

Nomenclatural changes in *Magnolia*

by DOROTHY L. JOHNSON
L. H. Bailey Hortorium, Cornell University
Ithaca, New York 14853-4301

ABSTRACT. *Magnolia ashei* and *M. dealbata* are recognized as varieties of *M. macrophylla*; appropriate combinations are proposed.

As part of a taxonomic study of the cultivated species of *Magnolia* in the United States (Johnson 1989), specimens of *M. macrophylla* Michaux, *M. ashei* Weath., and *M. dealbata* Zucc. were examined. It became clear that the three species are better recognized as three varieties of a single species. *Magnolia ashei* and *M. dealbata*, both considered by most authors to be closely related to *M. macrophylla*, are here reduced to varieties of that species.

Key to the varieties of *Magnolia macrophylla*

1. Mature follicles beaked; tepals lacking purple tinge at base var. *dealbata*
1. Mature follicles not beaked; tepals usually with purple tinge at base.
 2. Follicetum 6-10 cm long, ovoid to globose; tree; leaves 60-100 cm long var. *macrophylla*
 2. Follicetum 3-6 cm long, subcylindric; shrub or small tree; leaves usually less than 60 cm long var. *ashei*

Magnolia macrophylla Michaux var. *macrophylla*

Magnolia macrophylla Michaux, *Fl. bor.-amer.* 1:327. 1803.

Typical *Magnolia macrophylla* is native to rich woods from Ohio and Kentucky, south to Georgia, and west to Arkansas and Louisiana, where it often grows in moist, shady areas along gorges. It is probably most abundant in south-central Mississippi, but is not common at any locality, and most populations are small and isolated. It is a tree 9-15 m tall with smooth gray bark, oblong-obovate leaves 60-100 cm long and 10-45 cm wide, green above and silvery beneath, with an auriculate base. The flowers are 30-45 cm across, having six white petaloid tepals (in two whorls of three) with a purple blotch at the bases of the inner three. The fruit aggregate is ovoid to globose, 6-10 cm long, and the outer seed cost is reddish-orange.

Magnolia macrophylla Michaux var. *ashei* (Weath.) D. Johnson, *Baileya* 23(1): 55. 1989.

M. ashei Weath., *Rhodora* 28:35. 1926. *M. macrophylla* Michaux subsp. *ashei* (Weath.) Spong., *J. Arnold Arbor.* 57: 268. 1976.

Plants of *Magnolia macrophylla* endemic to deciduous forests along the bluffs

and steepheads of the Florida panhandle, especially the Knox Hill region, belong to *M. macrophylla* var. *ashei*. The most reliable characters used to distinguish this taxon from var. *macrophylla* are habit and fruit shape and size. *Magnolia macrophylla* var. *ashei* is shrub-like and is smaller in all ways than var. *macrophylla*. The fruit aggregates are shorter (3-6 cm long) and not as round or as broad as those of var. *macrophylla*. Plants of var. *ashei* flower when only a few years old (often when less than 30 cm tall), while plants of var. *macrophylla* require about 15 years from seed to flower. Many workers have combined these two taxa, while others have considered them to be distinct species. Spongberg (1976) was the first to include *M. ashei* under *M. macrophylla*, recognizing the former as a subspecies. This author is in agreement with Spongberg that the "extremely close relationships" of these taxa should be recognized; however, in order to maintain consistency within the genus, the taxa should be treated as varieties.

Magnolia macrophylla Michaux var. *dealbata* (Zucc.) D. Johnson *Baileya* 23(1): 56. 1989.

Magnolia dealbata Zucc., *Abh. Math.-Phys. Cl. Königl. Bayer. Akad. Wiss.* 2: 373, pl. 3, 4. 1837.

Magnolia macrophylla var. *dealbata*, native to the cloud forests of eastern and southern Mexico, is the only deciduous *Magnolia* found in the tropics. The character that consistently distinguishes this taxon is the presence of styler beaks on the follicles (absent in the other two varieties of *M. macrophylla*). The absence of purple blotches on the tepals has been used to define var. *dealbata*, but flowers of vars. *macrophylla* and *ashei* occasionally lack this coloration. Flowering age of var. *dealbata* is 7-10 years from seed, intermediate between var. *ashei* and var. *macrophylla*.

While the type specimen was not available for study, reduction of *Magnolia dealbata* to varietal status is justified on the basis of its close relationship to *M. macrophylla*, from which it consistently differs in only a single character. ■

Literature cited

- Johnson, D. L. 1989. Species and cultivars of the genus *Magnolia* (Magnoliaceae) cultivated in the United States. Master's thesis, Cornell University, Ithaca, New York.
- Spongberg, S. A. 1976. Magnoliaceae hardy in temperate North America. *J. Arnold Arb.* 57: 250-312.

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