Late Lilacs. A group of Lilacs which bloom later than any of the forms of the common garden Lilac (*Syringa vulgaris*) and earlier than the so-called Tree Lilacs makes the period of Lilac flowers here continuous for nearly two months. These late-flowering Lilacs have been in bloom for several days. The first of them known in gardens was a Hungarian species, *Syringa josikaea*. This is a tall narrow shrub with erect stems, broadly elliptic, dark green, lustrous leaves and narrow open clusters six or seven inches long of small violet-colored, long-tubed flowers. Interesting from the point of botanical geography, as its home is further west than that of any other Lilac, it is the least attractive as a flowering plant of all Lilacs with the exception, perhaps, of the Chinese *Syringa pinnatifolia*. Five years later in 1840 the second of these late-flowering Lilacs, *S. Emodii*, was cultivated in English gardens. It is a large broad shrub with large leaves pale on the lower surface and broad clusters of light lilac or nearly white flowers, and is a native of the Himalayas. This shrub is hardy in the Arboretum in a sheltered position, and occasionally flowers here. In this climate, however, it has little to recommend it as an ornamental plant.

The most valuable in this group has proved to be *Syringa villosa*, a native of northern China, and sometimes called *S. Bretschneideri* and *S. Emodi*, var. *villosa*. This plant was first raised in the United States at the Arboretum in 1882 from seeds which had been sent from St. Petersburg by Dr. Bretschneider, and is now often seen in our northern gardens. As it grows in this country it is a round-topped, handsome bush ten or twelve feet high and wide, with large, broadly elliptic to oblong leaves bright green and dull on the upper surface, and compact, broad or rarely narrow clusters of flesh-colored or nearly
white flowers. As a garden plant this is one of the handsomest of the Lilacs for its habit is excellent, and it flowers freely every year, the flowers remaining in good condition for several days. Unfortunately they have a rather disagreeable odor like those of the Privet. Two plants now found in some nurseries under the names of S. Josikaea pallida and S. Josikaea rosea are only forms of S. villosa with slightly different colored flowers. Plants under these names were cultivated, however, in Europe several years before the discovery of S. villosa, and if they or other varieties of S. Josikaea are known to any of the readers of these Bulletins the Arboretum will be glad to hear from them.

In the hands of the skilful French gardener L. Henry Syringa villosa crossed with S. Josikaea has produced a remarkable race of hybrids to which the general name of S. Henryi has been given. Plants of this breed are large, very vigorous, perfectly hardy and grow rapidly. The foliage resembles in a general way that of S. villosa, but the flowers are violet-purple or reddish-purple and are produced in great clusters twelve or fifteen inches long and broad. One of the handsomest of this race has violet-purple flowers and has been named Lutécé. The var. eximia has more compact clusters of rose-colored or reddish flowers which after opening become light pink.

Another of the late-flowering Lilacs, S. Wolfii, is a native of Mongolia or northern Korea and is still little known either as a wild plant or in gardens. It reached the Arboretum in 1906 from St. Petersburg where it had been sent by the Russian traveler and botanist Komarov. The foliage resembles that of S. villosa, but the flowers are produced in much larger clusters and are smaller and violet-purple; in color they resemble that of the flowers of the hybrid Lilac Lutécé but they are smaller and in denser clusters than those of that plant. When Syringa Wolfii is better known it will probably be considered one of the handsomest of this group of late-flowering Lilacs.

With the exception of Syringa Meyeri and S. pinnatifolia, all the new Lilacs from western China flower late, and several of them have been in bloom during the past week. The most interesting of these new Lilacs is S. reflexa, a large shrub with ample dark green leaves and long, narrow, compact, drooping clusters of pink flowers which are bright red before opening. This Lilac differs from all others in the drooping flower-clusters and for this reason will probably become a popular garden plant.

Syringa Julianae has been covered with flowers again this year and is a valuable plant in this climate. It is related to S. pubescens and has the same shaped flowers with long narrow corolla-tubes, but although fragrant the flowers are less fragrant than those of that species and are produced in shorter clusters. The beauty of the flower-cluster is increased by the contrast between the violet-purple color of the outer surface of the corolla and the white inner surface of its lobes.

Syringa tomentella, with which, judging by the plants growing in the Arboretum S. Wilsonii is identical, is a tall, fast-growing and perfectly hardy shrub with slender arching stems and open habit. The foliage resembles that of S. villosa and the flowers are produced in large loose clusters and are of the palest rose color with long and slender corolla-tubes.
Syringa Sweginzowii is flowering well here this year as it has for two or three years. The leaves are dark dull green and sharply pointed, and the flowers are borne in long narrow clusters; they are delicately fragrant, half an inch long, with very slender corolla-tubes, and are flesh-colored in the bud, becoming nearly white after the buds open. This species flowers freely even as a small plant and is well worth a place in a collection of Lilacs.

Syringa yunnanensis, although it is a native of southwestern China, is quite hardy in the Arboretum where it is flowering now for the fourth year. It is related, like most of the species of western China, to S. villosa and is a tall shrub of open habit with glabrous leaves pale on the lower surface and long narrow clusters of light flesh-colored or pink flowers. Geographically interesting, this plant is probably of less value as a garden plant than S. Sweginzowii.

