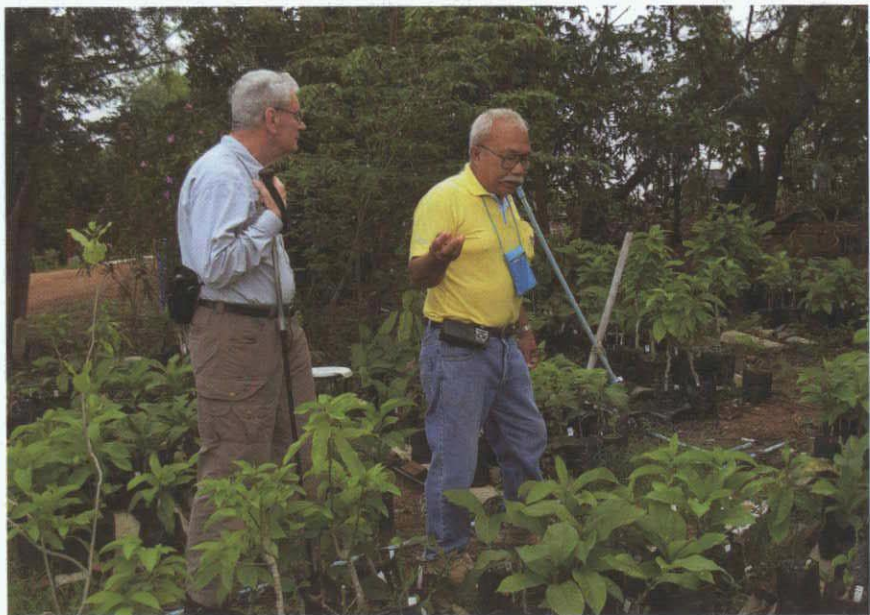


Magnolias in Thailand— a grower's point of view

Thinakorn Komkris

To ordinary Thai people who are just interested in plants, Magnoliaceae is known as a group of scented flowering trees and shrubs called "Champee" or "Champa" which are the common names for the similar and widely cultivated *Magnolia × alba* (white flowered) and *Magnolia champaca* (orange flowered). When grown near houses, these trees can perfume the whole compound during the flowering season. Most magnolia enthusiasts, including me, must admit that in the beginning, we may not care so much for these local cultivated magnolias as they are not very spectacular and there are so many other fragrant flowering trees to choose from instead. However, as I learned more about magnolias, I became increasingly attracted by their beauty, especially of the *exotic* temperate magnolias that were aromatic, as well. That these temperate magnolias are closely related to our Champee and Champa (which were formerly classified in the genus *Michelia*) made me even happier since these and our local magnolias can be grafted together. Such grafting helps us grow the temperate cultivars here in the tropics and lights up our hope that someday we may develop a hybrid with heat tolerance as well as beauty. That



Dick Fingar

The author, *Thinakorn Komkris* (right), in his garden/nursery with Hans Nootboom.

is how serious growers, like myself, became interested in all magnolias available to us. I would need to write a whole book if I were to discuss each individual cultivar, so I would prefer to group my magnolias in my own way and discuss each group from my point of view as a grower—first with my local magnolias and later with the imported exotics.

The local magnolias

Taxonomists and botanists have listed about 20 species of *Magnolia* that are native to Thailand. As a grower, I have a little different opinion than that of the taxonomists, especially with some of the recent changes in classification when many species were merged under one name and sometimes given new names. Nevertheless, I respect scientific justification but there are many more horticultural forms—if not species or varieties—different enough to keep them as separate taxa to grow in my collection. Therefore I will divide these natives further into the “Garden Magnolias” and the “Wild Magnolias.”

