



Let's Not Neglect Michelia

by Philip J. Savage

I was tempted to title this little story, "Michelias in Michigan" just to shake up Victor Reiter, Bob Egolf and other friends who can really grow species of this beautiful genus outdoors. Young trees of *Michelia doltsopa* and *M. figo* have been such easy and cooperative tenants of my small, "cool greenhouse" for the past eleven years, it would seem they could be much more widely grown and enjoyed.

Two eighteen inch seedlings of *Michelia doltsopa* were obtained from Clarke Nursery in the winter of 1962, and planted in twenty gallon garbage pails filled with good sandy loam.

Holes were drilled in the bottoms, for drainage, above which was a three inch base of coarse "Turface". Neil Treseder, who saw the plants a few years back, now and then asks how my "dust bins full of Michelias" are doing! For the first few years I moved the containers outside in the summer months, but growth was so vigorous it became difficult to handle them without breaking branches, so they were left inside the year round. A few years ago, I became aware that my baby plants had reached the awkward age. They were too big for house plants and too small for sawlogs, and I knew that

one had to go. Last year, after unsuccessful efforts to give it away, I was forced to destroy one of the trees. The remaining plant is now sixteen feet tall and beautifully symmetrical, with an arrow straight single trunk and a neat, spiral arrangement of branches. Foliage is dark, waxy green, although the leaves are not as stiff in texture as true broadleaved evergreens and are persistent for only one year, like *Magnolia virginiana*. In their native mountains, as well as in England, observers report the trees as almost deciduous in hard, windy winters.

My coolhouse is built on the order of a telephone booth, to accomodate trees up to sixteen feet tall. Fortunately for more esthetic neighbors, the lower half is built into a hillside and the portion below ground level helps to keep the temperature constant. The thermostat is set at 37 degrees F., and that is about where it stays in the cold months.

The plants first bloomed in 1969, at about eight years from seed. Being root-bound in containers no doubt encouraged youthful flowering. One plant had flowers facing the sky with sixteen tepals, (four rows of four), while the other had flowers that were semi-pendulous, or nodding, with twelve tepals in three rows of four. I kept the first plant, which was in bloom last winter from January first through March, producing in that time at least one hundred and twenty flowers. Individual blooms are seven inches across when wide open, and last on the tree for an astonishing two weeks each, finally shattering without turning brown. Cut flowers are fragrant and exotic looking, but last only a day or so, like most of the Magnoliaceae. In late fall the buds become thimble size with a foxy red velvet coat and

are very pretty.

It is always interesting to speculate why some trees, like *Michelia doltsopa* and *Manglietia insignis*, are found over enormous stretches of territory, while other species, seemingly as well able to take the climate and exposure, occupy only small pockets. *Michelia doltsopa* is found from central Nepal eastward along the Himalaya and deep into the Chinese province of Yunnan.

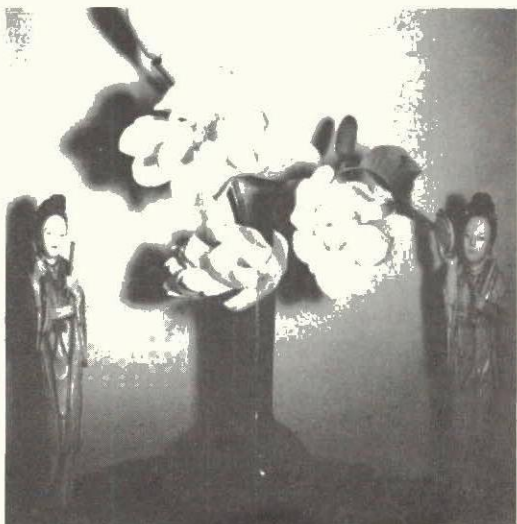
Sir Joseph Hooker, in his "Himalayan Journals", writes of this species, (then called *Magnolia excelsa*), in Sikkim, as "forming a predominant tree at seven to eight thousand feet, and in 1848 it blossomed so profusely that the forests on the broad flanks of Sinchul and other mountains appeared as if sprinkled with snow". Although the trees Hooker saw no doubt ended up as tea chests, this species is still said to be the most important source for dimensional lumber in eastern Nepal and Sikkim.

It seems no member of the Magnoliaceae is immune to botanical confusion, and it has been recently suggested that the snowy flowers on Sinchul and indeed the name *Magnolia excelsa*, may have first been applied to the white form of *Magnolia campbellii*, found in the same area. Hooker differentiated between "the white Magnolia" found at seven to eight thousand feet elevation, and "the purple Magnolia" found from eight to eleven thousand. However, since *Michelia doltsopa* appears to be the more common tree, and in some places, forms solid stands, it was probably this species that Hooker observed.

Michelia excelsa and *M. manipurensis* are now considered to be synonyms of *M. doltsopa*, although I have seen herbarium specimens of *Michelia* collected by George Forrest and labeled

For scale, the little ivory ladies are exactly thirteen inches tall.

Photos by Tim Savage



Plentiful pollen is produced, but the only fruits that have ever developed were hand pollinated from *M. figo*.



With a flower bud in just about every leaf axil, branches are often large bouquets.

M. manipurensis in which the flowers, even in a dried state, are rich dandelion yellow. Forrest mentions, "very beautiful forms", of this species as being, "common", on the Shweli-Salween divide in Yunnan, and also in upper Burma.