The Tree Lilacs. As the flowers of the late-flowering group of Lilacs fade the earliest flowers of the so-called Tree Lilacs begin to open. There are three of these Lilacs which all bear large clusters of white or yellowish white flowers with a corolla shorter than the stamens, while in other Lilacs the corolla is longer than the stamens which are hidden in its throat. The flowers of the Tree Lilacs all have the disagreeable odor of the flowers of the Privet, and the leaves fall in the autumn without change of color. The first of these plants to flower, S. amurensis, a native of eastern Siberia as its name implies, is a shrub in habit twelve or fifteen feet high with dark close bark, broad thick leaves dark green above and pale below, and short, broad, unsymmetrical flower-clusters. S. pekinensis from northern China flowers next. This is also shrubby in habit, sometimes twenty or thirty feet tall and broad, with stout, spreading stems covered with yellow-brown bark separating readily into thin plates like that of some of the Birch-trees, dark green, narrow, pointed leaves and short and unsymmetrical flower-clusters usually in pairs at the ends of the branches. This species holds its leaves later in the autumn than the others, and produces great quantities of flowers every year, the other species usually flowering abundantly only every other year.

The last of the Tree Lilacs to flower, S. japonica, is a native of northern Japan, and is really a tree sometimes forty feet high with a tall straight trunk covered with lustrous brown bark like the bark of a Cherry-tree, a round-topped head of upright branches, broad, thick, dark green leaves, and erect, mostly symmetrical flower-clusters from twelve to eighteen inches long. This is one of the handsomest of the small trees which bloom here at the end of June or early in July.

Cornus Kousa is a small tree which in eastern Asia enlivens the forests as Cornus florida enlivens the forests of eastern North America, and Cornus Nuttallii those of our Pacific states. The three species have the large white or creamy white bracts under the flower-clusters which make the inflorescence so conspicuous, but the Asiatic tree differs from the American trees by the union of the fruits into a globose fleshy head, while the fruits of the American trees are not united together. Cornus Kousa is a small tree rarely exceeding twenty feet in height, and the floral bracts are narrower, more pointed and not as pure white as those of the American trees. It is valuable, however,
because it flowers three or four weeks later than *C. florida*. *C. Kousa* is a native of central Japan and was found in western China by Wilson. The Japanese and Chinese plants are both now in flower, the former on Hickory Path near Centre Street and the latter with the Chinese shrubs on the southern slope of Bussey Hill. The floral bracts of the Chinese plant in the Arboretum overlap and are broader and less pointed than those of the Japanese form, and the inflorescence, which is three inches across, is much handsomer than that of the Japanese plant. The handsomest form of the Japanese tree which has been seen in this neighborhood is growing in Mount Auburn Cemetery where it has become an object of much beauty and interest.

*Indigofera Potaninii* has been raised at the Arboretum from seeds collected in the Province of Kansu by William Purdom during his collecting trip in northern China for the Arboretum. It is a beautiful little shrub now in bloom for the second year in the collection of Chinese shrubs on the southern slope of Bussey Hill. As it grows here it is three to four feet high, with a single stem and slender erect branches. The flowers are bright rose color, half an inch long, in long-stalked, erect and spreading racemes from two to three inches in length, from the axils of leaves on branches of the current year, and as the branches lengthen new flower-clusters appear and the plant remains in bloom for a long time. The flowers are of the same color but are larger than those of *Indigofera amblyantha* which Wilson found in western China and which until *I. Potaninii* bloomed was considered the handsomest shrubby species which could be grown here.

*Cornus rugosa*. Attention is called to the value of this common native shrub for the decoration of parks and gardens where, like many other eastern American trees and shrubs, it is rarely seen. *C. rugosa*, or *C. circinata* as it is still best known, is a shrub sometimes ten feet high which with plenty of space spreads into broad thickets. The young branches are green blotched with purple, becoming purple as they grow older. The leaves are broad, sometimes nearly circular, and dark bluish green; the flowers are ivory white, in compact clusters, and are followed in the early autumn by bright blue or nearly white fruits. This Cornel has been much planted in the Arboretum and is greatly improved by good cultivation. It can be seen in the Cornel Group at the junction of the Meadow and the Bussey Hill Roads; and the large individual plants and the great clumps on the right-hand side of the Bussey Hill Road beyond the Lilacs, and the masses among the Hickories in the group of these trees show the value of this shrub in park planting when great compact masses of foliage are needed.

*Rosa multiflora*, var. *cathayensis* is in flower on the southern slope of Bussey Hill. This is a climbing Rose with single pink clustered flowers and the Chinese representative of the better known white-flowered *Rosa multiflora*. This variety *cathayensis* is one of the most beautiful plants of its class, and is interesting as the wild plant from which have been derived the Crimson Rambler, such old-fashioned garden plants as *Rosa multiflora carnea* and *R. multiflora platyphylla*, long popular in England under the name of the Seven Sisters Rose.