The garden magnolias

For quite some time, many species (and hybrids) have been cultivated in public and private gardens in Thailand. These include *Magnolia coco*, *Magnolia figo* (formerly *Michelia figo*), *Magnolia liliifera* (formerly *Magnolia* or *Talauma candollei*), *Magnolia* × *alba* (Champee) and *Magnolia champaca* (Champa). Most people would be surprised to learn that *M. coco*, *M. figo* and *M. × alba* are not indigenous to our country. I personally believe that even the other two, at least those in garden cultivation, are not native either. None of the domestic forms can be found growing in the wild, although there are “wild forms” of Champa and Candollei (*M. liliifera*) that sometimes can be found in the wild, but our cultivated Champa probably came from India centuries ago. Each of these garden magnolias has a few different forms growing in Thai gardens, so we probably have about ten taxa that fit into the category of “Garden Magnolias.”

The wild magnolias

When serious magnolia enthusiasts want to increase their collections beyond the common garden magnolias, we begin to look in to propagating our wild species. Most are tall timber trees not easily noticeable among the other trees in the forest, and for mostly that reason, these magnolias are rarely cultivated as ornamentals. But even though hidden in the forest, one can often detect their flower fragrance from great distances during the blooming season. For the sake of discussion I will divide these wild magnolias into three groups: Ordinary wild species; the hill species; and rare species.

The ordinary wild species: Magnolia champaca, M. liliifera, M. baillonii, M. henryi, M. citrata and M. sirindhorniae

The ordinary wild species, grow mostly in non-mountainous regions in various parts of the country, usually along creeks or in humid valleys rather than in dry forest. Because of this, they don't seem to have any special requirements outside of those normally found in our own gardens. They not rare, but they are still uncommon components of Thai flora.

There are at least two or three wild forms of what is called *M. champaca*. They differ from each other and from the cultivated Champa by leaf shape and flower form. The same is true between the various populations of wild Candollei (*M. liliifera*) and cultivated Candollei. Previously several of these Candollei populations were regarded as separate species, but these differences, for the most part, are not important enough to maintain them as different species. However, I can think of at least one exception—the former *Talauma siamensis* (Yi Hup Plee), which clearly has distinct characters of its own: the flower shape, leaf shape and texture, tree size and form, and bark texture. Admittedly, there are variations within the species, however, ordinary growers can easily distinguish a “Yi Hup Plee” from other forms of *M. liliifera*.

The list of ordinary wild species is extended to include *Magnolia baillonii*, *M. citrata*, *M. sirindhorniae* and *M. henryi*—the first three from the section *Michelia* and the last being a member of section *Gwillimia* of *Magnolia*. *Magnolia baillonii* was considered to be the wild form of *M. × alba* but it is easy to see that the fruits of *M. baillonii* are



Thinkorn Komkris

The white Champaca (left) is definitely not the same as Champee or *M. × alba* (right)

composed of fused carpels rather than free carpels. Interestingly, in at least two or three places there appear to be some individuals that are known as "White Champa." It is clear that they are not the same as the white-flowered Champee, since the tepals are broader. However, fruits on these so-called White Champa appear to be intermediate between those of *M. champaca* and *M. baillonii* and the creamy to yellowish color of day-old flowers on the White Champa seems to provide additional evidence of its hybrid origin. Surprisingly, these hybrids are always found on temple grounds, including one tree that is claimed to be 700 years old and, according to legend, has links to the formation of the Kingdom of Thailand.

Of the others, *M. sirindhorniae* is of particular interest because of its recent discovery in 2001, and its unusual habitat (for a magnolia) as a bottomland species that forms buttressed trees in a swamp habitat near Tha Luang, which is about 100 miles (160 km) northeast of Bangkok. The newly described species, *M. citrata* Nootboom & Chalermglin (in press), is only the second known magnolia species that emits a licorice scent from its crushed leaves (the other one is *M. salicifolia*).

