

A Tree Born in Brooklyn

by Lola Koerting

A unique yellow blooming magnolia has been developed by the Brooklyn Botanic Garden (Vol. XIII, No. 1, 1977). The new hybrid resulted from an interspecific and intersectional cross between *Magnolia acuminata* in Sec. *Tulipastrum* and *M. heptapeta* (*demodata*) in Sec. *Yulania*. This cross was made in 1956 at the BBG by Evamaria Sperber. Her cross pollination of 12 blossoms resulted in 71 seeds. The seedlings were transplanted to the magnolia nursery at BBG's Kitchawan Research Station in Ossining (Westchester County), New York.

As of 1977, six trees from this cross are blooming and all have yellow flowers, the color varying only slightly among trees. From observations since 1972, the magnolia with lot number 391 has been selected for a plant patent. This was applied for in 1976 and is still pending. It has not yet been named.

Our reasons for selecting No. 391:

1. The flowers are of excellent color, size and quality.
2. It was the first of these crosses to come into bloom (1972), at the age of 15 years.
3. It is very floriferous and has bloomed consistently each year since 1972.
4. The flowers mature late enough so that spring frosts are less likely to cause damage.
5. Propagation has been possible by rooting softwood cuttings, with an annual success rate of about 25 percent.

Description. No. 391 is a deciduous tree about 6 meters high and pyramidal in shape. The flower buds begin unfolding in Ossining between the end of April and the beginning of May. The blooming period lasts about 2 weeks, although dates can vary as much as 2 weeks, depending on weather conditions; for instance, 5-7 - 5-22 in 1975; 4-18 - 5-8 in 1976; and 4-27 - 5-13 in 1977. The leaf bud begins to open during the peak of the blooming period. The young leaves are slightly rust colored: mature leaves are dark green and obovate. The flower buds have a faint greenish hue at the base (*yellow-green 149 A* and *154 C* of the Royal Horticultural Society color chart, 1966). The flowers are a uniform clear yellow (*yellow 9 D* and

yellow 7 D) when fully open, and have a pleasant fragrance. The 6-9 tepals are spatulate in shape, 9-11 cm long and 4-5 cm wide. The tree form and leaves resemble the seed parent, *M. acuminata*. The flower color is inherited from *M. acuminata*, although the green of the outer tepals of *M. acuminata* is not present in any of the hybrids. The size of the flower is comparable to *M. heptapeta* and the flower shape is intermediate between the two parents.

Propagation. The asexual propagation of No. 391 has been by rooting softwood cuttings, collected from mid-June to mid-August. The cuttings were treated with a mixture of fungicides (Captan & Benlate), dipped in rooting hormones (2 percent IBA in talc and 0.4 percent NAA in talc), and placed in different rooting media in peat pots. These were held on a propagation bench with bottom heat and intermittent mist. The rooting result has been about 25 percent.

Hardiness. No. 391 has been hardy so far in zone 6. Clones have been distributed to Michigan, Missouri and Washington D. C., for testing in different regions. In spring 1978, more trees will be available for additional testing at other locations.

Cytological Examination. Since *M. acuminata*



Brooklyn Botanical Garden's No. 391 hybrid.