

Magnolias at the Barnes Arboretum

by John M. Fogg, Jr.

When the American Magnolia Society met in the Philadelphia area in the spring of 1971 the schedule of field trips included a visit to the Arboretum of the Barnes Foundation in Merion.

In his account of this visit, in Volume 8, No. 1 of this *Newsletter*, Phil Savage wrote: "The beautifully kept Barnes is a heaven to non-professionals like myself, because every plant, thank God, has a label, large and readable at a distance.... The magnificent 'Veitchii,' the giant *M. fraseri*, and a strange aberrant *virginiana*, with rough 'alligator' bark, were objects of much interest."

Since 1971 the Arboretum has lost two or three species, but has added several more. It therefore seems of interest to place on record the plants we now have on the grounds and to express the hope that other gardens, arboreta, and individual growers will do likewise. In this way members of the Society can obtain a comprehensive understanding of the horticultural resources of their favorite group of plants.

Many of the fine old trees in the Arboretum were planted in the 1880's by the former owner, Captain J. Lapsley Wilson. These include the enormous fern-leaved beech, in front of the Gallery, the Japanese raisin-tree (*Hovenia dulcis*), a row of honey locusts and several magnolias, for example,

M. acuminata, *M. kobus*, *M. macrophylla*, *M. stellata*, *M. tripetala*, and the specimen of *M. virginiana* with "alligator" bark, mentioned by Phil Savage.

The arboretum owes its present character and great variety of species, however, to the zeal and foresight of the late Laura L. Barnes who, in the 1920's, began to increase its collections, with the result that today there are over 3000 species and varieties of trees and shrubs within its twelve acres. Not only did she add hundreds of species to the Arboretum, but to her everlasting credit, she had the wisdom to put "like things together." Thus all of the species of *Viburnum* are in one area, similarly with *Cotoneaster*, *Malus*, *Syringa* and many other large groups. The section allotted to the magnolias could hardly be more dramatic, lying as it does at the foot of a mild slope across a broad open lawn. (See photo below.)

The arrangement of species here considered corresponds closely to the classification proposed by the late J.E. Dandy in 1950 and brought up to date by him in 1972. According to Dandy, the genus *Magnolia* may be divided into the following two subgenera:

Subgenus MAGNOLIA. Flowers not precocious, i.e., not appearing before the leaves; outer tepals not reduced;



The Magnolia Section at the Barnes Arboretum.



Magnolia pyramidata at the Barnes Arboretum.

fruit usually symmetrical; American and Asiatic.

Subgenus YULANIA. Flowers precocious, i.e., appearing before the leaves; outer tepals reduced; fruit usually sigmoid; mostly Asiatic.

Subgenus Magnolia

M. hypoleuca Sieb. & Zucc. (*M. obovata* Thunb.), Japanese Whitebark Magnolia. Our fine specimen of this tree was obtained from the Kohankie Nursery in 1941. It is now about 12 meters tall, blooms about the middle of May and produces handsome, cylindrical, scarlet fruit clusters.

M. tripetala L. Our plant of the umbrella tree, as noted earlier, was planted by Captain Wilson and is one of the patriarchs of the collection. It differs from the preceding species in having leaves which are more tapering, rather than obtuse at the base, and also less glaucous beneath. Our tree still fruits abundantly.

M. fraseri Walt. This and the following three species (all natives of the southeastern United States) have in common an obovate leaf which is auriculate or "eared" at the base. Although our specimen of Fraser's magnolia was not obtained until 1941, it has grown rapidly and is today one of the largest examples known to us in the Delaware Valley. It is a "late bloomer," its flowers appearing after or with the leaves toward the beginning of May.

M. pyramidata Bartram. This small tree, which enjoys a somewhat limited distribution in northern Florida and along the gulf states, seems to us specifically distinct from the preceding. Its auriculate leaves are smaller and conspicuously rhomboidal and its flowers appear a week to

ten days later. Our first plant of this species was very kindly brought to us on the plane by Colonel William E. Dodd when he attended the Magnolia Society meeting here in the spring of 1971. Later we obtained a specimen from Jim Gossler's nursery in Springfield, Oregon. Bill Dodd's plant flowered first in 1976 and a picture of it is shown (photo at left).

M. macrophylla Michx. Several plants of the bigleaf magnolia are scattered about the grounds and, as noted above, Captain Wilson introduced the species in the 1880's (actually 1887). Its enormous leaves and gigantic flowers (often 30 centimeters across) make it the most spectacular member of the genus hardy in our growing zone, and one of its most impressive attributes is the manner in which the leaves carpet the ground in mid-October.

