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THE BETTER ORIENTAL CHERRIES

THERE is always much interest in the oriental flowering cherries at this time throughout the eastern United States. In Washington, Philadelphia, New York and other eastern cities extensive plantings of them can be seen in late April when they first burst into bloom, for the flowers have the most desirable trait of appearing before the leaves (in the case of most single flowered forms) or with the leaves in the case of the double flowered forms. Certainly in no cases are the flowers hidden by the foliage! In New England there are some that are perfectly hardy, some that are hardy in all but the most severe winters, and others which should not be grown at all, either because they are tender, or because they are similar in flower to some of the better species and varieties.

The Arnold Arboretum has been responsible for the introduction of many of these oriental trees and has planted numerous varieties over the years. Charles Sprague Sargent, Ernest Henry Wilson and others have been outstanding in the study and introduction of many of these plants, so it may prove helpful to gardeners in New England to review some information about these plants at this time, as they come into flower.

The Sargent Cherry is the tallest of all, being a standard tree up to 75 feet in height, although in this country few trees have exceeded 50 feet. The others are considerably smaller, and the double flowered Prunus serrulata varieties seldom grow over 20 feet in height. The single flowered forms have small fruits, usually bluish black, and the double flowered forms produce few if any fruits. Even though the fruits are produced, they appear after the leaves are fully developed and so are completely hidden. Thus these trees have practically no ornamental value when in fruit — an important point. One or two, like the Sargent Cherry have brilliant autumn color, but most have no autumn color at all. The bark of the Sargent Cherry is interesting in the winter and that of Prunus serrula is really outstanding because of its glossy red appearance, but the winter effect of most of the rest is negligible.

Consequently, with a very few exceptions, these trees are of ornamental interest only during the period they are in flower, another important point to bear in mind especially when planting the small home grounds where space is often at a premium. The length of period these plants are in flower depends on the weather. If the weather is cool at the time the flowers open, the trees with single flowers may be colorful for a week. On the other hand, if the weather is hot, or if there are heavy rains at the time of full bloom, these cherries may be of interest for only two or three days.

The double flowered varieties will of course be colorful for a much longer period, simply because there are many more petals. Two weeks is probably the maximum time they will be of interest, providing the weather is favorable, but again, if hot weather intervenes, this period will be reduced considerably. One new hybrid of *Prunus subhirtella* should be mentioned in this respect, for it has the desirable trait of opening its flowers consecutively over at least a two week period. This hybrid was produced at the Arnold Arboretum in 1941 and has been named Prunus "Hally Jolivette" (*Arnoldia*: 8:9-12, Dec. 1948).

Consequently, with no ornamental fruits, with little autumn color, these plants as a group can be enjoyed only for the limited time they are in flower. When compared, as a group, with the flowering crab apples for instance, one might think twice before using valuable space to plant them when other trees like the crab apples might be selected which always have two seasons of interest, and sometimes more.

Propagation

There has been considerable discussion during the past thirty years concerning methods of propagation for these interesting trees. The species like *P. sargenti*, *P. yedoensis*, *P. incisa*, etc. will breed true from seed unless the seed is collected from trees growing in close proximity to other closely related cherries. The varieties, especially those of *P. serrulata*, must be budded or grafted on some understock, since cuttings root with difficulty. It is the understock which has caused much discussion. At one time *P. sargenti* was enthusiastically recommended, but long experience both with our own trees in the Arnold Arboretum and with trees in the extensive collection in Durand Eastman Park in Rochester, N.Y., has shown that *P. avium*, the Mazzard Cherry, is better and more permanent as an understock. Varieties of *P. yedoensis* can be grafted on seedlings of the species, and varieties of *P. subhirtella* can be grafted on seedlings of that species, but for the majority of the varieties of the oriental cherries, Mazzard Cherry understock has proved most reliable from a long-term view point.

Pests and Culture

There are few insect and disease troubles to bother these cherries. Scale insects are perhaps the most prominent, which means that the trees should be sprayed with a dormant oil every two or three years, unless the pest is serious,



The bark of Prunus serrula is a rich reddish brown throughout the year.

when they should be sprayed annually. In the collections at the Arnold Arboretum, canker worm is about the only other pest with which we have to deal, easily controlled with a spray of DDT or lead arsenate applied at the time the small worms first begin to feed. Consequently, it must be admitted that as far as pests are concerned, the oriental cherries are no worse off than the crab apples.

