The remarkable mildness of the winter of 1912-13 will long be remembered by the lovers of plants in eastern Massachusetts. In the Arboretum the Silver Maple (*Acer saccharinum*) was in full bloom on January 23d. The flowers of the Japanese Witch Hazel opened the following day; on January 23d *Hamamelis vernalis* was also in bloom, and on February 2d expanded flowers were found on the European *Daphne Mezereum*.

The Japanese Witch Hazel is too little known here; it is a large, vigorous, and perfectly hardy shrub and there are two forms, one of them blooming a few days before the other. In ordinary seasons they blossom about the middle of February, and for weeks their slender branchlets are bright with the clear yellow of the petals of their numerous flowers. These are uninjured by the severest cold to which they have ever been subjected here, a temperature of several degrees below zero making no impression on them. The Japanese Witch Hazel would be an excellent subject to plant in city yards and with the protection and warmth the plants would obtain from city buildings they would probably flower in Boston in January every year. Although its flowers are smaller than those of the Japanese species, *Hamamelis vernalis* is an interesting plant with considerable decorative possibilities. It is a native of southern Missouri and, although the existence of a Witch Hazel in that part of the country has long been known, it has only recently been distinguished from the autumn flowering species of the northern states. This Missouri species flowered this winter in the Arboretum for the first time in cultivation and is still little known in gardens.

In spite of the warmth of the early winter, which was followed by a few days of hard frost, the general absence of snow and the three cold nights in the first part of this month, few plants have suffered in the Arboretum and less damage has been done to doubtfully hardy species than usual. Many of the new Chinese plants introduced by the Arboretum and planted in exposed positions have now come through two winters—one exceptionally cold and one abnormally warm—without injury and there is, therefore, good reason to hope that several hundred new species of trees and shrubs raised from seed collected by Wilson can be added permanently to New England plantations.

With the exception of some Willows and Alders the earliest exotic tree to bloom in the Arboretum this year is the Japanese *Euptelea polyandra*, a small tree with erect branches and pyramidal habit. The flowers open before the leaves and their beauty is found in the large, conspicuous, orange-red anthers hanging on long slender filaments. The flowers are unisexual but the pistils do not appear until some time after the anthers. *Euptelea* is a small genus confined to Japan and western China. A second species, *Euptelea Franchetti*, raised from Wilson's seeds also promises to succeed in the Arboretum. The plants now in flower of the Japanese species are on the right-hand side of Azalea Path and should be examined by persons interested in rare and curious plants.
Cercidiphyllum japonicum, another Japanese tree, is just coming into flower. Unlike Euptelea, the male and female flowers are borne on different individuals and, like those of that genus, the flowers are without sepals and petals. The anthers of the staminate trees are red and rather showy, but the female flowers are inconspicuous. The beauty of the tree is in its foliage. The leaves are rounded and, although smaller, are in shape a good deal like those of the Redbud or Cercis. For this reason the name Cercidiphyllum has been given to the tree. When the leaves unfold they are bronze red, during the summer they are light green and turn in the autumn to clear yellow. This is the largest deciduous-leaved tree of Japan where it grows in the northern part of the empire scattered through forests of Oaks and other northern trees. Cercidiphyllum is a tree of pyramidal habit with a number of stems springing from the ground, and in Japan it often grows to the height of more than one hundred feet. It was introduced into the United States through the Arboretum many years ago and has now become common in collections here. There is a group of these trees on the two sides of the Meadow Road a short distance beyond the Administration Building entering from the Jamaica Plain gate. In western China Wilson found a Cercidiphyllum growing on open hill-sides with a tall straight trunk, and therefore quite unlike the Japanese tree in habit. This form, which has been named var. sinense, is growing well in the Arboretum, the young plants showing the single stem habit.