M. Ashei Weatherby. Considerable doubt has been expressed by students of the genus as to whether this species is really distinct from the foregoing. My only comment on this is that I had the good fortune for many years to be intimately acquainted with C.A. Weatherby, whom I consider to be one of the most conservative of plant taxonomists. He was always very reluctant to describe a new species until certain of his ground, and if he thought *M. Ashei* was a good species I am strongly inclined to go along with him. This is not the place to enter into a detailed discussion of the merits of this confrontation. Suffice it to say that our two plants of what we are calling *M. Ashei* were obtained from Dr. W.W. Brubaker (a good friend of Mrs. Barnes' and of the Arboretum) in 1960 and that they have flourished, flowered and fruited abundantly. The three inner tepals usually lack the deep red blotch characteristic of those of *M. macrophylla*.

M. virginiana L. The sweet bay is one of the few species known to Carolus Linnaeus, who named the genus in honor of Pierre Magnol. It is widely distributed in the eastern United States, having occurred at one time as far north as the town of Magnolia in Massachusetts. It is one of the most delectable plants of the low wet ground in the Atlantic Coastal Plain, such as the Pine Barrens of southern New Jersey. As might be expected of a species with a broad natural distribution (in this case Florida and Texas to Massachusetts), *M. virginiana* exhibits considerable genetic variability. Sargent described var. *australis*, with densely silvery branchlets, and more recently the Society's president, J.C. McDaniel, has registered the evergreen cultivar 'Henry Hicks,' named in honor of a well-known Long Island nurseryman. We have a plant

called var. *australis* and two of 'Henry Hicks' in our collection.

M. × thompsoniana (Loud.) Sarg. This cultivated hybrid between *M. tripetala* and *M. virginiana* seems to have originated as early as 1808. Although it is the product of two perfectly hardy native species, it has proved to be somewhat tender in our area. We have traded it back and forth between the Morris Arboretum and ourselves, as one or the other of us has needed propagating material. Our present seemingly hardy plant was obtained in 1946 from the Morris Arboretum, which had obtained scions from us a few years earlier.

M. sieboldii K. Koch. This and the following belong to the section *Oyama*, natives of eastern Asia, characterized by flowers appearing with or after the leaves, usually nodding or pendant, the tepals pure white in marked contrast to the boss of scarlet stamens. Our plant, which is more than 40 years old, flowers copiously from late May to mid-June.

M. × watsonii Hook. f. (*M. hypoleuca* × *M. sieboldii*). It has been pointed out *M. × wieseneri* Carriere probably has priority over J.D. Hooker's name, but for the present our label bears the more familiar epithet. Our specimen of this attractive hybrid was obtained from Jim Gossler in 1971. It has grown well and flowered for the first time in 1976. See Newsletter, American Magnolia Society XII, (1) 12, 1976.

M. grandiflora L. Bull Bay. This is the only truly evergreen species of Magnolia grown in our area and even here it is close to the northern limits of hardiness. I once ventured to state in print that this magnificent Magnolia might well be considered the most widely cultivated tree in the world (except, of course, such tropical economic plants as coconuts, date palms, and olives). To date no one has offered a contradiction. We have seen it all over Europe, including the Mediterranean, in Africa (within two degrees of the equator at Nairobi), in Brazil and Argentina, in New Zealand and Australia and, of course, in Japan.

Our "Checklist of Cultivar Names in Magnolia," published in 1975, lists no fewer than 160 names which have been applied to this genus. Now only a small fraction of these are in cultivation, but a cultivar name once published (or preferably registered) must be retained if for no other reason than to guard against its being used for another plant.

In our own collection we have at the moment only 'Little Gem' and 'St. Mary.' Our fine plant of 'Praecox Fastigiata' died two years ago, but we have been promised

replacements. See *Newsletter American Magnolia Society*, Vol. 14 (1), 3-4, 1978.

The crosses between *M. grandiflora* and *M. virginiana* will be considered later.

Subgenus Yulania

M. denudata Desrousse, (*M. heptapeta* (Buc'hoz) Dandy) Yulan Magnolia. This species, which is a native of central or eastern China, was introduced into cultivation in Europe in 1789. Rehder (*Manual of Cultivated Trees and Shrubs*, ed. 2, 1940) lists it as hardy in Zone 5 with a question mark. Two of our three specimens have died, but the one remaining plant delights all visitors in early May by the alabaster purity of its gorgeous flowers. This is not the place to enter into a discussion of its taxonomic status and genetic variations. Let it suffice to say that for the time being, at least, we are retaining the more familiar name.

M. sprengeri Pampanini. Plants of this Chinese species obtained from the United States National Arboretum failed to survive our winters, but more recently (1969), through the courtesy of Hess Nurseries, we have received what seems to be "sturdier" stuff. At any rate, we now have growing plants of what we believe to be the cultivar 'Diva,' which have lived and flowered for us. I recall that on Easter Sunday, April 2, 1964, we drove to Washington with the hope of seeing 'Diva' in flower at the U.S. National Arboretum. All good people were in church so there was almost no one else on the road. It was in the days before the National was open on Sundays and since it was a balmy spring afternoon we wandered along the mall from the Art Gallery to the Lincoln



Magnolia sprengeri 'Diva' at the Barnes Arboretum.

