The wet season has been favorable to tree and bush and the foliage was never richer in appearance than at the moment. Weeds are hard to control but the lush growth on tree and shrub and vine is good to behold. The Arboretum's flowering season is nearing its close. Some of the mid-season trees are at the height of their beauty and the late-flowering Spiraeas and Sorbarias are in blossom. So, too, is the fragrant Azalea viscosa, last of its tribe to flower. The earliest of the Pepperbushes (Clethra barbinervis) is in bloom on the Overlook, and in the Shrub Garden the Hypericums are opening their handsome yellow blossoms. There are flowers on a variety of other shrubs, but the display for the year is over. On the Honeysuckles blue-black, red or yellow berries according to variety may be seen and some of the Dogwoods are also ripening their fruits.

Maackia amurensis is flowering very abundantly this season. In the Arboretum the best tree is about 30 feet high with a trunk 1 foot in diameter, but in a wild state it is often 60 feet tall. It has dark green, pinnate leaves which fall in the autumn without much change of color. The flowers are borne in erect, cylindric racemes, which, branching at the base, form candelabra-like masses. The individual flowers are cream colored, pea-shaped with a much swollen calyx; the standard is strongly recurved and greenish, while the keel opens to display orange red anthers. The fruit is a dry, thin pod and possesses no ornamental qualities. Unusually handsome this year is the variety Buergeri, which differs in having the leaflets hairy on the underside. Specimen trees of these and of the Chinese species may be seen in blossom on the right of Bussey Hill Road, facing the Lilacs.

Maackia chinensis is a comparatively new species native of central China from whence it was introduced into cultivation by seeds collected by Wilson in 1907. In size, habit of growth and general appearance it closely resembles the better-known M. amurensis, but it has narrower and more numerous leaflets and a larger, more branched paniculate head of flowers. The individual flower is also whiter and more conspicuous. The only other species growing in the Arboretum is M. Fauriei.
which is native of southern Korea. Maackia is an oriental genus, consisting of six known species which occur in Japan, Korea, Liukiu Islands and China, and is closely related to Cladrastis of which the Yellow-wood (*C. tinctoria*) is the best known member. In Maackia the buds are prominent in axils of each leaf, whereas in Cladrastis the bud is hidden within the sheathing base of the petiole. There are other differences but this is a rough and ready means of distinguishing the two genera. The different species are strikingly handsome when the leaves begin to unfold on account of the dense, silvery gray pubescence clothing them. The bark is smooth and the heart-wood of the tree is ebony-like and in the Orient is used for making small ornaments.

**Sophora japonica** was one of the first trees of the Orient to be introduced into cultivation, having been sent to France so long ago as 1747. It is much cultivated in the Far East, being usually associated with Buddhist temples and other religious sanctuaries, but its real home is northern China. It is well known in gardens and valuable on account of its late-flowering qualities. Moreover, it seems to withstand city conditions better than the average tree as specimens in the Public Garden, Boston, Massachusetts, well demonstrate. The leaves are pinnate, dark green above, gray on the underside, and the bark is deeply fissured and corrugated. Old trees have much the appearance of the White Ash. The flowers, which appear in early August, are cream-colored and borne in large, erect, much-branched panicles at the end of every shoot and are followed by slender, jointed pods which, if crushed, are soapy to the touch. In the Orient trees 80 feet tall, with a trunk 12 feet in girth and an abundance of gnarled, wide-spreading roots are frequently to be seen. There are several horticultural varieties, the most distinct being that with pendent, crowded branches (*pendula*). Grafted high as a standard this makes a picturesque tree.

**Koelreuteria paniculata** is one of the handsomest flowering trees hardy in New England and, except the Laburnum, the only tree with yellow blossoms that can be grown in the Arboretum. It is a flat-topped tree, seldom 40 feet high but with a crown more than this in diameter, and dark green, pinnate leaves with incised leaflets. The flowers are borne in enormous compound, paniculate masses at the end of every shoot. They are similar in shape to those of the Horsechestnut, but are clear yellow in color with prominent orange-red markings at the base of the petals. The fruit is top-shaped and bladder-like; at first white it ultimately changes to pink and brown. Native of northern China, this tree was brought into cultivation more than a century and a half ago but is by no means as widely grown as its merits deserve. Like *Sophora japonica* it thrives in town gardens and parks better than a majority of trees and on this account is doubly valuable. It is easily raised from seed and there is no reason why it should not be readily obtainable. The trees on the right of Meadow Road are now laden with conspicuous, rich yellow blossoms.

**Oxydendrum arboreum**, the Sorrel-tree or Sourwood, is one of the few tree members of the great family to which belong the Rhododendrons, Kalmias, Ericas, Vacciniums and other familiar plants. Native of the
The Umbrella Pine (*Sciadopitys verticillata*)
southeastern United States, it is a tree from 30 to 50 feet tall with a straight trunk clothed with dark gray, furrowed bark. The pointed leaves are oblong-lance-shaped, finely serrated along the margins, bright green on both surfaces and have a pleasant acidulous taste, from which character the tree derives its generic name. The urn-shaped flowers, borne in loose, spreading panicles at the end of every shoot, commence to open towards the end of July. As the corollas wither, dry, white fruits simulating the flowers in appearance speedily form and remain attractive late into the fall. Among native trees none assume more brilliant autumn tints of orange and crimson, and from the time the flower buds appear in mid-July until the leaves fall in late October the Sourwood is decidedly ornamental. A group of these trees just bursting into blossom may be seen among the Kalmias, bordering Hemlock Hill Road.

**Sciadopitys verticillata**, the Japanese Umbrella Pine, is among the most notable Conifers that can be grown in the climate of Massachusetts. It is of dense, pyramidal habit with ascending-spreading branches. The leaves are borne in clusters around the stem, one tier above another, suggesting a parasol, hence its common name. They unfold bright green but soon change to black-green and remain so throughout the winter. The strap-shaped leaves, each from 3 to 4 inches long, are thick and leathery in texture with a white line on the under side. It likes a cool situation and good soil and would appear to thrive better in New England than in the British Isles. There are several fine specimens in the Juniper Dell but larger ones may be seen here and there in Massachusetts, notably in Newburyport. By the old regime in Japan, this was one of the seven famous trees, the illegitimate felling of which was a capital offence. The wood is white, fragrant, very durable in water, and is much used in Japan for making bathtubs and small boats. Like certain other trees it does not grow old gracefully, and in the adult tree with its narrow, often spear-shaped, crown it is hard to recognize the stately ornamental plant we know in gardens. A monotype, it is confined mainly to the mountains of central Japan, being very abundant on Koyasan, a mountain not far distant from the ancient capital of Nara. The Umbrella Pine is easily raised from seeds but grows slowly. No other form of propagation is known, but on account of its great hardiness and distinct appearance nurserymen ought to raise it in quantity. It was one of the plants introduced into America by Dr. G. R. Hall in 1862.

**Sphaeralcea remota** is a relative of the Hollyhock and Hibiscus and a very rare American plant, being known only from Altorf Island in the Kankakee River, Illinois. It is suffruticose in habit and the stems die down to the ground each year. The leaves are similar to those of a Hollyhock in shape but thinner in texture with more pointed lobes. The flowers are short-stalked and freely produced from the axils of every leaf. They are lavender-pink in color, somewhat saucer-shaped, with four or five petals. This plant is now in blossom on Centre Street Path and on account of its mid-season flowering qualities has a decided use in gardens.

E. H. W.

These Bulletins will now be discontinued until October.