

Twinning in Section Rytidospermum

Harold Hopkins

Around 20 years ago—give or take a year—President Joseph C. McDaniel of the Magnolia Society dusted pollen from flowers of *Magnolia macrophylla* onto flowers of its subspecies, *Magnolia ashei*, and at the same time pollinated *M. macrophylla* flowers with pollen from *M. ashei*, a double procedure that he did routinely, for it was not in his nature to leave any “t” uncrossed nor “i” undotted. The second phase he always referred to in his somewhat cryptic writing style as “the reciprocal.” Some other members of the society who had access to both plants made this same cross at roughly the same time, but details apparently do not appear in the printed records that are available to me. Among these were Bill Kosar and, I believe, Phil Seitner, both demonstrably keen on magnolia species in the Section Rytidospermum to which both plants belong.

That year, Joe McDaniel harvested a shower of seed from these two completely compatible subjects and promptly distributed generous supplies of these F₁s to anybody who seemed interested. He also planted some of the seed himself and produced a sizable flock of small plants. At the time, nobody seemed greatly excited about this cross, and even Joe made only passing references to it in his recaps about the numerous hybridization programs and other magnolia projects he had underway. Thus, many of Joe’s seedlings remained in their buckets and many became rootbound over the next several years as they awaited their time in the sun.

In 1978 the author moved onto a small farm of 22 acres in Frederick County, Maryland, impelled by the urge to put more plants into the ground than he took out of it. Some of these surplus hybrids were offered to him and were gladly accepted. There is, unfortunately, no way now of knowing for sure if they



*Twinned fruit aggregates of M. ashei.
Note the globular shape.*

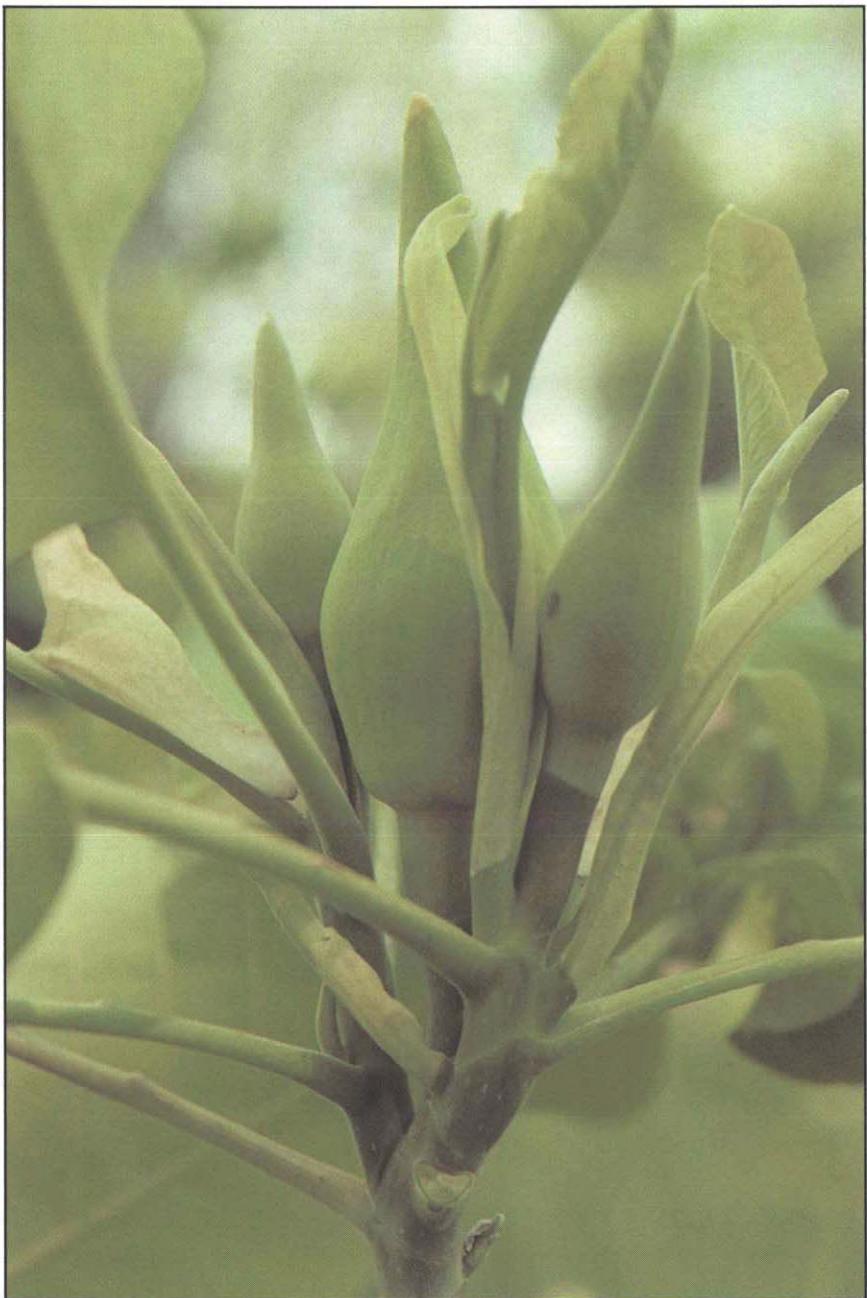


*One pre-anthesis and one immature bud on F₁ hybrid at Adamstown,
Frederick County, Maryland, in 1989.*

were all *M. macrophylla* x *M. ashei* or *M. ashei* x *M. macrophylla*, or a mix. Three of these were planted on the farm, two were passed on to Tom Stone, the author's horticultural friend and Magnolia Society member who was also the author's family doctor at the time, and another was given to a colleague and car pool member, Joe Taccino, who made the daily 20-mile drive with the author to the Food and Drug Administration beehive at Rockville, Maryland.

