PIERIS FLORIBUNDA. The mountain andromeda has always been dependable at the Arboretum, much more so than the rhododendrons. Professor Sargent wrote of it that, "judging by an experience of over fifty years, it is the only broad-leaved evergreen to which nothing ever happens in this climate." It is not attacked by borers or the lace wing-fly, so troublesome on rhododendrons; its foliage stays a good bright green all winter long, and its nodding clusters of white flower buds are rarely injured by winter cold. They open the first thing in the spring and are in bloom now at the Arboretum. The mountain andromeda can not be recommended too highly, and, fortunately, is being used more frequently as its good properties are recognized.

Pieris japonica, the Japanese andromeda, is considerably less hardy, though its dark, shiny green leaves and the greater height to which it grows make it the more handsome of the two. However, there are some protected places in eastern Massachusetts (and at the Arboretum) where it is doing well; its clusters of flower buds hanging on the plant in graceful, drooping panicles, and its white flowers are certainly an asset in the garden at this time of year, if they can be brought through the winter uninjured.

The Corylopsis, now in bloom, are oriental shrubs, very similar to the witch-hazels in general habit. All species have yellow, drooping spikes of flowers before the leaves open. There are three Japanese forms, the oldest in cultivation being Corylopsis spicata and C. pauciflora. Unfortunately, these two plants can not be depended upon at the Arboretum, for they are frequently injured in the winter; either the flower buds themselves are killed or the branches and twigs are
killed back severely. The hardiest species is *C. glabrescens* (formerly *C. Gotoana*) which, unfortunately, not very common in the trade. Seeds of this species were first sent to the Arboretum from Korea by Professor J. G. Jack in 1905, and the plant itself has proved the hardiest and handsomest of the lot. Though the buds have been occasionally injured in the winter, such injury has never been as severe as that of the other species. It grows as much as 10 feet in height. The two Chinese species, *C. Veitchiana* and *C. Willmottiae*, have been killed repeatedly at the Arboretum and are not recommended for this region.

**Rhododendron dauricum mucronulatum.** Though this "Azalea" was discovered in the mountains west of Peking in 1885 by Dr. P. V. Kirilow, it was not introduced to America until Dr. Emil Bretschneider sent seeds to the Arboretum in 1882. The flowers of this variety are large, rosy purple and not nearly magenta, as is the species. It is the first azalea or rhododendron to bloom and if weather conditions are right, it may make a good show for about two weeks at this time of year. Sometimes late freezes kill the flowers after they have opened, though it is seldom that the flower buds themselves are injured during the winter. If planted in the shade, particularly out of the morning sun, the chances are considerably increased for it remaining in bloom for some time. People interested in a long blossoming period from azaleas and rhododendrons, or wanting to get some color other than yellow in the garden this early in the year, are planting this very worth while Korean plant.

**Early Blooming Magnolias.** Those magnolias which bloom before the leaves open in the spring are naturally the most conspicuous and the ones in which the greatest amount of interest is shown. Most of them are Asiatic species, since the American species do not begin to bloom until mid-May. The first of the magnolias to bloom in the spring (usually late April) are *Magnolia stellata* or star magnolia and *M. kobus borealis.* The former is becoming common, fortunately, not only for its interesting, many petalled white flowers, but also for its excellent foliage. In fact, too much can not be said of its landscape value as a foliage plant. It is bushy in growth, dense, the leaves have a good, dark green color, and the whole appearance of the plant is one of a billowy mass of green foliage all summer long. Its texture is not coarse, like most of the other magnolias. With the exception of *M. kobus* and its variety *borealis,* *M. stellata* is about the hardiest of the magnolias, another excellent factor in its favor.

**Magnolia kobus borealis,** a variety much better than the species,
Magnolia stellata, photographed by Alfred Rehder
Early-flowering Rhododendron (davuricum var. macrosomum)
is native in Japan. It was introduced by the Arboretum in 1878 and has not been used in cultivation very much, possibly because in some places it is said to take a considerable number of years before the plant blooms sufficiently to make it of value. However, this is not always true since there are young plants which bloom profusely. The flowers are white and have fewer petals than those of *M. stellata*. It is the hardest of the magnolias, a tree type often growing 60 to 70 feet tall. It is a valuable tree, a vigorous grower and because of this fact is used a great deal as an understock for grafting other magnolias.

**The white yulan** (*M. denudata* or *conspicua*) has been a favorite in Chinese gardens since the seventh century of the Christian era. It has a profusion of white flowers and blooms about the first of May, shortly after *M. stellata*. It is a fine type and should be planted more than it is. The lower growing *M. Soulangeana* and its several varieties are also in bloom the first of May. *Magnolia Soulangeana* is a hybrid between *M. denudata* and *M. liliflora*, and originated in France in 1820. There are several named varieties of this plant but only a very few are obtainable from nurseries in this country. The true *M. Soulangeana* has a purplish flower, but the color of the flowers in the varieties ranges from white (in *alba* and *spectabilis*) to reddish in *rustica*. Variety *Lennei*, the last of the *Soulangeana* types to bloom (late May) has petals colored rosy purple on the outside and white on the inside. Two other varieties have their flowers colored white on the inside and light purplish on the outside (*alexandrina* and *speciosa*). The magnolia collection in Highland Park, Rochester, N.Y., one of the best in the country, suffered a severe set-back in the cold winter of '33-'34, when the branches of these *M. Soulangeana* varieties were killed back considerably.

**The lily magnolia** (*M. liliflora*) and *M. obovata* (*M. hypoleuca*) bloom the middle of May. *Magnolia liliflora* and its variety *nigra* are low, purple-flowered, shrubby plants, but have failed to do well at the Arboretum because they are tender. *M. salicifolia*, which the Arboretum introduced in 1892, is another of the white-flowered Asiatic species. A very interesting magnolia is *M. Watsoni*, first found in a Japanese nursery though its origin is unknown. It blooms in mid-June. The flower is about 4 to 5 inches across and saucer-shaped, while the sepals are pink on the outside and the petals creamy white. The anthers, in a ball-like mass in the center of the flower, are a reddish pink, which with the surrounding white of the petals makes a very effective color combination. For interest and beauty of individual flowers, this species might be termed one of the best of those men-
tioned.

**Forsythias.** Much has been written in past numbers of this Bulletin about the Goldenbells, now in full bloom at the Arboretum. It is certain that no Forsythia can take the place of *F. intermedia spectabilis*, the showy border Forsythia, for a splurge of brilliant yellow color. Nor can *F. intermedia primulina*, the primrose forsythia, be replaced in the minds of those who have learned to appreciate its delicate, pale yellow flowers, a color which is not nearly as showy as that of *F. intermedia spectabilis*, but which is much more restful to the eyes.

However, the merits of *F. ovata* should be emphatically stressed again for those colder sections of the northeastern United States where the flower buds of the common forsythias have been repeatedly killed by cold winters. *Forsythia ovata* has the hardiest flower buds of any and though much might be desired in form and habit of growth it still blooms well (usually a few days before the rest) at times when the others fail. This plant was first introduced into this country by the Arboretum with seeds sent by E. H. Wilson from Korea in 1917. It should be grown more by nurserymen and used more by the gardening public.

Donald Wyman