The hill species: *Magnolia garrettii*, *M. insignis* (Thai form), *M. sp.* (White Ang Khang), *M. utilis*, *M. compressa*, *M. floribunda*, *M. rajaniana*, and *M. hodgsonii*

These magnolias can be found in the mountains at elevations of 3,000 to 6,500ft (1,000 to 2,000m). To us tropical people, we consider them to be cool-climate plants since at those elevations temperatures can go down to near freezing for a few days in winter (but never snow). Most of these species will still grow when planted on the common lowland of tropical Thailand, though. Grafted plants of *M. floribunda* and *M. rajaniana* (both of section *Michelia*) as well as seedlings of *M. hodgsonii* flower well in cultivation but seem to bloom a few months later in the season than they do in the wild. They also seem to be less floriferous. Of the other species in this group, none has flowered in my garden so far (some say they must become very large trees before they will bloom on the lowland).

The rare species: *Magnolia gustavii*, *M. mediocris*, *M. liliifera* var. *obovata* (Talauma betongensis), *M. elegans*, *M. praecalva*, *M. thailandica*, and *M. duperreanna*

Besides being rare in the wild, these taxa are rarely seen in cultivation anywhere, even in public and private botanical gardens. Perhaps some have very low reproduction rates in the wild and require very specific microclimates to grow. To me, they lack one or all of the "3 Gs": Cannot **get** them easily; do not **grow** easily; and do not **graft** easily. I am most concerned about the last "G" because grafting, apart from seeds, is the only way to obtain such plants from their habitats. Seeds are very difficult to obtain because of unclear ripening times or because the fruits are too high up in the trees. It would seem that some of these species might be difficult to graft on commonly available rootstocks such as *M. champaca*, especially the last three species named above.

The imported magnolias

I would group imports into two categories: the species from neighboring South Asian countries that are brought directly into Thailand, and the well-known species and hybrids that we call the temperate magnolias.

Other South Asian species: M. delavayi, M. dianica, M. maudiae and M. platypetala

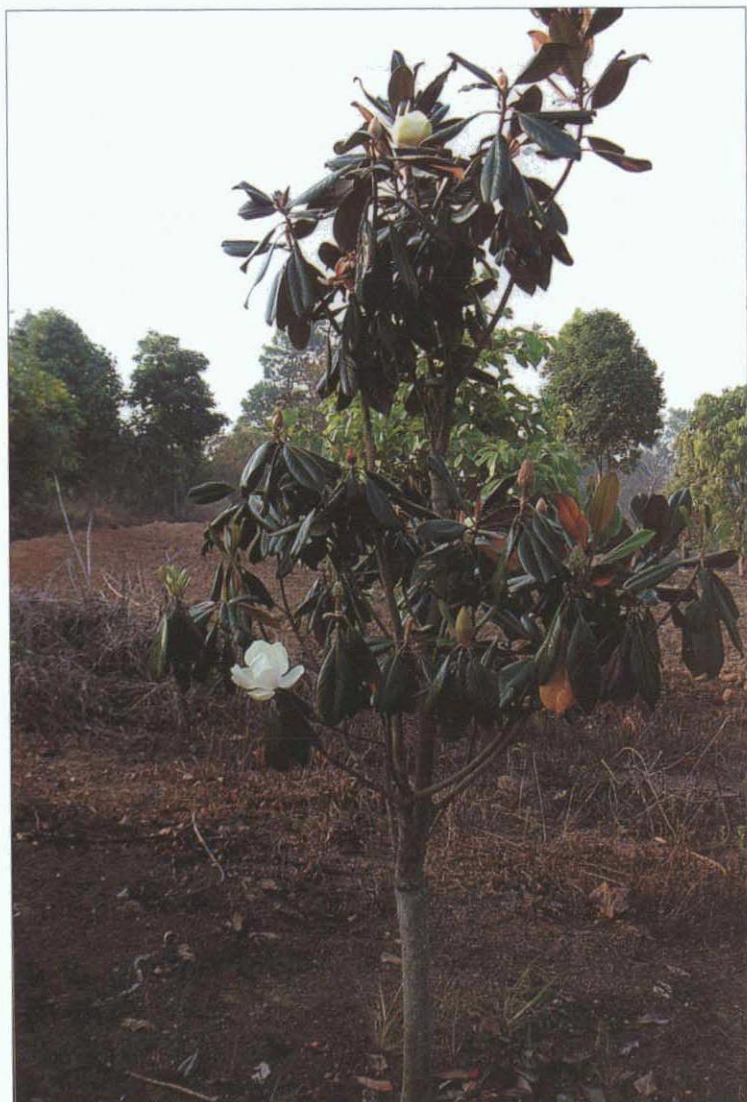
It is a pity to say that we have less contact with some of our neighboring countries than with many other far away countries. So, we often overlook many of their imports even though some of these places have climatic conditions similar to Thailand. Only recently, can we travel freely into once forbidden China and later into Vietnam. Our local nurserymen cannot help wandering into China to bring in whatever plants they feel worthwhile, including magnolias. Most are evergreen types of sections *Michelia* and *Manglietia* from Yunnan province. Although Yunnan is not very far from Thailand's northernmost border, it is already into the warm temperate latitude. A greater part of the province, especially around Kunming, is already highland over 3,000ft (1,000m) in elevation. Magnolias from there must be treated as our hill species, as many of them, in fact, perform well in the cooler parts of Thailand. The trouble is that local plant vendors and our nurserymen often do not care very much for the scientific names, so one hardly knows what one is buying!

