

Exploring in Vietnam

Editor's note: Modern-day plant explorers, Scott McMahan and Dan Hinkley, provide separate reports on their recent plant exploration trips to northern Vietnam. Dan describes the results of various sites and dates of Vietnamese ventures, while Scott focuses on their joint exploration in 2010 to the Five Finger Mountains.

Magnolias in Vietnam

Dan Hinkley

During the past twenty-five years I have had the opportunity to examine numerous *Magnolia* taxa *in situ*: *M. sargentiana*, *M. delavayi*, *M. floribunda* and *M. wilsoni* in China, *M. salicifolia* and *M. obovata* in Japan; *M. sieboldii* and *M. compressa* in Korea; *M. campbellii* in Bhutan and E. Nepal. These encounters, though exciting, were only occasional incidentals to the mostly deciduous flora of each country and in no way prepared me for the opulence of the Magnoliaceous inventory of northern Vietnam.

Beginning in 1999, I have had the opportunity to visit numerous sites in Vietnam a total of seven times. Slowly but steadily, with the gracious help of Dick Figlar, I have become more comfortable in determining the identity of the approximately ten species of *Magnolia* that occur in this region.

It should be noted that in untrammelled areas of Vietnam; i.e., with no significant deforestation, the seed of numerous *Magnolias*—sometimes with their associated receptacles and sometimes not—are collected on the ground from specimens towering high overhead. Though these are often parasitized, for those that do successfully transition from the collection bag through USDA inspection to a potted plant, numerous years await before certain identification can be made.



My collections of *Magnolia* sp. HWJ 99461 (Hinkley, Wynn-Jones) were made during our first ascent of Fan Si Pan near Sa Pa in 1999. The highest mountain in Indochina, it rises to 10,312ft, with the lower slopes seriously degraded by human activity and the upper slopes an unclimatic monostand of bamboo. The Goldilocks zone is a dense evergreen jungle comprised chiefly of Theaceae, Lauraceae, Araliaceae, Hamamelidaceae and, of course, Magnoliaceae.

M. grandis, a rare find in Vietnam,
shown proudly by two guides

In 1999, prior to the dedication of this area as a national park and subsequent development of basic tourist facilities, the climb up the eastern side of the mountain from the town of Sa Pa was a minimum three-day round trip. It was while approaching our first bit of forest on an upper ridge at 7,350ft that we came upon an exposed specimen of *Magnolia* laden with ripened seed in large, oblong, upright cones. Three of five seedlings from this collection have blossomed in my zone 8 garden, showing significant variation in color, from slight pink to a handsome rose. Dick Figlar has tentatively identified them as *M. insignis*.

On the same mountain in 2008, but on the northern side outside of the park perimeter, beginning from the village of Seo Mi Ty, perennial traveling companions Scott McMahan and Ozzie Johnson and I, along with a legion of guides and porters, trekked along a river drainage at moderate elevations before climbing up onto the densely forested mountain slopes. Along this river grew a staggering diversity of *Magnolias* with apocarpus species (*M. martini*, *M. foveolata* and *M. fulva*) growing adjacent to those with cylindrical and cone-shaped fruit (respectively, *M. cathcartii* and *M. insignis*; *M. sapaensis* and *M. grandis*). Finding the latter is considered to be a new record for Vietnam, as it has been known only to southern Yunnan prior to this.

Besides the *Magnolias*, also present of note were *Acer*, *Styrax*, *Illicium*, *Mahonia*, *Edgeworthia* and *Stauntonia*.

In 2006, 2008 and 2010 we traveled to the northwest of Lao Cai to an area of moderate elevation on the Chinese frontier known as Y Ty. Attesting to how close to the border we actually were on our last trip, our campsite was visited the first night by border police, who spent considerable time perusing our passports. This is



Magnolia aff. *insignis*
HWJ 99621



Rusty indumentum on underside
of *M. foveolata* leaves.

Magnolia

a remarkable area with a rich aggregation of familiar genera, including *Acer*, *Rhodoleia*, *Loropetalum*, *Schefflera* and *Magnolia*, though the local tribal minorities are still cutting the forests for firewood at an alarming rate.

Most memorable here were stunning specimens of *M. foveolata*, with leaves undersurfaced in a rich rusty red indumentum. Fortunately, we were afforded the luxury of youthful and agile porters who would readily scale the trees barefoot to help collect seed.

There are remarkable changes happening in Vietnam, in regard to its environmental ethos as well as the existence of tourist facilities throughout much of the country. In addition to its lovely and welcoming people and French-infused cuisine, there exists a superb inventory of plants readily witnessed if but with a bit of physical exertion.



A specimen of *M. sapaensis* illustrates the unique attributes of this species: coppery-golden pubescence on the buds only, and the rich green leaves are contrasted by glaucous-white on their backsides.

