LILAC BULLETIN FULL OF FACTS

Dr. C. S. Sargent Describes Arboretum Collection.

MORE AT HIGHLAND PARK

Rochester Park Contains All Lilacs in Arboretum and More, Too. Much Admired by Harvard Expert—Tells Best for Garden Use

Dr. Charles S. Sargent, director of the Arnold Arboretum at Harvard University, has made the lilac the theme of the latest bulletin of popular information to be issued from that well-known botanical garden. The bulletin is of particular interest to Rochester inasmuch as Highland Park, which attracts much attention at this time of year, contains every variety of lilac at the arboretum, and a number of others. Dr. Sargent's bulletin on lilacs follows in part:

"The earliest lilac in the collection was in flower at the end of the last week in April and it will be the first of July before the flowers of the latest have faded. The lilacs are all Old World plants and the genus is confined to Eastern Europe, Southwestern Asia, the Himalayas, and to Eastern Asia, from Eastern Siberia to Western China and to Japan, the largest number of species having been found in China.

"Although a great improvement has been made in the flowers of the common lilac of gardens (S. vulgaris) by skillful cultivators of this plant in France and Germany, comparatively few important results have yet been obtained by crossing the different species, although one of the most valuable of all lilacs as a garden plants is a hybrid between S. vulgaris and S. persica. This hybrid appeared in the Botanic Garden at Rouen nearly a century ago and through an error as to its origin it was unfortunately called S. chinensis. In gardens it is also sometimes known as S. rothomagensis.

"Another interesting hybrid lilac is known as S. hyacinthiflora. This was raised in France and is the result of crossing the common lilac with the Chinese S. oblata. The extremely fragrant flowers are small and double and are borne in small clusters. This plant, however, is chiefly valuable on account of its earliness for, like its Chinese parent, it is one of the first lilacs to flower. Some of the recently discovered Chinese species will probably be less desirable garden plants than several of the better known species, but it is not impossible

that they may prove valuable in the production of new hybrid races.

"That a great and unexpected prize may be obtained by the breeder of lilacs is shown in the new race known generally as Syringa Henryi. This hybrid was obtained in Paris a few years ago by crossing the Hungarian S. Josikaea with the Chinese S. villosa. One of the plants obtained from this cross, called Lutece, is one of the most beautiful of all garden lilacs, although its Hungarian parent is perhaps the least beautiful of the whole genus, and the last species most breeders would have selected for one of the parents of a new race of garden plants. What therefore may be the result of crossing the small-flowered species collected by Wilson in Western China with some of the large-flowered species no one can now predict.

"From the wild lilac (S. vulgaris) of the mountains of Bulgaria, many varieties have been obtained in the three centuries since this plant reached Western Europe. The flowers of these varieties vary from dark purplish red through all the shades of lilac, and to pale pink, white and blue. The flower-clusters vary in length and breadth, and there are single-flowered, semi-double and double-flowered forms. The flowers of some forms are more fragrant than those of others and there is a difference of a week or more in their time of flowering. The double-flowered forms usually bloom later than the single-flowered form, and the double flowers last longer. The wild Bulgarian plant

is in the collection and will flower this year.

"It is interesting to compare the flowers of these wild plants with those of the forms which have been improved by cultivation. There are now 160 of these forms in the collection. Several others are in cultivation, but the arboretum collection shows the variation which cultivators have produced in the lilac and contains all the most desirable and vauable kinds. New varieties are produced every year, but these show no real improvement over many of the forms produced many years ago, and the appearance of new varieties more valuable than those already in cultivation can hardly be expected.

"The Arboretum is often asked for a list of the best garden lilacs. No two persons, however, will agree on what are the best lilacs for this is a matter of individual taste. Some persons prefer the white flowers and others the very dark flowers. Some lovers of lilacs think that none of the new varieties compare in beauty with the purple-flowered lilac of old gardens. One of the most satisfactory of the lilac-flowered forms is Charles X. Among the single-flowered white varieties no plant produces larger flowers in greater abundance than Marie Legraye; for those persons who admire double-flowered lilacs none is better than the late-blooming, white-flowered Madame Lemoine. Philomen, Ludwig Spath and Congo are as good as any of the very dark-flowered varieties, and among the pink-

flowered varieties Macrostachya is a first-rate garden plant.