The farm was sold at the end of 1983. Two of the three hybrids planted on the farm have prospered. The third is alive but struggling against heavy overshadowing by other trees. All the three giveaways have done well. At this writing (August 1992) all five of the prospering trees are loaded with bulging seed cones that are ripening to what one hopes will be perfection a very few weeks hence. The present owners all have agreed to let the seeds be collected and, with luck, there'll be a substantial supply of the F_2 hybrid seeds for the Magnolia Society's seed counter this year, so that members belatedly will have a new opportunity to benefit from Joe McDaniel's work. There's no way to determine at present if the F_1 hybrids differ from each other in characters to any substantial or marked degree. The present owner of the farm also has agreed to contribute seeds to the Society from all the other magnolias originally planted by the author. These include but are not limited to *Magnolia pyramidata*, *M. hypoleuca*, *M. tripetala*, *M. salicifolia*, *M. macrophylla*, dwarfed and southern and northern forms of *M. virginiana*, and others, even a few seemingly full pods noticed on *M. x wieseneri* (lately *watsonii*).

Why all the fuss about the *macrophylla-ashei* hybrid? Well, for one thing, these trees exhibit characters that are intermediate between the parents as to stature, size of foliage, flowers and seedpods, and nodular proximities, resulting in a more compact plant that takes up less space than *M. macrophylla* in the garden, is more adaptable to the average garden, and is not as likely to be damaged by strong winds as is *M. macrophylla*. The implication is that they may not require as much protection as *M. macrophylla*. The hybrid's leaves do not appear as ruffled or wavy as the attractive *M. ashei*, but that's an easy throwaway. The hybrid is at least as hardy as either parent, and may thrive in spots where, for one reason or another, *macrophylla* and *ashei* will not prosper well.



If twins, why not triplets? This young M. ashei from seed from the society seed counter produced four bloom buds in 1993. One was a single, two were twinned, and this one took the Triple Crown.

It seems to me that it's worth trying in new locations both in North America and overseas.

For another, these hybrid trees start to flower from seed three or more years sooner than *M. macrophylla*, which normally does not become sexually mature until it's 6 or 7 feet tall, according to Society President John Allen Smith, who also has trees on his Magnolia Nursery in Chunchula, Alabama, from Joe McDaniel's prolific crop of hybrid seed. This is an advantage for plants in the *Rytidospermum* section, which almost always must be grown from seed.

Best of all, the crosses have all taken after *M. Ashei* in that they frequently produce two flowers side by side on the same branchlet tip. Sometimes one flower may open one of several days ahead of its twin companion. These twinned floral entities nonchalantly produce mature seed pods of regulation size, although occasionally there may be stunting or aborting of one of the pair along the way. As if to tell you you've seen nothing yet, the hybrid tree now and then puts forth a younger third flower between the two existing ones, often after the flowering season is past and the pods of the first two are already enlarged and growing. A purist may sneeze at this bit of metamorphic legerdemain, but not the author, who's always ready for errant bonus blossoms, in season or out.

By the end of the growing season, the seedpods have sprawled their separate ways along the branchlet at the ends of lolling peduncles that reach lengths of 4-5 inches, and one has to look closely to verify that both arise from the same branchlet end. This may be Mother Nature's way of allowing them to get out of each other's way as they sprint to see which can become the longer and larger specimen.

The writer never catches sight of one of our native large-leaved magnolias without experiencing a jingoistic thrill, for there's no other tree that looks as sturdy and sassy and sanguine, at once bold and graceful and reassuring, with its banana-like foliage anchored to the ground by a framework of living cellulose which, in winter without its sinuous, flowing cloak of green, stands stiff and erect and pointing in all directions like the antlers of the biggest stag in the forest. The flowers that appear in May and the heavy pods that slowly turn from leaf-green to blobs of crimson by autumn are just so much lagniappe for the almost persuaded. The modest purple

trey-spot on the creamy white flowers of this hybrid and its parents may be a pale comparison to the more colorful Asian magnolias, but to a pollinator beetle it points the way to the picnic.

This is as good a time as any to make a modest proposal that this cross or hybrid group be given a grex name, so it can be referred to in one word, and any clearly superior woods colt that descends from this breeding can be identified with a cultivar name and still be traced to its origins. Magnolia Nursery once offered F_2 seedlings raised from trees of McDaniel's F_1 hybrids, but buyers showed little enthusiasm for the polysyllabic name and its explanation, and the plants were dropped from the catalog. Can a grex name be properly conferred on a hybrid group produced from the crossing a species with one of its subspecies? I'm assuming that a grex name is a term of convenience to deal with a fact that exists, and that's exactly what we have here. Since many of these trees are already in cultivation, it's time they were legitimized. how about *M. x mcdanielii?* or *M. x kosarii?* The names McDaniel and Kosar may not have the patina conveyed with that of the Chevalier Solange Bodin, but both are better known to magnolia enthusiasts today. It's time to give a relevant name to a relevant group of magnolias that obviously are here to stay. In the words of a recent political aspirant: Think about it. *

MAGNOLIAS

—J. M. Gardiner—

The Magnolia Society has purchased the remaining stock of Gardiner's beautifully illustrated book, *Magnolias*. These books are available, while stock lasts, for \$15.00 postpaid (surface mail). Why not order one, or more, for yourself and one for the local library or garden club?

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