## by J. C. McDaniel

Henry Mitchell, in a column, "Earthman" in the Washington Post compares several magnolias, including *M. heptapeta* (denudata), the Yulan of China. "The Yulan, which may be the most beautiful of all magnolias, is white with a strong sweet lemon fragrance. It is far more beautiful than its pink offspring. (M. × soulangiana) and the pink progeny have no scent worth mentioning."

Yet, he says, "It is almost impossible to find the Yulan at nurseries, but that has nothing to do with the fact that it is supremely fine." This "does not mean the pink one is not worth growing. It is exceptionally beautiful, and any garden is the richer for it. It is simply not supremely beautiful. But you will notice nurserymen are far more likely to offer the very good rather than the very best. Sometimes that is because they think popular taste is a bit vulgar. Sometimes because they fear the Yulan, say, would not sell as well as the pinks. Sometimes because it is too much trouble to find and stock the Yulan. Sometimes because they simply do not know any better."

Not mentioned by Mitchell is the more expensive propagation cost of the Yulan. It has usually required grafting or budding on another stock, whereas *soulangiana* propagates readily on its own roots by layering or green wood cuttings. Not very many wholesale propagators are experts at grafting or budding magnolias. If a retailer does find a source of Yulan, it will be priced higher than the mass-produced *soulangiana*. So long as general demand for deciduous magnolias is satisfied by the common *soulangiana*, the nursery retailer will stock what has sold well in the past, without too much incentive to vary his stock in trade. Potted or balled *soulangiana* trees in bloom in the early spring season do provide a beckoning banner to impress shoppers at garden centers.

Members of the American Magnolia Society, whether nurserymen, landscapers, or amateurs, can do their part to improve general taste in Magnolias by use of more variety. For one thing, propagators can select clones that have performed better than usual over a broad range of conditions. The Yulan, for instance, has the 'Japanese Clone' (Wada's Form) and some others which are less susceptible than the usual trade clone to America's spring frost hazards. There are better



Magnolia 'Wada's Memory'

Phase Out or Supplement	Better Clones to Add to Propagation
<i>M. acuminata</i> seedlings	M. * 'Elizabeth'
M. acuminata subcordata *Cordata	' 'Miss Honeybee'
M. liliflora, most stock including 'Nigra'	'O'Neill'
<i>M. denudata</i> ( <i>heptapeta</i> ) common	'Japanese Clone'
<i>M. kobus</i> in general	<i>M. × loebneri</i> 'Ballerina'
<i>M. × loebneri</i> 'Merrill'	'Spring Snow' M. * 'Wada's Memory'
<i>M. macrophylla</i> seedlings	'Sara Gladney' (white) 'Whopper' (spotted)
M. salicifolia, usual	'Else Frye'
M. stellata, common	"Royal Star"
<i>M.</i> * <i>soulangiana</i> , common: 'Alba'	'Alexandrina' 'Lennei'
'Rustica Rubra'	'Lennei Alba' 'Superba Rosea'
M. × thompsoniana, original	'Urbana'
M. tripetala seedling	s 'Bloomfield'
M. virginiana seedlings	'Mayer' 'Havener'
For More Adv Older Offerings	enturous Planters Promising Newer Clones
M. acuminata; M. × soulangiana	M. × brooklynensis 'Woodsman'
M. stellata; M × loebneri	M. * 'Spring Joy'
M. × soulangiana M. × veitchii	M. 'Gresham Hybrids' including 'Royal 'Crown' and others under test
M. sprengeri 'Diva'	*Paul Cook' is hardier, as large, and blooms at earlier age
M. denudata (heptapeta)	<i>M. (stellata × denudata)</i> 'Pristine' has more tepals, is easier from cutting, but not as fragrant

clones of the star magnolia in the U.S. than the plant sent from Japan and cultivated since the 1860's. Why not discontinue the old one in favor of 'Royal Star'? It is bigger, better and hardier.

Collectors will add new things. The list at left is directed toward nurseries with a general clientele, who wish to upgrade their offerings in Magnolia.

The cultivars listed for increased propagation (on the right) are my personal choices from a wider list of possibilities. Most have been under my observation at Urbana, Illinois (Zone 6a) for at least the past three seasons, including three of the coldest recorded winters here. Two, 'Elizabeth' and 'Spring Joy,' are subject to patent restrictions and are slower to come into commercial availability; some others ('Japanese Clone,' 'Wada's Memory,' 'Sara Gladney,' 'Whopper,' 'Bloomfield,' 'Mayer,' 'Havener,' 'Paul Cook,' and 'Wada's Snow White'-are unknown in current American nursery offerings. 'Miss Honeybee,' 'O'Neill,' 'Ballerina,' 'Spring Snow,' 'Urbana,' 'Woodsman,' 'Royal Crown,' and 'Pristine' (without its cultivar name) have been offered by one or more nurseries.

I did not include anything from the Oyama section. I can highly recommend one unnamed clone of *M*.



