## by J.C. McDaniel

The Arnold Arboretum of Harvard University has been one of the channels through which many foreign woody ornamental plants reached this country. Although this arboretum sponsored some of E.H. Wilson's productive Asian plant explorations early in this century and although C.S. Sargent, its first and longest-tenured director, was himself instrumental in introducing some Japanese magnolias even earlier, less success seems to have accompanied the Arnold's imports of magnolias during its second 50 years.

According to a summary concluded in Arnoldia 38 (1), January-February 1978, M. × loebneri 'Merrill,' which originated at the Arnold, is listed as being received in 1952 and still alive there. But nothing survives at the Arnold of original imports between 1952-1968, from English sources, of: M. campbellii 'Charles Raffill,' M. × 'Charles Coates,' M. denudata 'Picture\*', M. denudata 'Purple Eye\*', M. \* highdown-ensis\*, M. \* 'Kewensis,' M. officinalis v. biloba, M. salicifolia 'Concolor,' M. × soulangiana 'Stricta,' M. × soulangiana 'Superba,' and M. wilsonii form taliensis\*. (\* Means plant has received different taxonomic placement in recent treatments: 'Picture' is in M. \* soulangiana, 'Purple Eye' is a hybrid, highdownensis is probably a form of M. × wilsonii; and form nicholsoniana has priority over form taliensis.)

Other American importers have evidently had better survival of several of these magnolias including, to my knowledge, 'Picture,' 'Charles Coates,' 'Kewensis,' and officinalis biloba, all of which have flowered in Illinois; 'Purple Eye' in Michigan; and the now abundant 'Leonard Messel,' which was in both the Gossler and Burpee catalogs by 1977. (I imported a scion in 1970 and James Wells later brought in material in quantity for wholesale propagation.)

The two soulangiana cultivars 'Stricta' and 'Superba' were both in French commerce by 1891, so probably have been imported somewhere else in America. M. campbellii 'Charles Raffill' probably is growing in California.

Wilson's collecting in Japan and Korea was concluded in 1918. Not until 1977 did the Arnold Arboretum send another expedition to these two countries. Staff members Stephen A. Spongberg and Richard E. Weaver, Jr. spent several weeks collecting there in the 1977 seed gathering season. Their expedition made a total of 505 collections representing 327 plant taxa in 69 families, including 5 species of magnolia, according to the preliminary report. One discovery in Korea, where Spongberg and Weaver were assisted by AMS member Carl Ferris Miller, was fruit on *Magnolia officinalis* in an old garden between Seoul and Miller's arboretum on the southwest coast.

## Staking Understocks

For those who are flabbergasted at how Phil Savage determines a need or encounters a problem and then thinks out not only a good way but the best way to handle it. There's another "throwaway" from recent correspondence:

"One easy way to grow magnolias for later chip budding is to get some durable stakes, such as oak or cypress,  $1 \times 1 \times 24$  or 36 inches and drive into the ground where you want a tree. Plant a couple of seeds next to the stake in April and attach a cylinder of  $\frac{1}{4}$  inch hardware cloth around the stake at the bottom to protect the seedlings from the alrger varmints and to show you where to water."

"Of the seeds, either both or none will come up, naturally. I have planted quite a few this way, including open pollinated *Magnolia sprengeri* 'Diva,' with good results. *M. kobus* seeds (germinates) all over around here, but the only seedlings that survive are those right against a stake or tree or wall. I destroyed a seedling of *M macrophylla* with my hammer knife mower last summer. Guess I thought it was a burdock! First time one ever volunteered here. Tripetala seedlings come up now and then right against a chain link fence."