It is perhaps unfortunate that so many people have the impression that these trees are best planted beside water. It is true that in such situations they are very beautiful, and the reflections formed as the trees blossom are superb, but trees planted this way can have a very short life span. Such situations frequently have very poor drainage, so that a tree may grow satisfactorily for a few years then die suddenly, merely because the drainage was not satisfactory. Good soil and good drainage are both aids in producing trees that have a maximum life span, and in the case of all but one or two species (such as the Sargent Cherry) this life span may be under twenty years. They are not long lived trees, for their branching habit is conducive to weak crotches, and their thin bark is often susceptible to "sun scald" in the more severe winters.

Varieties

Over 150 species and varieties of oriental cherry trees have been named by Japanese horticulturists and at least fifty are at present growing in the United States. The amateur gardener can have a difficult time determining which are best. Hardiness is the first consideration. The Sargent Cherry is the hardiest of the species and "Kwanzan" and "Fugenzo" are the hardiest of the double flowered varieties, at least in New England.

The close similarity of some of the double flowered varieties is marked. All but the specialist want trees that are distinct from a landscape point of view. Some of the varieties have flower clusters with only slightly longer flower stalks, or the flowers are just a shade lighter or darker than some of the others, or the leaf serrations or pubescence varies from some of the others. Such botanical characteristics are not conducive to distinct ornamental variations when the trees are judged in a landscape setting. Then too, the flowers of some varieties are considerably more fragrant than those of some others, reason enough why the fragrant flowering forms should be first selected. Because of these things, the better varieties only are here recommended and briefly discussed. Other varieties may be grown by the specialist who has the space, the funds and the time to grow plants with only minor variations.

The oriental cherries recommended below, are divided into general groups according to habit or flowers, in order to make it easier to select certain ones for specific landscape purposes.

1. Bush-like Trees.

Prunus "Hally Jolivette" a hybrid of P. subhirtella developed at the Arnold Arboretum will probably develop into a small bushy tree. The flowers are small,

white, semi-double, and do not open all at once but consecutively over a two week period, reason enough why it should be recommended here.

Prunus incisa, the Fuji Cherry, is a delightful bushy tree, about 18 feet tall and very dense. Native in Japan, it has long been a favorite in this country and in England as well because of the extreme floriferous condition when in bloom. Its small white flowers, sometimes pinkish, are produced regularly each year in such great profusion that sometimes it is difficult to see the branches and twigs. It was first introduced into America in 1910.

Prunus nipponica, the Nipponese Cherry, is similar in size and density of branches and foliage. It also has white to pinkish flowers and is a native of Japan. Perhaps it might be desired in preference to some of the other cherries because it is one of the few cherries the foliage of which turns a splendid yellow to orange-crimson in the fall.

2. Standard trees, 30 feet or more in height.

Prunus maximowiczi, the Miyama cherry, has white, single flowers. It eventually reaches a height of 30 feet, is a native of Korea and was first introduced into America in 1892. Although beautiful in flower, it is particularly noted for the fact that its foliage turns scarlet in the autumn. This desirable trait, brings it into the small group of cherries with two seasons of ornamental interest, and so makes it more desirable from a landscape viewpoint than some of the others. Unfortunately it is very difficult to locate available plants from commercial nurseries.

Prunus sargenti, the Sargent Cherry, was named after Charles Sprague Sargent, first Director of the Arnold Arboretum, and has been recommended many times in former issues of Arnoldia. It is a standard tree of 75 feet in height in its native land, but probably will not grow over 40-50 feet in America. The flowers are single, large and deep pink and the young leaves, appearing as the flowers fade, are a rich bronze color as they unfurl, an added asset. In habit it is wide and spreading with a rounded top, but a fastigiate form is growing in the Arnold Arboretum and will be available from certain nurseries within a few years. It is one of the hardiest and the tallest of all the oriental cherries and is blessed with a rich red autumn color, giving it outstanding ornamental value in the fall as well as in the spring. This tree can be recommended for street tree use as well as use as a specimen, in most of New England.

Prunus serrula is a tree as yet unavailable outside arboretums in this country. It grows about 30 feet tall, has white flowers, but is especially noted for its brilliant glossy, reddish-brown bark, a striking ornamental character that lends beauty and interest to this tree throughout the entire year.

Prunus subhirtella, the Higan Cherry, is perhaps best known for its varieties. The flowers are single, light pink to almost white, and the foliage is of a very fine texture. The variety autumnalis, has semi-double flowers $\frac{3}{4}$ of an inch in di-

ameter, that appear (some years) in the fall as well as the spring, although very few are produced in the fall. The Higan Cherry is one of the earliest cherries to bloom, is very graceful and floriferous. The variety "Moni-jigari" has double deep pink flowers and is most beautiful.