"All the forms are equally hardy and equally vigorous; they all grow with nearly equal rapidity. Many of these forms, however, are so nearly alike that it is not easy to distinguish them, and in a collection of ten or twelve can be obtained all that are best worth growing.

"In addition to S. vulgaris there are now established in the collection twenty species of syringa and some of them are beautiful and desirable garden plants. The first of the species to flower is S. affinis from Northern China; this is one of the most generally cultivated of all shrubs in the gardens of Peking. The pure white flowers are borne in loose, rather narrow, open clusters, and are extremely fragrant. There is a mauve-flowered variety of this species, var. Giraldii, which was discovered a few years ago in Western China by a French missionary and which appears to be unknown in Chinese gardens. The two forms are very hardy, grow rapidly, and are blooming well this year. The habit of these plants, however, is loose and not attractive, but they deserve a place in every collection on account of their very early and fragrant flowers.

"Another Chinese lilac, S. oblata, flowers nearly as early. This plant has the handsomest leaves produced by any lilac; they are broad, thick and shining, and in the autumn, unlike those of any other lilac, they turn a deep dark wine color before falling. This plant grows

into a large, broad symmetrical shrub. The flowers are pale lilac color and very fragrant, but unfortunately the flower-buds are often injured by late frosts and the brittle branches are frequently broken by ice. When this lilac is in good condition it is one of the handsomest of the collection, but it cannot be depended on. This year the flower-buds have been killed.

"Another North China species, S. pubescens, is one of the best of the genus as a garden plant. It is a tall shrub with erect stems, small leaves and large clusters of pale lilac-colored flowers remarkable for the long tube of the corolla and for their delicate fragrance; indeed the flowers of S. pubescens are more fragrant than those of any other lilac, and for this fragrance alone this plant should find a conspicuous place in every northern garden."

Syringa villosa, another north China species, is valuable for it is the last of the true lilacs to flower. It is a large, vigorous shrub, of excellent habit, with large leaves. The flowers are produced in clusters which vary in size on different individuals; they vary, too, in color from rose to flesh color and occasionally nearly to white. This plant is therefore best propagated by cuttings taken from the best varieties rather than by seeds. The flowers have a disagreeable odor. Only two of the new Chinese species will flower this year, S. Meyeri and S. Julianae. The former has dark purple flowers, with corolla tubes even longer than those of S. pubescens, and is in-

teresting because it begins to flower freely when not more than a foot or two high; its history, too, is interesting. The plants in the Arboretum were raised from seeds gathered in China by F. N. Meyer, a collector of the United States Department of Agriculture. Meyer made no herbarium specimens and has no recollection of the place where he found the plant. No other plants but those in the Arboretum were raised and the only knowledge of the species has been obtained from the small plants cultivated here. S. Julianae, discovered in western China by Wilson, is of the same general character as S. pubescens, and is a conspicuous plant in flower as the outside of the corolla is dark purple and the inner surface of the corolla lobes white. The flowers are fragrant but not so fragrant as those of S. pubescens. The plant is very hardy but it is too new in cultivation to make it posible to judge of its real value as a garden plant.

Of old-fashioned shrubs now too seldom seen in gardens none are more beautiful than the Persian lilac (S. persica) and its white-flowered variety. The Persian lilac is a native of southwestern Europe where it is found from the Caucasus to Afghanistan and was cultivated in England as early as the middle of the seventeenth century. In gardens it forms a wide and shapely bush which, after the common lilac has finished its bloom, covers itself with long clusters of small, fragrant flowers which weigh down the slender branches. This is one of the parents of the hybrid S. chinensis already

mentioned. This hybrid is a shrub as large or larger than the common lilac, with slender branches, leaves intermediate in shape between those of its two parents, and large, elongated clusters of purple-red flowers intermediate also in size between those of its parents. There is a variety of this hybrid with nearly white flowers.

There are three tree-like lilacs with large unsymmetrical clusters of small white flowers which belong to a section of the genus distinguished by the very short tube of the corolla. The first of these to flower, S. anurensis, comes from eastern Siberia; this is followed by S. perinensis from northern China, and later by S. japonica, the last and most tree-like of the lilacs.

The Arboretum lilacs have never given promise of a more abundant crop of flowers, and it is probable that the largest number of plants will be in the best condition during the week beginning on the 14th of May.