Memorial. Next morning when we awoke there was three inches of snow on the ground and it was still coming down! We went to the Arboretum and saw their 'Diva' but its flowers were water-logged, their petals flopping crazily. I had to wait for ten years to see this cultivar in bloom in our own collection (see photo, page 5).

M. × veitchii Bean. (*M. denudata* × *campbellii*). To the best of our knowledge *M. campbellii*, of the Himalayas, by many persons considered the most beautiful tree in the world, has never proved hardy in the Middle Atlantic States area. A very acceptable substitute, however, exists in the hybrid between it and *M. denudata*, known as *M. × veitchii*. The older of our two specimens produces enormous flowers of a luscious pink in those years when it is not blasted by a late cold spell, which is about one in three.

M. stellata (Sieb. & Zucc.) Maxim. Star Magnolia. Our oldest specimen of this popular, early-blooming, Japanese species was planted by Captain Wilson in the 1880's and although twisted and gnarled it still continues to favor us with a great profusion of pure white flowers each April—the earliest of the genus to bloom.

We are well aware of the arguments of our good friend, Ben Blackburn, who considers this species to be a variety of *M. kobus*, but the two are so completely different with us that we prefer to regard them as separate taxa. Among the several cultivars of *M. stellata* our collection contains 'Centennial,' 'Rosea,' 'Royal Star,' and 'Water Lily.'

M. kobus DC. Kobus Magnolia. Of the several specimens of this Japanese species in the Arboretum the oldest was planted by Captain Wilson and the youngest was a gift from the late Carl English who created that wonderful garden in the Chittenden Locks at Seattle. Our small collection also includes two specimens of the beautiful cultivar 'Wada's Memory.'

M. × loebneri Kache (*M. stellata* × *M. kobus*). This hybrid, which Rehder tells us was originated before 1910, has become increasingly popular because of its small size and neat habit of growth. Our collection contains two specimens and we also have two plants of its cultivar 'Merrill.'

M. salicifolia (Sieb & Zucc.) Maxim. Anise Magnolia. This Japanese species is unique among the other members of our collection in its small ovate leaves which give off an anise-like fragrance when bruised. Our single specimen, which Mrs. Barnes obtained from the late Henry Hohman of the Kingsville Nursery in 1957, is one of the most popular plants in our collection.

M. × proctoriana Rehd. (*M. salicifolia* × *stellata*). Although a mere 40 years old, this hybrid is the tallest magnolia at the

Arboretum. It is a rigidly columnar tree which produces a multitude of pure white flowers in early April. Its leaves have retained a faint suspicion of the anise fragrance of one of its parents.

M. acuminata L. Cucumber Tree. Of the several specimens of this native species scattered around the grounds, two were planted by Captain Wilson in the last century; others are of more recent origin. This is without doubt the hardiest of American members of this genus, occurring as far north as the Great Lakes.

M. cordata Michx. This close relative of *M. acuminata* may be distinguished from it by its very different habitat, its manner of growth, its oval leaves and its distinctly canary yellow-colored flowers. For many years I maintained a lively but very amicable correspondence with the late J.E. Dandy who wished to submerge it completely as a synonym of *M. acuminata*. I kept telling him that if he would just come over here and study our plant in the field, instead of in the herbarium, he would soon change his mind. Unfortunately he never did. I am well aware that there is a nomenclatural problem as to the correct name of this taxon, but to those of us in the Arboretum, few native plants in our magnolia collection are more deserving of admiration than those which bear our label *M. cordata*.

M. liliiflora Desrousse. (*M. quinquepetala* (Buc' hoz) Dandy). Although it has been the victim of a considerable amount of juggling by recent taxonomists, we prefer to regard this species as a reputable member of the Chinese flora and as a putative parent of the most widely grown hybrid, which follows. It is a small tree, one of the latest to flower in this subgenus (at least with us) and is represented in our collection only by the cultivar 'Nigra,' although several other names have been proposed. The significant features, as it seems to us, is that *M. liliiflora* is among the latest of the Asiatic species to bloom and that its flowers are of such a deep pinkish or purple color.

M. × soulangiana Soul. (*M. denudata* × *liliiflora*). Saucer Magnolia. According to most authorities this hybrid appeared about 1820 in the garden of Chevalier Soulange-Bodin near Paris. It is by all odds the most widely grown magnolia in the Middle Atlantic States, flowering in early to mid-April and exhibiting a wide variety of color forms. In fact, the number of cultivar names assigned to this species (103 in our "Checklist") is exceeded only by those in *M. grandiflora*. Again, only a small number of these can be regarded as at present in cultivation. Our collection contains 'Alba,' 'Alexandrina,' 'Amabilis,' 'Lennei,' 'Reflorescens,' 'Rustica' and 'Verbanica.'