japanese Abies brachyphylla and A. homolepis, the Carolina Hemlock (Tsuga caroliniana), and three Japanese Pines, Pinus parviflora, P. Thunbergii, and P. densiflora. There are good plants of a dwarf form of the last in the collection of dwarf conifers to which attention is called. This dwarf is a common plant in Japanese gardens and should be better known in this country, for it is one of the handsomest of all dwarf conifers among which are many decorative garden plants. Among other conifers which should be studied at this time are Englemann’s Spruce (Picea Englemannii), the Colorado form of the Douglas Fir (Pseudotsuga mucronata), the Siberian Spruce (Picea obovata), the western White Pine (Pinus monticola), the different forms of the Black Pine of Europe (Pinus nigra, laricio, etc.), and some of the eastern North American Pines, notably Pinus resinosa, P. virginiana, and P. Banksiana.

The few broad-leaved evergreens which can be grown successfully in this climate are in good condition, and Laurels (Kalmia) and all Rhododendrons now promise abundant flowers for next year. The evergreen Hollies are beautiful now. Ilex opaca is covered with its large red berries and is interesting because it is the only broad-leaved evergreen tree which is hardy in the Arboretum. Although less beautiful than the European Holly with its lustrous leaves, it should be more often seen in eastern American collections in which north of Washington the European tree is not hardy. The native Inkberry (Ilex glabra) is one of the most valuable of the evergreen shrubs which can be grown in this climate. It is a round-topped plant, occasionally five or six feet tall, and is very common in the neighborhood of the coast from New
England to Texas. As an ornamental plant it is chiefly valuable for its small shining leaves which nearly completely hide the small black fruits which remain on the branches during the winter. A large mass of this Holly can be seen on the Bussey Hill Road opposite the Laurels at the northern base of Hemlock Hill. Only one other Holly with evergreen leaves has proved hardy in the Arboretum. This is the Japanese *Ilex crenata*, which is a taller growing and narrower plant than *Ilex glabra*, with darker green leaves and larger black fruits. There are several of these Hollies on the lower side of Azalea Path.

Several shrubs are more beautiful now than at any other season of the year, especially those with showy fruits which retain their leaves late into the autumn with little or no change of color. Among such plants not one perhaps is more beautiful than the common European Privet (*Ligustrum vulgare*) which has been cultivated for centuries and has become naturalized in the eastern United States. This plant bears at the ends of the branches large clusters of shining black berries which now make a fine contrast with the dark green leaves. The European Privets are in the Shrub Collection where they are planted with a number of Asiatic deciduous-leaved species, to all of which they are superior as decorative plants at this season of the year.

There are few more beautiful shrubs in the Arboretum at this time than the variety (var. *podoarpa*) of the eastern Asiatic *Lonicera Maackii* which was discovered by Wilson in western China, for its leaves are still green and perfectly fresh, and its branches are covered with bright red fruits. This is a large, vigorous, fast-growing, and perfectly hardy shrub with wide-spreading branches and requires a good deal of space in which to show its real beauty. From the northern *Lonicera Maackii*, a native of the Amoor region, the leaves have mostly fallen, but the erect growing branches are covered with scarlet fruits. The flowers of the northern plant are pure white and larger than those of any other Bush Honeysuckle.

Photinia is a genus of the Rose Family related to the Apples, with a few species of small Asiatic trees. Two of these plants, *Photinia villosa* and its variety *laevis*, thrive in the Arboretum and may now be seen in the Shrub Collection covered with their small red fruits. These little trees succeed perfectly in this climate; their small white flowers are freely produced in spring in many-flowered clusters, and their fruit remains a long time on the branches, especially that of the variety, from which it sometimes does not entirely disappear until the end of winter. This plant has been largely planted in the Boston parks, and several good specimens can be seen along the borders of the Francis Parkman Road.

The trees and shrubs of Japan usually retain their leaves later than the related American species, and as the leaves of many Japanese plants take on brilliant colors in the autumn they are valuable for prolonging the beauty of the autumn garden. It is interesting to find that this late changing of color is common also among many of the plants of western China. This is particularly noticeable in the new species of Cotoneaster discovered by Wilson. The leaves of nearly all these plants are still perfectly green, and probably by the middle of November they will be bright scarlet, or in some species scarlet and orange. These plants have late ripening, red or black fruits which greatly add to their beauty, and among them are certainly some of the most val-
uable shrubs of recent introduction. There are now many good speci-
mens of these Cotoneasters on Bussey Hill and they deserve the atten-
tion of all lovers of hardy plants, especially Cotoneaster divaricata,
C. foveolata and C. Dielsiana, the leaves of which turn brilliant colors,
and the different forms of C. horizontalis, low shrubs with wide-spread-
ing nearly prostrate branches. These have small lustrous leaves which
in this climate do not fall before Christmas, and small red berries. No
shrubs are better suited for the decoration of the rock garden.

Among the American Hawthorns which show their greatest beauty
in November may be mentioned Crataegus cordata, C. nitida and C.
persistens. The first of these plants, the so-called Washington Thorn,
is a narrow, slender tree, which sometimes attains the height of twenty
or thirty feet. The flowers are small, creamy white, and do not open
here until nearly the middle of June, and the small, scarlet, shin-
ing fruits, which ripen late in October, remain on the trees without
much change of color until the spring. As the fruit begins to show
its bright color the small triangular leaves turn to shades of orange
and scarlet. Crataegus nitida is a native of the bottom-lands of the
Mississippi opposite the city of St. Louis; it is a large tree with slightly
spreading pendulous branches forming a large, open, round-topped head.
The leaves are narrow, long-pointed and very lustrous; the flowers are
pure white, of medium size, and produced in numerous clusters which
cover the upper side of the branches. The scarlet drooping fruit, which
is also of medium size, ripens late just as the leaves turn orange and
scarlet. This is one of the handsomest of the American Hawthorns
and has grown to a large size in the Arboretum. Crataegus persistens
retains its leaves, which are now as green as they were in mid-
summer, after those of all other Hawthorns have fallen, and the
 crimson fruit remains on the branches until spring, making this tree
in winter the most conspicuous of the deciduous-leaved plants hardy in
New England. It resembles in the shape and in general appearance of
the leaves some of the Cockspur Thorns of eastern North America.
Raised many years ago at the Arboretum from seeds received from the
Paris Museum, its native country is still unknown. The largest plant
of this tree in the country, and the type of the species, can be seen
among several large Hawthorns at the foot of the bank on the path-
way near the Forest Hills entrance to the Arboretum, where it is now
the only plant with perfectly green leaves.

The only shrub now in flower in the Arboretum is the Witch Hazel
of the northern states (Hamamelis virginica) which is covered with
its yellow flowers.

These bulletins will now be discontinued until spring.

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