Persons interested in the plants best suited for the decoration of parks and gardens of eastern North America can find much to learn in the Arboretum from this time until the end of the year, for it is in the autumn that conifers are seen to the best advantage and that the mature leaves of the few broad-leaved evergreens which flourish in this climate best show the beauty and value of these plants for the late autumn and winter garden. Perhaps nowhere else in the world are so many different plants with brilliant autumn foliage and handsome and abundant autumn fruits assembled as in the Arboretum; and in no other garden can such plants be so easily and conveniently studied. Such plants give a character and beauty to the autumn garden which can be found only in eastern North America and perhaps in Japan where the leaves of many of the native trees and shrubs assume brilliant colors before they fall. In the Arboretum the autumn foliage of many Japanese plants is as brilliant as it is in their native country, but it is still to be shown if that of American plants cultivated in Japan is as beautiful there as it is in our eastern states.

The earliest of the American trees to change the color of its leaves this year is the Red or Scarlet Maple, *Acer rubrum*. On trees growing in swamps the leaves are now often bright scarlet, while on trees growing on higher and drier ground the leaves are still bright green or only slightly tinged with red. The so-called Water Willow, *Decodon verticillatus*, perhaps better known as *Nesaea*, is a native of all the region from Maine to Florida and Louisiana, and is a shrub with arching stems from two to three feet long growing only in the wet often submerged borders of streams and ponds where it often spreads into broad thickets. The flowers and fruits are not conspicuous, but the stems hanging over the water make an interesting and attractive margin to a shallow pond or sluggish stream, and in early autumn the leaves turn bright scarlet, so that for a few weeks the plants are conspicuous among the green sedges and swamp grasses with which they are usually associated. It is not probable that the Water Willow is often cultivated, but it is now well established in the Arboretum along the margins of two of the little ponds near the junction of the Meadow and Bussey Hill Roads.

The leaves of some of the forms of the so-called Virginia Creeper of eastern North America are already bright scarlet. The earliest to adopt its autumn dress and now in brilliant color is *Parthenocissus vitacea*. This plant rarely has adhesive discs at the ends of the tendrils, so that it cannot attach itself to the trunks of trees or to brick and stone walls like *Parthenocissus quinquefolia*, which is often sold in nurseries as *Ampelopsis Engelmannii*. Of this plant there are several varieties recognized by botanists. On the variety *hirsuta* the young branches, tendrils and leaves are covered with soft down, and a form of this variety which grows in the neighborhood of Ontario in Canada appears to be the best of all the Virginia Creepers for covering brick walls. Fine plants of this form can be seen on some of the buildings at the Central Experimental Farm of the Dominion of Canada at Ottawa. The variety *San Paulii*, which is the common form in Illinois and Missouri, also attaches itself to walls and grows rapidly to a great
height. Nearly all the forms of the Virginia Creeper can now be seen on the trellis at the eastern side of the Shrub Collection and near the entrance from the Forest Hills Gate.

One of the handsomest shrubs in early autumn is the Japanese Evonymus alatus, for the leaves of this plant turn a delicate rose color unlike those of any other plant in the Arboretum. This Evonymus, with abundant room, spreads into a compact round-headed shrub from four to six feet tall and ten or twelve feet in diameter. The fruit is small and less conspicuous than that of many species of Evonymus. The broad or sometimes narrow corky wings of the branches make it conspicuous in winter. There is a good specimen in the Evonymus Group on the Meadow Road, and a large isolated specimen in the grass border of the Bussey Hill Road above the Lilac Group.

The earliest of the Opulus Group of Viburnums to change the color of its leaves is the eastern Asiatic Viburnum Sargentii, and on some individuals of this species the leaves are already dark red. Of the three species of this group this is the handsomest in flower, for the sterile flowers which surround the clusters of perfect flowers are larger than those of the eastern American or of the European species, but the fruit is small, dull in color and of little value.

Another plant from northeastern Asia, Acer ginnala, is beautiful in the autumn when the brilliant scarlet of the fading leaves of this small tree is hardly surpassed by that of any American tree or shrub. Among Maples Acer ginnala is interesting on account of the fragrance of the flowers, fragrant Maple flowers being unusual. It is a native of eastern Siberia, and has proved very hardy in the northern states, and in Quebec and Ontario.

