

Hoffman-La Roche Company, Maag Division. Atrinal operates to reduce the apical dominance of magnolias and other ornamentals. One spray application when the new growth is one to two inches long will suffice for all but rapid growing or heavily fertilized plants. In addition to sharply reducing the need for pruning, Atrinal will produce a compact plant with a thick canopy of bloom. One of the inherent weaknesses of many magnolias is their light sensitivity. The foliage seeks the light, and the leaves and bloom will concentrate in the uppermost branches. Atrinal helps overcome this problem when used upon young magnolias or those grown in shade.

Unfortunately, the price of Atrinal has doubled to about \$65.00 per liter in two years' time. The primary caution in the use of Atrinal is to avoid application when the flower buds are being formed; otherwise, the flowering will be retarded. However, I use Atrinal on most young ornamental stock regardless of the loss of flowers or fruit. It is preferable to sacrifice a few flowers in a young plant if it means you will have a shapely specimen tree for a lifetime.



A big 'Little Gem' *Magnolia grandiflora* is what Bon Hartline saw during a vacation in Bermuda. Does anyone know a bigger?

Pitcher-leaf Plants

The unusual leaf forms of *Magnolia grandiflora* reported in the article "A Magnolia Safari" in the issue of *MAGNOLIA*, vol. XIX, No. 1, pp. 15 and 16 (Spring and Summer, 1983), can be found described in a book dealing with abnormal forms in plants — *Vegetable Teratology* — by Dr. Maxwell T. Masters, published for the Ray Society in London, 1869. To quote from this work:

Pages 21 - 22. "Cohesion of Foliar Organs. The simplest case is that characterised by the cohesion of the margins of the same organ — which is due either to a cohesion of the margins of the basal lobes of the leaf, or to the development of the leaf in a sheathing or tubular manner. . . . In other cases the disc of the leaf is so depressed that a true pitcher is formed. This happens also in the lime (*Tilia*), in which genus pitcher or hood-like leaves may frequently be met with."

Page 30. A list of genera in which the formation of ascidia or pitchers has been observed includes, among woody plants, *Amorpha*, *Corylus*, *Albizia*, *Gleditsia* and *Staphylea*. On p. 22 there is a drawing of a pitcher-shaped leaf, a *Pelargonium* in which the tubular form may be due to dilatation rather than cohesion."

So it seems likely that the two trees in Springfield, Missouri and Van Buren, Arkansas, are modern examples of this abnormality. Dr. Masters does not suggest a cause for their formation, but perhaps some later plant physiologist may have done so, or might examine these particular cases more closely. — Brian O. Mulligan, Kirkland, WA., 98034.

NOTE: In a separate letter Brian adds: "One hopes the plants can be propagated and distributed to see if they will behave the same everywhere," and suggested also that seedlings be raised from them to see if the abnormality reappears in the progeny.