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No. 47

# ARNOLD ARBORETUM

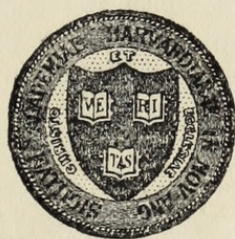
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## BULLETIN

OF

## POPULAR INFORMATION



JAMAICA PLAIN, MASS.

JUNE 26, 1913

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It is generally believed that the disease which is now destroying the American Chestnut-tree and the European Chestnuts planted in this country will not attack the Asiatic species. If these trees are really immune they will probably be of much economic importance in the United States. The Japanese Chestnut-tree (*Castanea crenata*) is a common inhabitant of the mountain forests of the central and northern parts of the empire. The Japanese have paid much attention to improving it as a fruit tree and very large chestnuts are sold in the markets of Kobe and Osaka, and are sometimes imported into San Francisco; and nearly as large nuts are raised in great quantities in the neighborhood of the northern city of Awomori. Several of these improved forms of the Japanese Chestnut have long been cultivated in the United States; the tree is hardy in the Arboretum but it does not grow particularly well in eastern Massachusetts, and the climate of the middle states appears better to agree with it. Unless the ravages of the chestnut disease can be checked, it is to China that we must turn for a tree to replace the native Chestnut in New England. Fortunately the common Chestnut of northern and central China (*C. mollissima*) is a tree of good promise here. Raised in the Arboretum from nuts found in Peking by Professor Sargent in 1903 the plants have grown without any check or injury and are now forming tall straight stems and narrow heads. They flowered and produced a few fruits last year and they are now coming into bloom again and look as if they would soon become productive. The other Chinese Chestnut (*C. Vilmoriniana*) is a larger tree and an inhabitant of the mountain forests of western Hupeh where it grows at altitudes between two and four thousand feet above the sea-level. Like the American Chinquapin it has only one nut in a burr. Plants of this noble tree have been raised at the Arboretum from seed collected by Wilson and are growing well, but it is too soon to speak of its hardiness and value in this climate. The Chinquapin (*Castanea pumila*) in the shrubby form common in the South Atlantic states, and in the tree form of the region west of the Mississippi River, from southern Missouri to Texas, is in flower. Although the species is not immune, the plants in the Arboretum have not yet been attacked by the disease. The Chinquapin blooms earlier than the common Chestnut-tree (*C. dentata*) on which the flowers are usually open during the first week of July. The Chestnut collection is on the right-hand side of the Valley Road just beyond the Hickories, going from the Centre Street entrance.

Several Grapevines are in flower and their perfume fills the air. Much time and labor has been expended in forming this collection which is on the trellis at the east side of the Shrub Collection and is one of the most interesting and valuable in the Arboretum. These plants have great decorative value, but their value is still little known to gardeners and it is difficult to obtain many of the species. The value of Grapevines for covering walls can be seen near the Jamaica Plain entrance and on the wall between the Jamaica Plain and Forest Hills entrances, and their value for covering the ground can be seen at the junction of the Meadow and Hemlock Hill Roads, where there are grapevines which are cut back to the ground every spring. All the North American species which are hardy are growing in the Shrub Collection. Among little known species best worth attention are per-

haps *Vitis Doaniana* and *V. cinerea*; the first is a native of the Texas Panhandle and is a fast-growing plant, apparently perfectly at home in New England. The leaves are large and thick, and of a rather pale bluish green color. The fruit grows in small clusters and is covered with a pale bloom. *V. cinerea* grows on river banks in the Mississippi Valley from Illinois to Kansas and Texas. This plant bears very large leaves which are dark green and dull on the upper surface and ashy gray on the lower surface, which, like the young shoots, is clothed when the leaves unfold with a thick, felt-like, gray covering. Some of the other species in the collection which are worth studying from the point of view of the planter of handsome vines are *V. vulpina*, the Frost Grape, the species which grows the farthest north; *V. rotundifolia*, the Muscadine or southern Fox Grape; *V. monticola*, the Sweet Mountain Grape of the limestone hills of southwestern Texas; *V. rubra*, a graceful plant found from Illinois to Missouri, Louisiana and Texas; *V. arizonica*, with small, pale gray-green leaves; *V. aestivalis*, the Summer Grape of the middle states, with large, dark green leaves covered below with rusty brown hairs; *V. bicolor*, of the northern and middle states, a vigorous growing plant with large, deeply-lobed leaves dark green on the upper surface and pale blue-green on the lower surface; *V. labrusca*, the common Fox Grape of New England, with leaves which are covered below with tawny white, tan-colored or red-brown felt, and large berries which vary in color from dark purple to reddish brown or amber color; and *V. cordifolia*, the Frost Grape, an inhabitant of the middle states, with thin leaves light green on both surfaces, and with large clusters of small blue fruits which become edible after frost; this is one of the largest and most vigorous of the American Grapevines, often growing into the tops of the tallest trees and forming stems from one to two feet in diameter.