Fortunately, some are easily recognizable such as *M. delavayi*, *M. dianica*, *M. maudiae* and *M. platypetala*. The first two species seem to do well even in the hot Bangkok area, and the latter two bloom quite well in the lowland of our northern provinces. The magnolias of section *Manglietia* are even harder to recognize since they look so similar to each other. We may have to wait until they flower, but like our own hill manglietias, hardly anyone ever sees a cultivated individual blooming. So far, not many nurserymen venture far into southeastern China or Vietnam for plant acquisitions. Hopefully that will change soon since some of the magnolias there might be very interesting to us.

The temperate Magnolias: Magnolia grandiflora, M. virginiana, M. campbellii, M. dawsoniana, M. sprengeri, M. denudata, etc. (including various hybrid cultivars)

I guess all magnolia enthusiasts in the temperate countries would be anxious to know how their popular magnolias grow in Thailand. We tropical people are aware that they are temperate plants, like apple trees, firs, etc. They would seem to have as little chance of surviving here as tropical plants would have of surviving in cold countries. Luckily, most magnolias do not require extremely cool climates, and many magnolia species have vast natural ranges of distribution—some that extend from tropical to temperate regions. As I mentioned in the beginning, it is the beauty of these temperate magnolias that tempt us to try. So whenever we get the opportunity, we bring in any and all cultivars that we think might have a chance to survive here. After all, each cultivar could have a slightly different heat tolerance, so we still have hope.

One of the most important requirements, I believe, is to graft all of the temperate species and cultivars on to our tropical rootstocks. Fortunately, we find that most will graft well to *M. champaca* rootstock. We even find many of these much easier to graft than our local tropical selections! Secondly, we try to site them in the coolest parts of Thailand. I have found that on a hill station above 5,000ft (1500m), the temperate magnolias, such as *M. × soulangeana*, *M. liliiflora*, and *M. doltsopa* 'Silver Cloud' perform as well as in temperate countries, blooming prolifically, in fact.



Thinakorn Komkris

At 2,297ft (700m) elevation and upward, *M. grandiflora* performs well. Note the graft boundary of the *Champaca* stock.

Unfortunately, most private gardeners don't have access to such highlands for their plant collections. Such places are either national parks or other types of protected land. So the coolest area one can find is about 2,300ft (700m). Such places can be as much as 9°F (5°C) cooler than the average lowland temperature and have a winter-time minimum temperature of just 53°F (10°C). [Editor's note: This type of winter minimum temperature would be similar to that of the southern tip of Florida in North America.] Even though these temperatures are not cold enough to be considered sub-tropical, I grow my temperate magnolias in such a place. So, presented below is a list of the temperate magnolias that I am growing successfully here in my garden near Petchabun, Thailand. Please consider these results as preliminary since most have been in cultivation here for only about six years.

