The brilliant autumn coloring of the leaves and the abundant and handsome fruits of many trees and shrubs are conspicuous features in the floras of eastern North America and eastern Asia, and as there are larger collections of these plants in the Arboretum than in other gardens this is the best place to study trees and shrubs with reference to the autumn decoration of parks and gardens in our northeastern states. Bright autumn colors can be seen in the Arboretum from the middle of September until the middle of November, or even later in exceptional years. Handsome fruits begin to ripen here in July and on some plants they retain their brilliancy until late spring. In Japan the great autumn color effects are in November or a month later than in our northern states, for in Japan the Maples, which are perhaps the most brightly colored of the Japanese trees, take on their autumn colors very late, as they do when transplanted to this country. The leaves of several eastern Asiatic trees change color and fall early. Some of these are Phellodendron amurense, Acer ginnala, Acer mandshuricum, and Evonymus alatus.

Phellodendron amurense. This is a small tree from the Amoor region of eastern Siberia. It is chiefly interesting as the type of a small genus with a few species of trees of eastern Asia of the Rue Family, and for its peculiar thick, ridged, pale cork-like bark. Early in October the leaves turn to a bright clear yellow which is hardly equalled in beauty by the yellow of the autumn leaves of any other tree. Unfortunately this beauty is short-lived and the branches are already bare.
**Acer ginnala** is another small tree or large shrub of the Amoor region. It bears compact clusters of small, nearly white, fragrant flowers and pointed lobed leaves which in October are even more brilliantly scarlet than those of the best of our native Red Maples. This beauty is also short-lived and is already passing. *Acer ginnala* is one of the early introductions of the Arboretum into the United States, and it is fortunate that its decorative value has been recognized by American landscape gardeners and nurserymen, and that it is no longer rare in American plantations.

**Acer mandshuricum.** This tree is still little known in the United States and Europe. It is one of the trees with leaves composed of three leaflets, and it is one of the largest and handsomest trees of the mountain valleys of Manchuria and Korea. It has slender bright red branchlets, and the narrow leaflets are three or four inches long, gradually pointed at the ends, and are borne on long, slender scarlet stalks. The pale color of their lower surface is retained after the upper surface has turned bright red early in October, and the contrast of the colors of the two surfaces greatly increase the October beauty of this tree. This Maple flowered in the Arboretum for the first time this year and produced a good crop of fruit, which, however, unfortunately proved to be abortive. If this tree is ever taken up by nurserymen there is every reason to believe that it will become one of the most ornamental trees of recent introduction.

**Evonymus alatus.** To those persons who complain that the Arboretum is not interesting because most of its plants are not known to them or are beyond their immediate reach this Japanese Burning Bush should bring hope and encouragement as well as much joy, for its autumn beauty has long been known and it is now to be found in most American nurseries. The flowers and fruits are small and inconspicuous, and the only real value of this shrub is found in the deep rose color passing to scarlet of its October leaves which are already beginning to fall. That its whole beauty may be seen this shrub should be planted as a single specimen with plenty of space for the free development of its spreading branches, which when it has been well planted will cover a diameter of ten or twelve feet on the ground and form a compact, round-topped bush six or eight feet high. The corky wings on the branchlets to which this plant owes its specific name and which vary in different individuals are interesting. There is a large plant in the Evonymus Collection on the right-hand side of the Meadow Road and there is another on the left-hand side of the Bussey Hill Road above the Lilac Collection.

**Eastern American Mountain Ashes.** As fruit trees the two Mountain Ashes of eastern North America, *Sorbus americana*, and its variety *decora* have been perhaps the handsomest objects in the Arboretum this autumn. The fruit is already almost entirely eaten by birds, for which every year it furnishes here abundant harvests; but attention is now called to these small trees in the hope that they may become as well known in the gardens of southern New England as they are in those of eastern Canada, northern Michigan, Wisconsin and Minnesota.
At its best *Sorbus americana* is a tree twenty or thirty feet tall, but more often and here in the Arboretum it is a large shrub with spreading stems. The leaves are composed of numerous slender pointed leaflets; the small flowers are creamy white and produced in small crowded clusters which do not appear until the leaves are fully grown; in the autumn these turn dull orange-red some time before falling, but the great beauty of the tree is found in its great clusters of small bright orange-red fruits which by their weight become semi-pendent. The variety *decora* is a larger tree with broader leaflets; the flowers are nearly twice as large, and the fruit which is larger and therefore more showy, is of the same color. This variety grows only along the northern border of the eastern and middle states and northward, and is perhaps the handsomest of all Mountain Ashes. Rarely seen in Massachusetts gardens it is often the chief ornament in those of the more northern parts of the country. There is a group of these Mountain Ashes on the right-hand side of the path leading from the Forest Hills entrance into the Shrub Collection.

