Magnolia campbellii var. alba in Bhutan

by Philippe de Spoelberch

I was fortunate to visit the Kingdom of Bhutan in April of 1985 with my family on a private tour organized by one of our friends who was working in Bhutan in connection with United Nations projects. This was my third visit to the Himalayas after previous visits to Kashmir and Nepal. I cannot resist the temptation of stressing at this early stage how extraordinarily peaceful, beautiful and harmonious this country is. But first, a word about magnolia.

When Hooker discovered Magnolia campbellii in Sikkim (just to the west of the Bhutan border), he had this to say: "This, the noblest species of the genus, was, before the destruction of the grand forest that clothed the higher elevation of the outer range of the Sikkim Himalayas, by far the most notable tree of the district..." (in Treseder's Magnolia, p. 86)

I was hoping to see masses of this glorious tree in relatively unpopulated Bhutan but alas not so. Altogether, I saw a couple of patches during my ten days' visit. Once again, the value of the tree's wood must have reduced their number since the early days.

The first view of Magnolia campbellii is from the small airplane that creeps through the high valley on the way to Paro Airport (2,500 meters). Indeed, one flies below 3,500 meters—no higher, for lack of oxygen equipment.

Flying in, from Calcutta, over the Indian plain, we plunged between the mountain peaks and soon found ourselves progressing in a meandering course towards the top of the valley. Very suddenly, to the right and then to the left appeared white patches on several trees; there couldn't be snow at this altitude ... This was Magnolia campbellii surely. And that was it for the day! As far as I can remember, trees were grouped in pockets which must have suited them, on generally northfacing slopes (northeast to northwest) within a couple of hundred meters of altitude, indeed a narrow band. This of course must vary from place to place but was surely around 2,800-3,200 meters. We landed at Paro Airport and spent a few happy days in this exceptional high altitude valley visiting the surrounding hills and high placed Buddhist monasteries. Never did I see Magnolia campbellii in or around the Paro valley. We were probably too low and the area too dry. I cannot believe that Magnolia campbellii would not grow there. But the view of surrounding hills and mountains would have shown off any patch of white flowers. Many other flowering plants were all over to compensate: the rhododendrons of course (arboreum, virgatum, barbatum), Pieris forrestii, Berberis asiaticus, Rosa sericea, Picea smithiana. Cotoneaster microphyllus, Clematis montana and millions of Primula denticulata.

The Doshongla (3,250 meters)

There are no magnolias either as you drive from Paro to Timphu. The road to the capital again is probably too low and dry. Further, at this level and in this more populated and

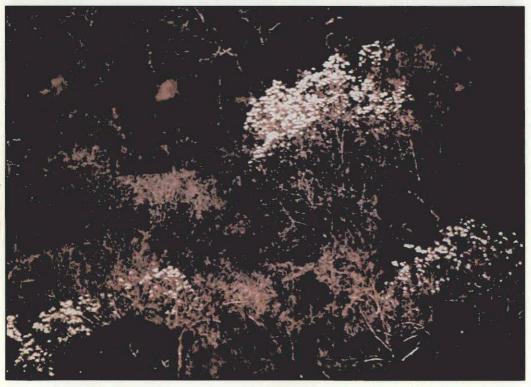
Magnolia campbellii var. alba



D1, D2







easily reached area, forest is already cut to a point that it will not be regenerated! Cattle is to be seen everywhere, and the resulting erosion is horrifying.

The Doshongla is one of the passes connecting parallel valleys which are oriented towards the Indian plains. It is probably well-known because of the main east-west road which uses this passage between Timphu and Punakha. Ludlow and Sheriff visited the pass several decades ago and described the flora extensively (see Fletcher, "A quest of flower").

