

***Magnolia grandis*: a first flowering**

William A. McNamara

Executive Director, Quarryhill Botanical Garden

A first flowering of any plant in one's garden is always exciting, but a first flowering outside of the country of origin is particularly thrilling. This is especially so if the plant is rare and endangered. Evergreen Magnoliaceae from China have been in vogue recently, however, many have not proved hardy outside of coastal California and parts of the southeastern USA. They also can be very stubborn to flower. So you can imagine our delight at Quarryhill Botanical Garden when *Magnolia grandis* (Hu and W.C. Cheng) V. S. Kumar flowered in May and June of 2009. Actually, it had flowered the previous year, but I was in China at the time and missed it. Unfortunately, no one here noticed, but upon my return I saw young fruiting cones developing. As far as we know, this is the first time this species has flowered outside of China.

Magnolia grandis, previously known as *Manglietia grandis*, is native to southeastern Yunnan and southwestern Guangxi, China, very near the border with Vietnam. It is rare in cultivation and rare in the wild. Loss of habitat,



Magnolia grandis. (Photography: Fran Wolfe)



Close up of *Magnolia grandis* flower.

due primarily to agricultural expansion and logging, and the ensuing fragmentation of the few remaining individuals have led it to be listed in the recently published "The Red List of Magnoliaceae" as *Critically Endangered*. The few trees that I have seen in the wild were on the edges of agricultural fields or in small remnant forests near villages. These remnant forests, often called Fēng Shūi Lín, offer some degree of protection, although they are usually too small and have too few individuals to offer a viable future for this endangered magnolia.

Magnolia grandis can grow to 65ft (20m) and has large leathery leaves up to, and sometimes greater than, a foot (35cm) long. The young leaves emerge with a bronzy red tint on stout stems with a bluish bloom. The large, dark red, fragrant flowers with 12 tepals appear terminally in late spring. It occurs between 2,625ft (800m) and 4,920ft (1,500m) elevation in evergreen broad-leaved forests with hot and rainy summers and cool dry, but foggy, winters.

Our two trees came as gifts from Monrovia Nursery in 1999 to test their hardiness and suitability as ornamentals. Monrovia received them as seed from Yunnan. We planted them out in the spring of 2000 on a gentle west-facing slope. They have grown as low-branching trees with foliage to the ground. Now, they are more than 26ft (8m) high and over 16ft (5m) wide and have survived numerous frosts. Our typical lows are 28°F (-2°C), though we can easily go as low as 19°F (-7°C). Summer highs are usually in the range of 95°F (35°C), with an occasional 103°F (39°C). Many of the leaves on the southwest side of our trees show sun damage. Despite our irrigation, they clearly want a more humid summer with occasional cloud cov-



Fructing cone on Magnolia grandis..



Close up of Magnolia grandis leaves.

er, two things we lack. They appeared to be about three years from seed when we received them, so it took nearly twelve years to flower under the California sun. We have managed to root cuttings, though the new plants are slow to establish.

As for their hardiness and suitability as ornamentals, they are perfectly happy in the Sonoma Valley of Northern California, but would benefit from some late afternoon shade. Their large bold leaves would make a great backdrop to any garden. The long wait for flowers might discourage some, but I think the arrival of their huge dramatic flowers with their delightful fragrance make the 10- to 15-year wait well worth it. As far as their endangered status is concerned, many believe that this, and several other species of magnolias in China, will not survive this century in the wild. Measures need to be taken to protect the few remaining individuals and *ex situ* programs need to be established. I am a firm believer that one of the best ways to protect rare and endangered plant species is to grow them in as many places as possible. This not only helps insure their survival in cultivation, but also makes it possible for the public to see and enjoy their beauty, and to learn about their rarity.

References

- Cicuzza D, Newton A, and Oldfield S. "The Red List of Magnoliaceae." Cambridge: Fauna & Flora International. 2007.
- Fu L (editor). *China Plant Red Data Book: Rare and Endangered Plants. Volume 1*. Beijing: Science Press. 1992.
- Gardiner J. *Magnolias: A Gardener's Guide*. Portland: Timber Press. 2000.
- Liu Y (editor). *Magnolias of China*. Beijing: Science & Technology Press. 2004.
- Xia NH, Liu YH, Nooteboom HP. *Magnoliaceae in Wu Z, Raven PH, and Hong DY (editors). Flora of China. Volume 7*, Science Press, Beijing & Missouri Botanical Garden Press, St. Louis. 2008.

All photographs by Bill McNamara, unless otherwise noted.