M. × soulangiana 'Alexandrina'



M. stellata 'Royal Star'

sieholdii that I obtained in 1974 from the Royal Botanical Gardens. Hamilton, Ontario. I have grafted it on both virginiana and acuminata stocks. Other Oyama species (globosa and wilsonii) and M. sieboldii ssp. sinensis have been considered too tender for the Illinois climate. Among Oyama hybrids, M. × wieseneri (watsonii) and M. \* 'Charles Coates' (sieboldii × tripetala) both have flowered well: 'Charles Coates' is more vigorous than wieseneri, but has heat-induced leaf scorch in this climate. A third hybrid, Society member Tor Nitzelius' wilsonii \* hypoleuca, is hardy but not yet to flowering age.

Other stellata cultivars are available, but I consider 'Centennial,' 'Rosea,' 'Rubra,' and even 'Waterlily' less desirable than 'Royal Star.' The hybrid 'Spring Joy' will probably compete, and make a larger tree.

In M. × loebneri, 'Leonard Messel' has a good pink color, but I do not consider it as choice a flower as either 'Ballerina,' 'Spring Snow,' or the M × 'Spring Joy' that I raised from a cross between 'Royal Star' × 'Wada's Memory.'

There is more clonal propagation of magnolias in subgenus Yulania, but subgenus Magnolia clones also can be propagated as cultivars. In fact, there have been more named selections of *M.* grandiflora than any other species or hybrid ( $M \times soulangiana$  is second). There is increasing American trade in grandiflora cultivars, largely in California and Oregon. Some southeastern nurseries and experiment stations now are working with local selections of grandiflora.

Among the other U.S. species in subgenus Magnolia, *M. macrophylla* has three registered cultivars, *M. tripetala* has two, and there have been several recently named in *M. virginiana*. So far no clonal cultivars are available in *M. fraseri* or its subspecies *pyramidata*; it is hard enough to locate seedling stock of these in nurseries. All species vary from seed, and alert propagators can find superior clones to root or graft.

'Whopper,' which I selected at Urbana, Illinois, as a seedling, is so far, the only *M. macrophylla* cultivar which has flowers with as many as 12 showy tepals (plus 3 sepaloid green tepals). Its tepals also are clearly and intensely marked inside with purple spots and are among the largest I have seen 'Whopper' tepals grow to 8.25 inches long, 5 1/16 inches wide.

From Mississippi, 'Sara Gladney' with six unmarked showy white tepals, is large and slightly earlier. Both cultivars have been propagated by chip budding at Urbana, on stocks of *macrophylla*. Todd Gresham's selection, 'Holy Grail,' was described as having tepals 8 inches long and 4-5 inches wide with markings similar to 'Whopper.' Chip budding on *macrophylla* stocks seems preferable to



M. × loebneri 'Spring Snow'



M. × soulangiana 'Lennei'

other propagation methods for these cultivars. There will not be the general planting of *macrophylla* that has taken place with M. × *soulangiana*, but there should be a demand from magnolia fanciers for such spectacular flowering cultivars as 'Whopper' and 'Sara Gladney.'

*M. tripetala*, not in demand for the usual landscape, makes a handsome, large leafed tree, but its flowers are not as pleasantly scented as those of its hybrid *M.* × *thompsoniana*. For anyone who wants a specimen of this species, 'Bloomfield' is the handsomest one I've seen. It buds readily on *tripetala* seedlings.

*M. virginiana*, usually available as seedlings, can, with both 'Mayer' and the larger-flowered 'Havener,' be grown from greenwood cuttings. Both are of the northern or typical variety. The southern var. *australis* currently is not recommended for zone 6a, but has a more intensely lemon-scented flower in climates where it is hardy (about 6b or 7) and is worth more selection.

*M. hypoleuca* can take 20 years to produce the first flower on a seedling. Although no American nursery offers it as a grafted cultivar, two have been listed ('Caerhays Clone' and 'Millais Clone') by the Treseder Nurseries in England. These, or perhaps grafts from good flowering trees in America, should flower sooner and be preferable to the seedling. *M. tripetala* can be used as the understock, but *hypoleuca* tends to outgrow it.

Currently no *M. grandiflora* cultivar is recommended for zone 6a in Illinois, as there are few trees which even survived the three winters in Urbana ending in 1979. Even the Missouri Botanical Garden at St. Louis (Zone 6b) removed *grandiflora* from its list of cultivated species in 1979. Planters in Zone 7 are invited to submit names of cultivars which best endured the 1976-79 winters.

Several deciduous species and hybrids are safer in Zone 7, though they have failed or done poorly in upper 6a. Sprengeri 'Diva' probably will be better in Zone 7 than it has been at Urbana. M. sargentiana var. robusta freezes back nearly every year in Zone 6b at Benton, Illinois, but is reported as flowering in Zone 8 in South Carolina. M. x veitchii has grown and flowered well in Zone 7a at Merion, Pennsylvania; 1 do not know of a specimen in a colder climate.

Most named and numbered "Gresham Hybrids" have a M. " veitchii percentage, and some of them that do well in Springfield, Oregon (Zone 8) or Gloster, Mississippi (Zone 8) may prove unsuccessful in Zone 6. Ken Durio of the Louisiana Nursery reports the recent loss of 'Delicatissima' at Opelousas, Louisiana, near the border of Zones 8 and 9. We can recommend Gresham Hybrids for Zone 8 but these still need testing for Zone 6. I do not know of a M. campbellii specimen that has flowered in Zone 7. We see it in Western Zone 9, and possibly 8.