

stock and scion are not placed in such close proximity, and must "find" each other, slowing formation of the union and making it weaker in comparison. This has been used in partial explanation of why a T-bud invariably develops into an unbranched "whip" in its first year, while a chip bud often produces a plant with one to several branches in the same period. This may seem less of a bonus to the amateur than to the nurseryman, who can sell a branched plant for a higher price than a whip. However, it is indicative of the better union formed by chip budding, and experimental evidence indicates that this results in a superior tree.

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References.

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Magnolia Zenii

by Peter Del Tredici

Dr. Steven Spongberg described the introduction of *Magnolia zenii* in 1981, in an article he wrote about *Magnolia salicifolia* that appeared in *Arnoldia* (vol. 41 (2): page 58):

"The sectional placement of *M. zenii* may soon be resolved, since the American members of the 1980 Sino-American Botanical Expedition to Western Hubei Province were fortunate to be given seed of that species in

October of 1980 when visiting Nanking."

As for the introduction itself, Dr. Spongberg brought five seeds of *Magnolia zenii* to the Dana Greenhouses of the Arnold Arboretum on November 19, 1980. At the same time, another member of the expedition, Dr. Ted Dudley, brought seeds to the National Arboretum in Washington, D.C. According to our records, the seeds were given to Dr. Spongberg while he was at the Kiangsu Institute of Botany in Nanking. He provided the following collection data: "People's Republic of China, Giangsu Province, Chu-yun Hsien, Forestry Station on Bao-hua-shan. Wild Population."

The five seeds were given a three-month cold stratification period after which they were sown on 10 February 1981. Four plants germinated within a month. The plants were grown in the greenhouse for their first year, after which they were put outside in containers in the spring of 1982. They grew to a height of 2-3 feet in the course of the growing season. In the fall of that year, one two-foot individual was planted, unprotected, in our nursery. As of this writing (1 April, 1983) the plant appears to have come through the winter without having lost a single bud. Granted 1982-83 was a mild winter, but the plant's survival outdoors strongly suggests that it will be reliably hardy.

A half a dozen cuttings were taken from our plants in spring 1982 and all of them rooted well. In spring of 1983, the Arnold Arboretum hopes to start propagating plants in earnest. With luck we should be able to offer rooted cuttings to AMS members in the spring of 1984 or 1985. We would appreciate it if people would refrain from sending in orders for cuttings until an official announcement of their availability is made.