The Imperiled Pyramid Magnolia

by Elray S. Nixon and Hendrik B. Weyland

Magnolias have been around a long, long time. Fossil remains indicate they were among the first flowering plants on earth. Even today they occur naturally over much of the earth's land surface. Although mostly Asiatic, magnolias are also found in nature in eastern North America, including east Texas. Actually eight species are established in forests in the United States.

The genus *Magnolia* belongs within the family *Magnoliaceae*. The genus and family names honor Pierre Magnol (1638-1715), an early professor of medicine and director of the botanical garden at Montpellier, France. In this family are ten genera, and two of these, *Magnolia* and *Liriodendron* (yellow poplar or tulip tree), are represented in east Texas and are familiar to many people in this region.

Liriodendron is not native to east Texas but it is often planted as an ornamental or grown in plantations there for its wood. Sometimes it escapes cultivation and becomes naturalized in the landscape. Several species of magnolia, on the other hand, are native to east Texas. Southern magnolia (Magnolia grandiflora L.) is quite common in southeast Texas. In some more remote areas it may reach heights close to 40 meters or about 130 feet. Most of the large trees are now gone, however, because of the desirability of the wood for the manufacture of railroad ties and furniture. Sweet bay (M. virginiana L.), another fairly common species, is associated with creeks, seepages, and other wet areas in east Texas. Sweet bay is not so magnificent a tree as southern magnolia but in some locations it does attain considerable size.

One magnolia is quite localized in its distribution in east Texas, occurring naturally only in Newton and Jasper counties. It is the pyramid magnolia (*M. pyramidata* Bartr.). Some botanists consider this species to be merely a variety of the mountain magnolia (*M. fraseri* Walt.). Regardless of how it is classified, the pyramid magnolia has recently received attention as a somewhat rare and endangered species in its east Texas habitat. It is so listed by the Rare Plant Study Center in Austin, Texas.

The imperiled condition results largely



The Texas form of Magnolia pyramidata shows opened and opening flowers and unopened buds.



The unchallenged candidate for the champion Magnolia pyramidata.

from the timbering practice called clearcutting. In areas that are clearcut, *M. pyramidata* unfortunately has not been spared. On the other hand, it does regenerate from seed in areas that have been logged. It also begins to produce its fragrant flowers at only a few years of age and therefore may owe much of its existence to this early reproduction phenomenon shared with several other magnolias.

A question in the minds of many con-



Like other magnolias in Sec. Rytidospermum, the pyramid magnolia displays attractive circles of leaves at the ends of branchlets.

cerned people is whether the pyramid magnolia can endure, through time, the influence of clearcutting, that is, whether it can survive under the closed canopies of pine forests, taking into account the tree farming practice of removing undergrowth from stands of pine by burning, and other manmade threats. One would hope this unusual magnolia can hang on.

It's important to note that *M. pyramidata* is also distributed along parts of the Gulf and Atlantic coastal plains, where it is often referred to as the southern cucumber tree. It grows from South Carolina and Georgia westward as far as east Texas. It has been said that this species is the most abundant deciduous magnolia in west Florida.

Trees of the pyramid magnolia may attain heights of 20 meters (65 feet). Its leaves are clustered at the ends of the branchlets; they are widest above the middle and taper to two ear-like lobes at the base. The large, thin leaves, to 23 centimeters (9 inches), add much to the beauty of this magnolia. Its flowers, like those of magnolias in general, are rather large, to 12 cm across (5 inches), creamy white and solitary on rather stout terminal peduncles. There are numerous stamens present in each flower. The pyramidal cone-like fruit turns to a bright