In the Harvard Herbarium are some interesting specimens of *Michelia* collected by Ernest Wilson in Szechwan, a couple of hundred miles to the north of *M. doltsopa* range. These were named as new species, *M. wilsoni* and *M. szchwanica*, and are described as "very large and handsome trees". Leaves on these northern specimens seemed smaller and more leathery than those of typical *M. doltsopa*, though not as small as those of the Japanese *M. compressa*. Included in one specimen is a ripe fruit nine inches long, with many seeds. It's a pity Wilson didn't collect the seeds for horticulture, and the leaves for the herbarium. The latitude at which these specimens were collected, is actually considerably north of the collection points of *Magnolias dawsoniana*, *sargentiana robusta* and *sprengeri*, but the altitude, I am sure, was much lower. Both these species, (if they are actually distinct), should be in the hardiness range of *Magnolia grandiflora*. They are placed in the same group of the genus as *M. doltsopa* by Mr. J. E. Dandy. As it ranges eastward through Yunnan, *M. doltsopa* intergrades and perhaps hybridizes with a species called *M. floribunda* according to a note published in 1927 by Mr. J. E. Dandy, who adds that the farther east one goes from the "melting pot" of Yunnan, the more morphologically distinct *M. floribunda* becomes.

About eight years ago, Tom Sawada gave me a nice young plant of *Michelia figo*, usually known as "Banana

Shrub", in the deep south, which settled down in its personal garbage can and began to bloom the following year. The stiff little flowers, cream yellow with a purple picotee, are produced in profusion and are quite pretty at close range. In a closed greenhouse, the powerful scent of "synthetic banana oil", can be a bit much. A few English writers of several years ago, described the flowers of this species as "brownish purple", with a scent resembling a confection called "Pear Drops". The same writers refer to it as the "Fruit Salad Shrub," also. These descriptions puzzle me. There is nothing brownish about the flowers of any *M. figo* I have seen in America, and the scent is exactly like the "banana oil" glue used in the balsa wood model airplanes of my youth. Of course, I have never eaten "Pear Drops", so perhaps they would smell, to me, like airplane glue! On the other hand, since writers quote from other writers, and since many genera formerly included in the Magnoliaceae are now removed and placed in families of their own, isn't it just possible that the "Fruit Salad Shrub" to which these writers refer is *Calycanthus floridus*? With brownish purple flowers, and a scent that combines strawberries, apples and pears, this rather old fashioned dooryard shrub fits the description much better than *Michelia figo*. The family Calycanthaceae is usually placed near and sometimes next to Magnoliaceae in the older classifications, such as Engler's in 1903, and surely there is a *Magnolia*-look to flowers of the Strawberry shrub. Believe me, stranger mix-ups than this have happened in *Magnolia* literature!

Way back in 1948, I received two beautiful young plants of *Michelia compressa* from the California Nursery

Co. of Niles. (They no longer stock it.) These grew vigorously in garbage cans for two years, and emboldened by the species reputation as, "the hardiest *Michelia*", I moved them outside against a brick wall. They struggled through one mild winter, but were zapped the next. I really don't think this species is any more arctic than *M. doltsopa*, and perhaps less.

No amateur greenhouse owner in the northern states is a stranger to disaster, and I returned from work one February evening to find all the glass in one end of my greenhouse smashed by vandals, and the thermometer at twenty degrees inside. Soil in seven inch pots was frozen solid. A week later, *M. doltsopa* had shed its brown and frozen flowers and new buds were coming out. Growth the following year was not affected.

From a botanists point of view, the genus *Michelia* is considered by Mr. J. E. Dandy to be a derived type, that has evolved from *Magnolia* or *Manglietia*. Axillary flowers are considered less primitive than terminal flowers, yet the connection with some sections of genus *Magnolia* is very close. *Magnolias* of sub-genus *Yulania* often produce flower buds on abbreviated branchlets in the leaf axils of vigorous shoots, and the typically stalked gynoecium of *Michelia* is found in *Magnolias* of sections *Gynopodium* and *Maingola*, so there is no really hard and fast line between the genera.

My own feeling, as an amateur, and from just "living with the plants", is that *Michelia doltsopa* is not too distantly related to *Magnolias* of sub-genus *Yulania*. Its anthers appear to me laterally dehiscent, and the relatively long life of individual flowers is quite different from the regular three or four day cycle of typical sub-genus

Magnolia. The structure of the fruits on some species of sub-genus *Yulania*, (*Magnolia salicifolia*, for example) reminds one of *Michelia*. Perhaps both had a common ancestor, eons ago, that if it were alive today would fit neatly in Mr. Dandy's section *Maingola* of the *Magnolia* genus.

Although we may have to wait for someone to rediscover George Forrest's dandelion yellow form of *M. doltsopa*, and someone else to determine the cold hardiness of Wilson's Szechwan trees, many *Camellia* gardens, (and *Camellia* coolhouses), can be enriched right now by selected plants of *Michelia doltsopa*. All the material needed for a fine new family of ornamental trees and shrubs is waiting for the interest of the hybridizer and the eye of the selector, in this genus. *Michelia* is not some beautiful but unattainable tropical legend, it is here in the United States and in England, Australia, and New Zealand. The species *doltsopa*, *figo*, (formerly *fuscata*), *compressa*, and *champaca* are at Strybing Arboretum. The first three species are thriving outdoors for M. S. member Dr. Paul J. Bowman. A fine thirty foot tree of *M. compressa* produces its small but multi-lobed flowers yearly at the Huntington Botanical Gardens at San Marino, California. At least one vigorous sapling of *M. formosana* is doing well at this splendid arboretum, showing leaves which appear quite distinct from *M. compressa* of Japan. Other species, such as *M. velutina*, flowered in the Temperate House at Kew one hundred years ago!

In our 1966 Newsletter (Vol 3 No 1), is a fine article by the late Todd Gresham entitled, "Notes on Two Species of *Michelia*", with a photograph of *M. doltsopa* growing outdoors