Among Old World Grapevines the most valuable as ornamental plants here are *V. Coignetiae* and *V. amurensis*. The first is an inhabitant of northern Japan, and is a large plant with enormous, thick, prominently veined leaves pale on the lower surface, which in the autumn turn bright scarlet. This for northern countries is one of the most valuable of all Grapevines. *V. amurensis* is a native of eastern Siberia and, although less vigorous than *V. Coignetiae*, it is a hardy and valuable plant for covering walls and trellises. The Chinese *V. Davidii* is interesting because, unlike other Grapevines, the stems are thickly covered with spines. The leaves of this plant turn bright red in the autumn. Unfortunately in severe winters the stems are killed back to the ground, and it rarely produces fruit in this climate. Equally interesting, perhaps, is another Chinese Grapevine, *V. Pagnuccii*, with leaves which are sometimes shaped like those of an ordinary Grapevine and sometimes are deeply and variously lobed much like those on the Virginia Creeper. There are in the Arboretum a large number of Chinese Grapevines raised from seeds collected by Wilson in western China, but it is still too soon to speak of their value here as ornamental plants.

The earliest Hawthorns (*Crataegus*) are in flower in the Arboretum before the end of April, and the latest of them, the so-called Washington Thorn (*C. cordata*), is now in flower, so that these plants have a blooming period here of at least two months. Their fruits are beautiful during even a longer period, for the earliest Hawthorn fruit is ripe in August and on some species it remains on the branches and retains its shape and color until spring. The Washington Thorn is a native of the

southern Appalachian foothill region and westward to Missouri, and has occasionally become naturalized in the middle Atlantic states from West Chester County, New York, to Delaware. It is a tree sometimes thirty feet high, with erect branches, small, nearly triangular, shining leaves which turn bright scarlet in the autumn, small, dull white flowers in small compact clusters, and small scarlet fruit which remains on the branches until late spring. The late flowers, the brilliancy of the autumn foliage, and the abundance and brightness of the fruit during the winter months, make this one of the most desirable of the American Hawthorns as a garden plant. Several large plants of the Washington Thorn can be seen on the slopes of the overlook near the top of Bussey Hill.

The Silky Cornel, *Cornus Amomum*, is now opening its small white flowers. This has been much used in the Arboretum borders, but in cultivation it is not a satisfactory plant unless it can be given sufficient room for its wide-spreading branches to extend freely and spread over the ground. When crowded by other plants the branches become erect and it loses its real beauty and value. To be seen at its best it should have a clear space with a diameter of not less than twenty feet in which to spread. It is well suited for the front of groups of larger plants; and there is no better shrub to plant by the margins of streams and ponds where its long branches can hang gracefully over the water. Its purple stems are attractive in winter, and the bright blue fruits which ripen in the autumn add to the attractions of this native shrub. In the Cornel Group, at the junction of the Meadow and Bussey Hill Roads, there is a good specimen of this plant and near it are two southern species which will not be in flower for a few days, *C. asperifolia* and *C. stricta*.

Attention is called to one of the new Honeysuckles from western China, *Lonicera Henryi*. This is a plant with long slender stems which, on its native mountains spreads over low bushes and rocks; it has large, dark green pointed leaves, and axillary clusters of flowers which when they first open are rose color but soon turn orange red; they have no perfume. There is a mass of this plant in full flower in the bed of Chinese plants on the southern slopes of Bussey Hill.

The white-flowered Chinese and Japanese tree Lilacs (*Syringa pekinensis* and *S. japonica*), many species and varieties of Philadelphus, the native Roses, the fragrant *Rhododendron arborescens*, and the yellow-flowered Woad-wax (*Genista tinctoria*) are now conspicuous in the Arboretum. The last is the plant which covers many hills in Essex County, Massachusetts, where, an escape from cultivation, it has proved a dangerous weed and destroyed much of the value of thousands of acres of land.

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



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