The first flowers of the earliest flowering Cherry in the Arboretum, Prunus tomentosa, are already open. This is a native of northern China and in cultivation is a broad, vigorous and perfectly hardy shrub of excellent habit which covers itself every year with large white flowers more or less tinged with red toward the base of the petals. The flowers are followed in early summer by bright red slightly hairy fruits of good flavor. Introduced by the Arboretum from Peking nearly thirty years ago, this has proved one of the most valuable of spring-flowering shrubs. There is a group of small plants of this Cherry on the right-hand side of the road just below the Forest Hills gate, and very large plants can be seen along the Boston Parkway between Perkins Street in Jamaica Plain and Forest Hills.

In the Cherry Group, on the Forest Hills Road, the Japanese and Chinese Prunus subhirtella and the Japanese Prunus pendula will be in full bloom early next week. The flowers of the former are among the most beautiful of the Asiatic Cherries, and the trees have never been more thickly covered with flower-buds.

The flowers of some of the Forsythias have appeared rather earlier than usual this year, especially those of the var. Fortunei of F. suspensa which is the form most generally cultivated in the neighborhood of Boston. This genus has given to our northern gardens some of the most beautiful and most satisfactory of all hardy shrubs. The species are all Chinese with the exception of F. europaea which was discovered in Albania a few years ago and is of much less value as a garden plant than the Chinese species. F. viridissima, the first species cultivated in Europe and America and the latest of all species to flower, is of comparatively little ornamental value. It is, however, one of the parents
of a race of hybrids, *F. Fortunei* being the other parent, known as *F. intermedia*, among which are some exceedingly valuable garden plants. One of these hybrids recently described as *F. intermedia var. primulina* originated in the Arboretum a few years ago. It has pale primrose-colored flowers which are produced in crowded clusters. This form is not yet much known in cultivation but it promises to be of exceptional value.

The Buffalo Berry (*Shepherdia argentea*) is in flower in the Oleaster Group on the left-hand side of Bussey Hill Road just above the Lilacs. The Buffalo Berry is a shrub or small tree, with handsome silvery leaves, minute clustered axillary flowers and small crimson or yellow subacid fruits which ripen early in the autumn. It is a common inhabitant of the borders of streams from Saskatchewan to the Rocky Mountains as far south as New Mexico. It is a valuable ornamental plant for the dry interior parts of the continent, and in the west much attention has, in recent years, been paid to it as a fruit plant.

The Spice Bush (*Benzoin aestivale*) is in full bloom on the right-hand side of the Bussey Hill Road opposite the end of the Lilac Group where there are large masses of this shrub. It is a native of the eastern United States and an inhabitant of the borders of swamps where it sometimes grows to the height of ten or fifteen feet. The flowers are small, bright yellow, and the male and female flowers are produced on different individuals, so that only some of the plants bear the small bright scarlet shining fruits which are so attractive late in the season in contrast with the bright yellow autumnal foliage. The leaves are fragrant like those of its relative the Sassafras, and are uninjured by insects. This is one of the common shrubs which should be better known by gardeners. Next to the Spice Bush Group the Leatherwood (*Dirca palustris*) is covered with its bright yellow flowers which appear before the leaves. This beautiful and interesting plant owes its common name to the toughness of the bark of the branches. Rarely cultivated, it deserves a conspicuous position in all collections of hardy shrubs.

On the right-hand side of Azalea Path the Japanese Box (*Buxus japonica*) is already in flower. This is a shrub of rather open habit with small yellow-green leaves, and the only really hardy Box which has been tried in the Arboretum. It is therefore of special interest to persons in search of broad-leaved evergreens suitable for New England gardens. It is remarkable, therefore, that this plant, which was raised here from seed brought from Japan by Professor Sargent twenty years ago, has remained practically unknown in this country beyond the borders of the Arboretum.

The most conspicuous flowers in the Shrub Collection now are those of a little European Heath, *Erica carnea*, which is already covered with its rosy red flowers. This is one of the few perfectly hardy Heaths which can be grown successfully in this climate, and an excellent plant for the early spring rock garden.

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