**Prunus hortulana.** This is the handsomest of the American Plums and one of the handsomest of the small trees of eastern North America where it grows on rich bottom-lands from southern Illinois to southern Missouri. This is a tree sometimes twenty or thirty feet high, with a trunk covered with dark scaly bark, and stout, wide-spreading branches which form on the trees growing in the Arboretum a dense, round-topped and shapely head. The flowers, which are produced in few-flowered clusters, are sometimes an inch in diameter and open when the leaves are less than half grown. When the trees are in bloom their appearance is not unlike that of several other Plum trees; and the great beauty of this tree is in its habit, in the long pointed, comparatively narrow and very shiny leaves which are now turning a deep bronze-red color. The fruit, too, which looks like a bright red cherry, is an inch in diameter and droops gracefully on slender stalks. It is beautiful although the flesh is hard and austere, and it is not as a fruit tree but as an ornamental tree that this Plum deserves a place in parks and gardens in which small trees are valued. Two specimens can be seen in the Plum Collection on the right-hand side of the grass walk leading into the Shrub Collection from the Meadow Road.

**Magnolias.** The leaves of the Asiatic Magnolias fall late in the autumn without much change of color, and those of some of the American species, notably *M. acuminata*, the so-called Cucumber-tree, *M. tripetala*, the Umbrella-tree, *M. Fraseri*, the Mountain Magnolia, and the great-leaved *M. macrophylla*, all turn to shades of yellow and brown, which make these trees so conspicuous at this season of the year. The leaves of the yellow-flowered *M. cordata* are still as green as they were at midsummer. Later they also will turn yellow or brown, but the leaves of the Swamp Bay, *M. glauca*, which are still as beautiful as they have been for the last six months, will fall gradually here late in November or early in December without any change of color. Further south they remain on the branches usually until spring.
The group of American Magnolias is between the Jamaica Plain entrance and the Arboretum building.

Two American Viburnums. *V. Lentago* and *V. prunifolium* are even more beautiful now with their large brightly colored leaves and drooping clusters of large, dark blue fruit than they were late in the spring when they were covered with broad clusters of small, creamy white flowers. These are common eastern American plants and are shrubs or small trees, and there are no better subjects for the decoration of woods or forest glades. *V. Lentago* is the more round-topped plant of the two, with larger leaves and larger clusters of flowers, while *V. prunifolium* which naturally does not grow north of southwestern Connecticut, has more spreading branches, smaller clusters of whiter flowers and narrower leaves of a deeper red at this season of the year. These two Viburnums have been largely used in the Arboretum border-plantations which owe much beauty to them. The decorative value of these plants is now recognized and it is possible to find them in several American nurseries.

Ligustrum vulgare. Attention has often been called in these Bulletins to the value of the common European Privet, *Ligustrum vulgare*. In recent years much attention has been paid by botanists and gardeners to the Privets of eastern Asia, where many species have been discovered. None of these, however, are as valuable in this climate as the European species which is perhaps the handsomest of all hardy, black-fruited shrubs. The bright shining fruit is borne in compact clusters which stand up well on the ends of the branches above the dark green lustrous leaves and remain on the plants during the early winter months and after the dark green leaves have fallen. Formerly this was a common garden plant in the northern states and it is now sparingly naturalized in some parts of the country. There is a form with yellow fruit which is much less beautiful than the type. There is a variety *foliolosa* in the collection which has rather narrower leaves and larger fruit. This shrub, although apparently still little known in our gardens, is one of the handsomest of all shrubs here at this season of the year. The specimen in the Shrub Collection is now covered with its large and brilliant fruits, and is well worth a visit by any one interested in the autumn decoration of gardens.

*Abelia grandiflora* on Hickory Path near Centre Street is still well covered with flowers. These resemble in shape the flowers of some of the Honeysuckles; they are white faintly tinged with rose color, and their delicate beauty is set off by the small dark green and lustrous leaves. *Abelia grandiflora* is a slender shrub with arching stems from three to four feet high, and is thought to be a hybrid between two Chinese species. Until the introduction by the Arboretum of some of the species of this genus from western China it was believed to be the hardiest of the Abelia. In the Arboretum it suffers in severe winters; but in sheltered positions it flowers well every year and the flowers continue to open during nearly two months. This Abelia has become an exceedingly popular plant in the gardens of the southern states and is cultivated with more or less success as far north as New York.