Evergreen species such as *M. grandiflora* and *M. virginiana* seem to perform normally at about 2,297ft (700m) elevation or greater. Some cultivars like *M. grandiflora* 'Little Gem' still do well in ordinary lowland. Some of the deciduous magnolias of section *Yulania* flower well, but never in profusion. The species and cultivars that have *M. × soulangeana*-type leaves seem to flower well. These include *M. denudata*, *M. liliiflora*, *M. × soulangeana* (all cultivars so far), 'Star Wars,' 'Tolantie,' 'Heaven Scent,' 'Elizabeth,' 'Manchu Fan,' etc. Cultivars that have *M. campbellii*-type leaves (larger, more round) can still grow up to 13 to 16ft (4 to 5m) but haven't bloomed as of yet (after 8 years). These include *M. campbellii*, *M. dawsoniana*, *M. sprengeri*, etc. as well as hybrid cultivars like 'Harold Hillier,' 'David Clulow,' 'Albatross,' etc. *Magnolia macrophylla* and *M. sieboldii* simply refuse to live. *M. stellata* barely grows



Dick Figlar

Larry Langford, Dick Figlar, Hans Nooteboom, and Thinakorn Komkris touring the nursery.

taller than 1ft (0.3m). It produces one or two Chrysanthemum-like flowers. *M. kobus* and its daughter, *M. × loebneri* grow a little taller, but just produce one or two flowers per tree—not much of a spectacular sight.

Finally, the flowering season for these temperate magnolias seems to change completely from their place of natural origin. Although I haven't kept records, I can say that of some 20 cultivars that can bloom in my climate, there has not been a single day in the year when I will not have a few magnolias blooming. However, during the warmest (and driest) months (February through April), the flowers do not develop properly—the tepals look contorted.

Ed. note: The Top Tropicals Botanical Garden ad on page 42 has photographs of three of the magnolias mentioned in this article. Additionally, images of several of these species are available on the Magnolia Society's website.

Biographical information: After obtaining degrees in Agriculture and Animal Science, Thinakorn Komkris embarked on a life-long career of achievement in Dairy Farming promotion and development for Thailand. He is largely responsible for the success of that industry in Thailand today. During the latter part of his career (1982 to 1987) he even worked directly for the King of Thailand. While working on one of these projects, the "Royal Project" which helped the hill tribes of northern Thailand to replace opium farming with profitable agriculture, he was exposed to colder climate plants, both experimental ornamental plants and rhododendrons and magnolias which grow naturally in those northern mountains. Thinakorn first caught the rhododendron bug, but by 1999 became a serious collector and propagator of magnolias. Today, he has built the largest collection of magnolia species and cultivars in Thailand.

Research Grants Available

The Research Committee of the Magnolia Society announces that grants for research on Magnolias are available. The Grant Program exists to encourage and support research related to Magnolias and the Magnoliaceae. Authors of successful proposals may be awarded as much as \$2,000



US funds). Funds may be expended over a period of one to three years, at the discretion of the recipient, except they cannot be used for institutional overhead. Grants are provided to deserving recipients with the understanding that research results will be published in *Magnolia*, the Journal of the Magnolia Society, a non-refereed publication. If

you are unfamiliar with research published in the Journal, you may review back issues, which are available in many horticulture libraries. Or, you can obtain a sample copy of the Journal from Beth Edward, 3000 Henneberry Rd., Jamesville, NY 13078.

Proposal Guidelines

All proposals must be received by November for consideration in the following year. Proposals will be evaluated by the Magnolia Society Research Committee, and awards will be based on the perceived value of the research to the Society's members and the probability of successful accomplishment. The format for the proposals and suggested areas of research is available on the world wide web at www.magnoliasociety.org. If you do not have Internet access, you can contact Paul Cappiello at the address given below and request that an application form be mailed to you.

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