Exploring in Five Finger Mountains, Vietnam

Scott McMahan



Last fall, I had the opportunity to travel back to the high mountains of northern Vietnam with my faithful traveling companions, Ozzie Johnson and Dan Hinkley. This was the second time we had botanized in these mountains together. Our main goal was to continue to try to explore remote areas in the Fan Xi Pan mountain range as well as do

A view of the Five Finger Mountains

some snooping around in a new area or two in order to begin to test the hardiness of these Vietnamese plants in gardens both in the southeast as well as the Pacific Northwest.

Outside of the Fan Xi Pan Mountains, one of the most interesting areas for temperate flora we explored was a group of mountains called the Five Finger Mountains. Hiking in this part of the world could almost be interchanged with the word 'mountaineering'. The mountains that create the border between China and Vietnam are rugged, steep jungles that are difficult at best to navigate, and hacking through them is the only way to make progress.

This part of the trek began with our driver dropping us off at a turn in the road where the three of us, our trusted guides, Uoc and Ton, and three porters piled out. Since there are no real roads leading up into the mountains, other than rutted out pig trails used by motorbikes, our adventures in this region usually begin in this way. We started out by climbing up into the mountains on a dirt path that wound through some sort of a work camp and finally into the jungle. Along the way, we began to notice the change from cut-back trees and shrubs that were struggling to grow along the trail to majestic, broad-leaved evergreen tree outcroppings, which led the way to the dense canopy in the mountains. I began to realize that these huge trees in the distance were not oaks or maples such as we had seen at lower elevations...they were at least three different species of mature magnolias. What a feeling to be standing amongst groves of Asian magnolias that had been allowed to grow and mature!

Our main method of germplasm collection is via seed. While most of the magnolias were not laden with ripe cones full of seed, we did make several significant collections in this area and were able to tentatively identify those species, thanks to Dick Figlar and digital photography. I began snapping photos and collecting not only seed, but also branch cuttings, which I could clearly photograph later and send to Dick. Before I left for my trip, I had received an in-depth tutorial on keying out evergreen species of magnolias from Dick in his garden. Because of this exercise, I was able to give him descriptive information about the buds, undersides of the foliage, glossiness of the leaf, the presence or absence of leaf scars, and other



Fellow plant explorer Dan Hinkley walking toward groves of *M. foveolata* growing in a moist valley in the Five Finger Mountains.

Magnolia

details. By exchanging emails and pictures, we usually had valid identification for our collections within 24 hours.

In the areas we visited on this trip, *Magnolia foveolata* seemed to be the most widespread. We usually found this species growing in full sun, but the



M. foveolata with ripe seed

soil conditions ranged from fairly dry pastures to very wet, bog-like conditions. I would never have imagined that these huge trees would have grown so well with their roots completely submerged in water. The trees themselves were as diverse as the conditions they grew in. Some had beautiful golden indumentum on the undersides and some displayed fine silver hairs and some had none at all. Based on foliage alone, very ornamental selections of this hardy species could be made.

As we continued onward up into the mountains, we came across an impressive *Magnolia* species growing happily by a river. Characterized by long, narrow leaves with short stipule scars along with prominent flower buds covered in golden indumentum held in the leaf axils, we wondered if it was *M. floribunda*. As far as we could tell, this was one of the only specimens of this particular taxon we encountered. Growing close by, we also found quite a few specimens of *M. insignis*, which has a wide natural distribution, from northeast India, Nepal and southern Sichuan in the north to northern Vietnam and Thailand in the south. While there are several hardy selections of *M. insignis* being grown in the US, *M. insignis* from this area unfortunately seem to be very tender. I was especially disappointed with the apparent lack of hardiness of *M. insignis*, as collections from previous trips to this region have yielded vigorous plants with hints of red pigment in the foliage, but north Georgia winters (zone 7) have proven to be too cold for them.

At our highest elevation of *Magnolia* collection from this area (6,700ft), we discovered a very exciting and rare species known as *Magnolia cathcartii*. We had seen this species at lower elevations without fruit and while it did resemble something in Magnoliaceae, I decided that it more closely resembled something related to *Ficus* and continued on. Compared to other *Magnolias* in the area, this species has very small, glossy foliage completely free of indumentum. When we finally came upon a tree with fruit on it and could then positively identify it as a *Magnolia*, we collected the seed

and began taking pictures to send to Dick, hoping for quick identification. Little did I know, this species is easily identified by a very prominent mid-rib on the upper surface of the leaf. What a great find as this species is virtually non-existent in US gardens.

I have now seen with my own eyes the amazing diversity of Magnoliaceae that occurs from southwestern China and into the mountains of northern Vietnam. In fact, of the six collecting trips I have made to Western China and Northern Vietnam, the trip we took in the fall of 2010 proved to me that much exploration still needs to be done in the mountains that create the border between these two countries.

I would like to thank my friends Dick Figlar and Philippe de Spoelberch for their very generous support of my collecting efforts last fall. Without these sorts of collaborations with individuals, botanical institutions and serious plant societies, explorations and plant introductions of this sort would be impossible.



Glossy *M. cathcartii* leaves with prominent mid-rib