Bright scarlet now are the leaves of Rosa nitida. This little Rose, which grows naturally on the margins of swamps from Newfoundland to New England, is perhaps the most beautiful of our native Roses and very distinct in the bright red prickles which thickly cover the stems and branches; it is too rarely cultivated.

A few of the fruits which ripen in early autumn are already conspicuous. There is perhaps no shrub more beautiful in the Arboretum at this time than one of the American Cornels, Cornus rugosa, or, as it is sometimes called, C. circinata. This is a tall, broad, round-headed shrub with greenish branches and round-oval, dark green leaves. The flowers are not more showy than those of other Cornels, but the clusters of light blue fruits on red stalks which now cover the plants make them objects of much interest and beauty. There are several plants of this species in the Cornel Group at the junction of the Meadow and Bussey Hill Roads, and there are large masses of it among the Hickories on the Valley Road. The finest individual plants, however, are on the slope where the Celtis collection is planted, on the right-hand side of the path which follows the north side of the Bussey Hill Road. The red Osier Cornel or Dogwood, Cornus racemosa, often called C. stolonifera or C. candidissima, is also beautiful at this season, for the leaves are beginning to turn dark red and the plants are covered with abundant clusters of white fruits on bright red stalks. There is a large mass of this plant in the Cornel Group and it has been largely planted in the mixed plantations along the drives. Spreading rapidly into large dense clusters, with good foliage, abundant flowers and beautiful fruits, few shrubs are more desirable for park or roadside plantations.
The two eastern American species of Mountain Ash, *Sorbus americana* and its variety *decora*, are covered with large clusters of scarlet fruit which remain on the branches in brilliant condition until after the leaves have fallen and until late in the season when they are eaten by the robins. These plants are on the border at the eastern end of the Shrub Collection and near the entrance from the Forest Hills Gate. In the same border several species of American Hawthorns are now bearing large crops of scarlet fruits, notably *Crataegus succulenta*, *C. prunifolia*, and *C. rotundifolia*. On some of the American Hawthorns the fruit ripens soon after the middle of August and has already disappeared; on other species it will continue to ripen during the next two months, and the fruit of a few species will retain its beauty until spring. Many of the young plants in the general collection of Hawthorns on Peter's Hill, are fruiting this year, and among them one of the Colorado species (*C. colorado*) is conspicuous from the abundance of its bright red fruits which ripen early in September. The decorative value of the American Hawthorns is hardly realized yet, although few small trees or shrubs produce more beautiful flowers or handsomer or more abundant fruits.

The collections of Grapevines on the trellises at the eastern side of the Shrub Collection is now in excellent condition and is one of the most complete and successful groups in the Arboretum. Persons interested in hardy vines or desirous of seeing the decorative value of our native Grapevines should lose no time in visiting this collection for the first severe frost kills the leaves of these plants. All the species of eastern North America, except two or three from the extreme south, are represented in the collection and they all have value as ornamental plants. Of the species which are not often seen in cultivation attention is called to *Vitis Doaniana* from the Texas Panhandle, *V. bicolor* from eastern New York and southward, and *V. arizonica* with its small pale gray-green leaves. The Japanese *Vitis Coignetiae* is perhaps a more vigorous plant than any of the American species, although probably *V. cinerea* and *V. aestivalis* growing on the rich bottom-lands of the Mississippi valley reach a greater height than this Japanese vine, but in the size of its thick dark green leaves which are sometimes a foot in diameter, in its vigor, rapid growth and massive appearance it has no equal among the Grapevines which have been grown in the Arboretum. In northern Japan the leaves turn bright scarlet before falling, but the earlier frosts of the American autumn, which is a month earlier than the autumn of Japan, generally destroy the leaves while they are still green.

The season for flowers in the Arboretum is practically ended for the year, although one of the new Chinese shrubs, *Indigofera ambliantha* is still covered with its erect spikes of small rose-colored flowers. This is a small perfectly hardy shrub with erect stems, which, beginning to flower the middle of July, continues to produce its flower clusters until October. Among summer-flowering shrubs this is certainly one of the most beautiful of recent introduction.

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