

# 'Galaxy' Magnolia<sup>1</sup>

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*Magnolia (liliflora 'Nigra' x sprengeri 'Diva')* 'Galaxy', Accession No. 28352-14 and PI 433306, is a new introduction from the U.S. National Arboretum as part of its continuing program to develop new and improved cultivars of important landscape trees and shrubs. It is an upright, single-stemmed deciduous tree with strong branches and a pyramidal habit (Fig. 1). The large red-purple flowers are borne in profusion and open sufficiently late in the spring to avoid any significant frost damage.

## Origin

This new cultivar was selected from a group of seedlings derived from the cross of *M. liliflora* Desrouss. 'Nigra' (= *M. quinquepeta* Buc'hoz 'Nigra') NA 2901 as seed parent with *M. sprengeri* Pampan. 'Diva' NA 4268 as pollen parent. The cross was made in 1963 by William F. Kosar at the U.S. National Arboretum. Apparently 134 filled seed were harvested and 47 seedlings were field planted in rows in 1966. The trees were moved to wider spacing in 1969. 'Galaxy' first flowered in 1972, at 9 years of age from seed.

## Description

'Galaxy' is a strong, upright, growing tree that can be easily maintained as a single-trunked specimen. Growth rate is moderate. In December, 1972, the original tree was 4.8 m in height and had a diameter at breast height (1.4 m above ground level) of 6 cm. In December, 1977, at 14 years of age from seed, the tree was 7.6 m in height with a diameter of 18 cm. Height growth has been reduced in recent years because of flower buds forming on the terminal leader.

The leaves are slightly keeled, ovate (to 22 x 11 cm), and have an acute base and an acute to mucronulate tip. Leaf margins are entire and undulate. Leaf veins are impressed on the medium green upper surface but raised on the lighter green lower surface.

Flowers have 11 to 12 tepals arranged in whorls of about 4 tepals each. The tepals are pigmented on the outer surface at the base Red Purple 64 A (1) shading to Red Purple 64 C toward

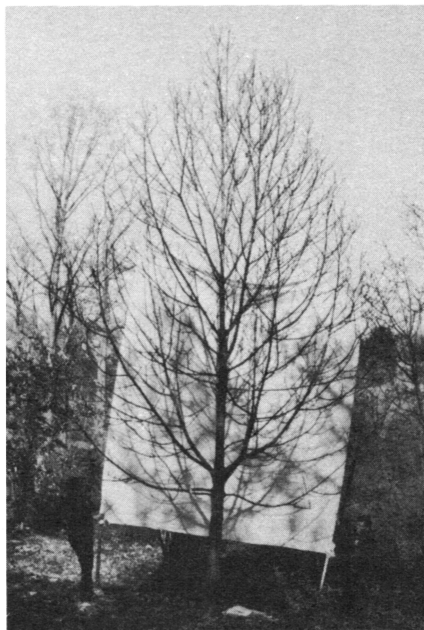


Fig. 1. 'Galaxy' magnolia in dormant condition showing tree form and branching pattern.

the tip. The inner surface of the tepals is a paler Red Purple 65 C. Anther filaments and the base of the receptacle to which they are attached are Red Purple 64 A, while the anther connective tissue is Red Purple 64 C. The size of the tepals in the outer and middle whorls are up to 12 cm long by 5.5 cm wide. Those in the inner whorl are usually shorter and narrower, but seldom

shorter than 8 cm. Flowers of the 1979 crop had about 94 anthers and 101 stigmas.

The flowering period in Washington, D.C. is intermediate between those of the parent cultivars, and is usually sufficiently late so that spring frosts cause little or no damage to the flowers. No flowering occurred on the terminal leader until the fifth year of flowering. Although 'Galaxy' is a pentaploid hybrid with  $2n = 95$  chromosomes, and is partially sterile, it may occasionally produce fruit and viable seed.

## Culture

'Galaxy' has proved adaptable to a wide range of soil and cultural conditions including sod culture, making it eminently suitable as a specimen tree for landscape use. Evaluation trials have proved that it can survive in Zone 4a (2) with some cold injury, but it appears to be perfectly hardy in Zone 5b. Cuttings root easily from semi-hardwood cuttings taken after stem elongation has ceased. Best results (over 80%) have been obtained using a coarse perlite medium and a commercial 0.8% IBA powder dip.

## Availability

Public release of this cultivar will be made in 1980. Propagation stock has been provided to wholesale production nurseries. Plants are not for sale at the National Arboretum but a distribution will be made in 1981 to cooperating arboreta and botanical gardens.

## Literature Cited

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# 'Molino' and 'Tonto' Arizona Rosewood<sup>1</sup>

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**Additional index words.** drought tolerance, arid landscape plant, ornamental breeding, *Vauquelinia californica*

Arizona rosewood (*Vauquelinia californica* Torr), Rosaceae, is native to southern Arizona and northern Mexico

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at elevations of 750 to 1500 m (1). 'Molino' and 'Tonto' Arizona rosewood were released by the Arizona Agricultural Experiment Station to provide evergreen, drought-tolerant, flowering shrubs adapted to the low and medium deserts of the southwestern United States and similar regions of the world.

## Origin

The 2 cultivars were derived from crosses made in 1973. One parent was grown from seeds collected from the

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