Prunus yedoensis, the Yoshino Cherry, is the one so widely planted around the Tidal Basin at Washington. Nearly 900 trees were presented to the city of Washington by the Mayor of Tokyo as a gift of friendship in 1912. These trees have prospered and have been appreciated by millions of visitors. The Yoshino Cherry has single white to pink flowers, about one inch in diameter that are slightly fragrant. It was first introduced into America by the Arnold Arboretum in 1902, and like all other cherries, is shown off to best advantage if planted in with an evergreen background.

3. Small Trees with pendulous branches.

Prunus subhirtella pendula, the popular Weeping Cherry, is probably the oldest oriental cherry tree in this country, having first appeared here about 1842. Its long pendulous branches and pink flowers are familiar to most gardeners. A double flowered form of this variety is growing in this country and is very beautiful indeed. The form of *Prunus yedoensis perpendens* that is growing in the Arnold Arboretum is not as graceful as is the more common Weeping Cherry.

4. Small trees with fastigiate form.

Prunus serrulata "Amanogawa," is the only true fastigiate oriental cherry worth growing. Its habit is favorably compared with that of the Lombardy Poplar, although of course it is a much smaller tree, seldom growing over 20 feet tall. The flowers are semi-double, light pink, fragrant, $1\frac{3}{4}$ inches across. David Fairchild is credited with first introducing this interesting variety from Japan in 1906. A very high percentage of the seedlings will retain the fastigiate form of the parent.

5. Small trees with spreading or upright branches.

- A. Flowers single or slightly semi-double (all are varieties of P. serrulata).
- "Botan-zakura" with semi-double flowers, pink, 2 inches in diameter, 6-15 petals and fragrant.
- "Gyoiko" the Japanese name meaning "Imperial yellowish costume" because the flowers are actually a yellowish green. This color is rather pleasing, the flowers being semi-double and $1\frac{1}{2}$ inches in diameter. The variety "Ukon" is similar but the flowers are larger.
- "Jo-nioi" is the most fragrant of all the varieties of P. serrulata, according to E. H. Wilson, reason enough why it should be grown. The flowers are mostly single, white and $1\frac{1}{2}$ inches in diameter.
 - "Taki-nioi" the Japanese name meaning "fragrant cascade." This tree sel-



"Shogetsu" is one of the better double flowered oriental cherries, and bears a profuse crop of blossoms annually.

dom grows over 12 feet tall. The flowers are single, white, $1\frac{1}{4}$ inches in diameter and fragrant.

"Washino-o" with single white flowers, $1\frac{1}{2}$ inches in diameter and very fragrant.

B. Flowers double (varieties of P. serrulata except P. sieboldi).

Prunus sieboldi, the Naden Cherry, is the first of the double flowered oriental cherries to bloom. The flowers are light pink, about 1½ inches across and fragrant.

"Fugenzo" which is also found in nurseries under the name of "James H. Veitch" or "Kofugen" is a popular variety for the flowers are as much as $2\frac{1}{2}$ inches in diameter. They are a rosy pink at first, fading to a light pink. Paul Russell, in his excellent work "The Oriental Flowering Cherries" remarks that this variety was known and cultivated by the Japanese 500 years ago.

"Kwanzan" is probably the most popular of all the double flowered varieties, and justly so. It is one of the most hardy. The flowers are a deep pink and as much as $2\frac{1}{2}$ inches in diameter, with 30 or more petals. The young foliage is a bright copper color as it first appears, adding materially to the colorful display of this tree in flower.

"Shirotae" is the best of the double white flowering cherries. Its Japanese name means "snow white." It is unfortunate that there is no double white form with as many petals as "Kwanzan" (30 or more) and this variety only has 12. However, the petals are slightly ruffled at the edges and this gives a most pleasing effect. The flowers are $1\frac{1}{2}-2$ inches in diameter and fragrant.

"Shogetsu" considered by some to be the most handsome of the double flowered cherries. It grows about 15 feet tall, is broad and flat topped. The flowers have about 30 petals, are a very pale pink color, often with a white center, and are up to 2 inches across.

DONALD WYMAN

Field Class

Registrations are still open for the Saturday morning Field Class at the Arnold Arboretum which meets Saturday, 10 to 12 o'clock, from April 29 to May 27.