I believe the pass to be approximately 3,300 meters high, still well below the tree line. The change in vegetation was most striking on both sides of what I thought to be a more or less north-south ridge. The



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Send for our free price list. Contact: David Ellis Day: (205) 675-4696; Night: (205) 675-8471 westfacing slope, from Timphu to the top, is obviously drier and shows recent farmer/cattle raising settlements. The forest will be gone here within twenty years. Pinus, Quercus semecarpifolia, Berberis asiaticus, Rosa sericea are found here as in the drier valleys. The eastern slope (northeastern) down to Punakha seems to enjoy heavy rain during the monsoon season and shows all the variation of rain forest flora. It is a beautiful natural forest with Abies at the summit, Cupressus a little lower, then Tsuga dumosa dominating masses of minor trees and shrubs.

Magnolia campbellii was to be found growing within the hemlock belt and towards its upper limit. The trees were just coming into flower on the 6th of April (1985) at the same time as Rhododendron arboreum, Daphne bholua, Litzei, and Stachiurus nepalensis, all of which grew together on this site. Magnolia campbellii is of course a breathtaking sight specially against the background of towering Tsuga dumosa (see Fig. D1).

Older, maturing trees seemed to flower somewhat later than the more vigorous or pollarded trees along the road (see Fig. D3). The Bhutanese people indeed hack at every possible tree seemingly for the pleasure; a chip of bark to light a fire is particularly effective. And so is the top of a young magnolia within easy reach...

Individual flowers presented the characteristic cup-and-saucer habit, although this was not as regular as one might expect. It is most apparent in Fig. D2, less so in the vigorous top of pollarded tree in Fig D4. Tepals are of a creamy white with the markings outside of a reddish-purple tone. Both outer and inner tepals were marked although this is of course more visible on the upright inner tepals.

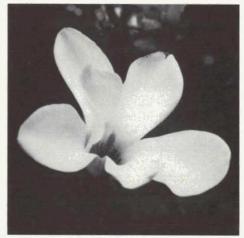
The bark on branches was silvery gray. Older stems appeared black because of the attached moss. This contrast is evident on Fig. D2.

Although no count was made. I reckon there were no more than a dozen trees on the top of the pass and all were mature specimens: obviously, I would have missed very young trees-they would not have been flowering. But still the impression is one of an aging forest with no young or middle-aged trees. Cattle is starting to roam around. Do they go for seedlings as they would in the West? Magnolia seed pods were evident on old trees so that there must be potential for regeneration, but one must fear that magnolia seedlings are as palatable to animals in Bhutan as they are in other parts of the world.

The Pelela and the Gante Gompa giant magnolia

This pass, lying at 3,500 meters crosses one of the main mountain chains of Bhutan. It is said to be a major dividing factor in the Himalayan flora. Some *Magnolia campbellii* were again present here, but much more scattered.

Close to the Pelela lies the village and temple of Gante Gompa. On the esplanade, surrounding the monastery, were several giant trees, mostly Juniperus recurva. But one tree really caught our eye: probably one of the largest magnolias in the world-20 meters high, more in width, and 4.5 meters in girth. Buddhist monasteries are contributing more and more to the conservation of trees and it is enough to remember that Gingko biloba is extinct in the wild and was conserved as a sacred plant nearby temples and monasteries of the Far East. One day maybe, the only magnolias left in Bhutan may be those which have found refuge in the vicinity of holy buildings.



M. denudata (Wada's form) \times M. cylindrica

On a misidentified specimen of Magnolia × wieseneri

by Frederick G. Meyer

In the Winter 1986-87 issue of MAGNOLIA (XXII, No. 2 [Issue 42]), Sir Peter Smithers published a note entitled "A ray of light on M. × wieseneri". My note here is intended to clear up the misidentification of Mrs. Polly Hill's magnolia on Martha's Vineyard which was thought to be M. \times wieseneri but is not. After reading Sir Peter's note, and examining his two photos, I then wrote to Mrs. Hill and explained that on the face of it, I surmised her plant was probably M. obovata (M. hypoleuca) and not M. X wieseneri. I asked her to send, if possible, a voucher herbarium specimen and I would then try to confirm the identification of her plant. Not long after I received a beautifully prepared specimen with a photograph and later a seed aggregate. This material now confirms that Mrs. Hill's plant is a perfectly good M. obovata and not M. \times wieseneri, which is utterly distinct from any other magnolia known to me.