## Possibilities in Manglieta

Of the twelve existing genera into which Mr. J. E. Dandy feels the two tribes of the Magnoliaceae may be sub-divided, most botanists regard Manglietia as having the greatest number of primitive, that is, unspecialized, characteristics. Actually, it is separable from genus Magnolia only by having, ordinarily, more than two ovules (and, therefore, possible seeds) in each fruiting carpel. Even this is not a hard and fast rule, since occasional Magnolia fruits have as many as four ovules in some carpels. Thus, although Manglietia could logically and technically be united with Magnolia, for convenience sake it is better not to do so. The great uniformity of structure in Manglietia species makes them most easily handled as a generic unit.

Of roughly twenty-five species presently recognized, all are evergreen, and all flowers are terminal. The majority are trees of strictly tropical type, in other words, their periods of growth or dormancy are triggered by climatic factors other than temperature and day length, and they have little or no resistance to freezing temperatures. About half the known species are native to southern China, and of these perhaps six have developed, through the ages,

the growth characteristics of warm-temperate zone trees.

With the widest range of all, from Nepal to south-central China, Manglietia insignis is an adaptable and aggressive large forest tree. Wallich in 1824 raved about the wide-spreading perfume of the innumerable pink blossoms of "this noble tree." George Forrest wrote of the beauty of a 120 ft. specimen under which he camped in Yunnan. Reginald Farrer described flowers on some specimens as "splendid rose pink" and "richest creamy carmine." Frank Kingdon-Ward and Joseph Rock were constantly charmed by it, and more recently, G. A. C. Herklots describes Nepalese specimens in intimate detail in the April, 1964 issue of the American Horticultural Magazine.

As shown in Dr. Herklots excellent drawings, the opening flowers follow a sequence of tepal movements very similar to those of Magnolia virginiana. Herklots found the color of the tepals to be white at the base, and rose madder, H.C.C. 23/2 on their upper half, extending downward on the outer edges. This is the opposite distribution of color with which we are familiar in magnolias of the Soulangiana grex, for example.

A Manglietia said to be "commonly cultivated" in Loshan, Chengtu, and other cities in Szechwan is M. duclouxii. Smaller in every part than M. insignis, the flowers are described as pink to dark rose in color, and "very fragrant."

With larger leaves, and a flower usually described as white, M. hookeri is growing well in England (Lanarth), at Strybing Arboretum in San Francisco and at Little Lake Nursery, P. O. Box 782, Willits, Calif. 95490. Mr. Peter Sullivan, genial master plantsman at Strybing, generously gave me a small rooted cutting of M. hookeri while our Society was holding its San Francisco meeting. After shooting up to eight feet in my cool-house, this specimen

suddenly died, to my great sorrow. M. hookeri differs considerably from M.

insignis in the shape of its fruit clusters.

Two arborescent Manglietias, the first of which is in cultivation in England, are the closely related M. forrestii and M. fordiana. George Forrest described flowers of the first of these as "large, pure white in color with magenta anthers and fragrant." It would thus sound quite similar to a descripof flowers of the magnolia hybrid 'Watsonii'. Forrest describes the leaves as "large, clothed beneath with reddish indumentum, with the branchlets similarly covered." There are several specimens of M. fordiana collected by Prof. Ren Chang Ching in the Herbarium at Harvard University. Leaves are smaller than those of other Manglietias, very narrow and leathery. It is interesting for its native range, which extends as far north as the Hwang Shan area of southern Anhwei province, about 30 latitude degrees. This is the area where Prof. Ching collected Magnolia cylindrica.

Extending north to about the same latitude in western China is M. szechuanica. Although herbarium specimens have been collected, this desirable species has not been introduced into cultivation, where its probable cold-

hardiness would be most useful.

As mentioned on the inside cover, Mr. Peter Sugawara has found M. insignis little damaged, other than leaf burn, by temperatures down to 19 degrees F. At Little Lake Nursery, M. S. members Ed and Jerry Hetzer write that M. insignis and M. hookeri survived the murderous 5 degrees F. low in 1972. Although defoliated, they were back in leaf the following May. Please understand. I am not intimating that species of Manglietia can be considered "hardy" trees. They are not, but there are doubtless vast areas in the temperate parts of the world where horticulture can be enriched by trees of this beautiful genus.

— P.J.S.





Above: Upside down on a white sheet of paper, the male flower parts of M. sprengeri, yield pollen for 1975 hybrids. The watchdog's head (outside window) is not necessary. Left: As crooked as Harry Lauder's walking stick, a cull Soulangiana is turned into a thing of beauty by another Scotsman, Joe McDaniel, who chipped a bud of M. 'Diva' into it three years before. All Teaves are 'Diva' and tree bloomed the following spring.