

Joseph Hers and *M. biondii*

by Rob Nicholson

The recent flowering of *Magnolia biondii* (MAGNOLIA, Issue 41) in the garden of August Kehr was a notable first that has eluded western horticulturists for almost one hundred years. After its initial collection by Augustine Henry between 1885 and 1888¹, the plant remained sparsely collected and was not introduced to the west until Y. C. Ting's collection of 1977 was successfully germinated (MAGNOLIA, Issues 21-25, 27).

If one digs deep enough though, the records show how maddeningly close a number of collectors came to introducing this rare species.

E. H. Wilson introduced more Chinese magnolias than any collector. To his chagrin, *M. biondii* was the one *Magnolia* species from which no seedlings were produced from seed he collected and sent to the Arnold Arboretum.

Wilson collected the plant in Western Hupeh in only one locality, the village of Hsing-shan Hsien, and he considered it very rare. He wrote that it was a "shapely tree with many rather slender and spreading branches and a wealth of leaves." Wilson unwittingly named his collection as a new species, *Magnolia aulacosperma*, unaware that it matched the previously described and obscure *Magnolia biondii* of Renato Pampanini.

Joseph Hers was another collector who had the opportunity and although he did a fairly thorough job

of collecting the woody flora of the north central Chinese provinces he inexplicably ignored *Magnolia biondii*. A Belgian, Hers was an administrator of the railroads of the Chinese state and was secretary general of the Lung-hai and Pienlo lines. These were being constructed across the provinces of Kiangsu, N. Honan, Shensi and Kansu. He directed a number of railroad employees in the collection of seed and herbarium specimens, and the Arnold Arboretum was among the fortunate recipients of these collections.

Between 1919 and 1925 Hers sent over 400 lots of seeds and cuttings to the Arnold, the great majority of these collected from the wild. Although it is unclear from our records just how many of these lots germinated or rooted, there are 40 accessions from Hers's collections extant in the living collections. These now form the bulk of our collections from the northern tier of Chinese provinces. Both his herbarium sheets and seed lots bore correlating collection numbers, so it is now quite easy to match the resulting plants on the grounds of the Arnold Arboretum with the original source data.

C. S. Sargent, the Arnold Arboretum's first director, was extremely glad to have a collector in these provinces and urged Hers on. Some of their correspondence is preserved in our archives and in one of Sargent's first letters to Hers he responded to the initial shipment:

"The collection is a very interesting and important one, containing a number of new species and giving us also much information

¹Herbarium specimen at Gray Herbarium verified by Dr. S.A. Spongberg. Henry's #7733.

in regard to the distribution of many Chinese trees and shrubs which before have been known only from other provinces. On the whole, this is one of the most important collections of Chinese plants which has been sent to the Arboretum and I am extremely obliged to you for sending it to us."

Hers had a rudimentary understanding of the Chinese language and script and among his efforts was an article in which he collated the Latin names of the northern Henan flora with their local names in phonetic English and their expression in Chinese characters. Listed are 378 woody species, collected on both sides of the Yellow River between 34 degs. and 36 degs. north latitude.

Two magnolias are on the list as being wild-collected. *Magnolia aulacosperma* (*biondii*) is listed with the local name of *wang ch'uen hua*, while *Magnolia denudata* is listed with three local names; *wang ch'uen hua*, *pai yü lan*, and *sin i*.

What is odd is that while Joseph Hers was an efficient collector and chronicler of the Chinese flora he encountered, like all collectors he had inexplicable lapses in judgment. Unfortunately, the failure to collect *Magnolia biondii* was one of these.

In corresponding with the editor of the French journal, *Revue Horticole*, Hers stated: "All the Magnolias of China were originally native to the Yang-tse basin (climate moist and always warm) and I know of only three which have succeeded in moving further north and establishing themselves in the Yellow River basin (climate much more cold and dry.) They are:

"*M. conspicua* [*M. heptapeta*], which is found as far as Peking, but only in well sheltered gardens.
"*M. conspicua* var. *purpurascens*,

[probably *M. sprengeri*], which seems a little less hardy and which is seldom found in cultivation here, except to be forced in a greenhouse (the young plants are brought from Shantung and put in a greenhouse at about the same time as Mutan peonies to produce flowers in January.)

M. aulacosperma, [*M. biondii*], which is the only one I have encountered in the wild.

"Travelling several years ago in a remote area of Honan, I encountered there a *Magnolia* of [translator's note: could be read either as 'noble/lofty height' or as 'beautiful form'—judging from photos, I'd guess it's height], which I photographed. I obtained also specimens which were identified at the Arnold Arboretum as *M. aulacosperma*, and the only thing I was able to confirm is that the species is native to northern Honan and also scattered on the north flank of the Fu-Niu-Shan massif which separates the Yang-tze basin from that of the Yellow River. I have not attempted to introduce it into cultivation because our gardens are all level, with very limey soil and water, and I have never successfully grown a single *Magnolia*."

Why Hers collected seed of hundreds of other species and chose to neglect *M. biondii*, simply because it wouldn't grow in his garden, is puzzling to me. It almost seems a hindsight excuse since he collected for many others besides himself. Herbarium specimens show that he had a number of chances with the species, having made 5 collections of it in 1919. Two of these were made in late May and the other three were fall collections, one in late September and two in mid-October. This may explain why Hers never collected seed; he arrived either too early or too late.

Sargent did single out plants he wished to have collected or recollected in a list he included in a letter to Hers. Our archives contain a copy of the letter but unfortunately not the list, so we have no way of knowing if Sargent and Wilson pushed Hers to collect seed of this rare *Magnolia*.

Hers did, however, photograph the plant for the first time and these photos might add another conjecture. In the background we can see how sharply steep the terrain is. The plant might have been a struggle to reach and a trek that Hers did not wish to repeat. The photo of Hers's collection #964 was shot at Lushih, (34 deg. N, 111 degs. E, on the Kiao Lo River) on October 12, 1919, at an altitude of 1000 meters. The leaves are still on the tree but lack of a color print makes it impossible to tell if the foliage color had begun to turn. The measurements of the tree are reported as 18 meters tall with a circumference of 1.2 meters. This puts it among the tallest magnolias of the Orient and clearly establishes it as an arborescent species.

As late as 1938, a time of war in China, Hers was still working in that country, and located now in Shanghai. He wrote a last letter to Sargent: "Under the present circumstances there is no chance to do anything here in the way of botanical research, but when peace comes, I shall only be too glad to offer my assistance again for anything you may need in connection with the flora of Anhwei, Kiangsu, Chekiang."

Joseph Hers died in Belgium in December 1965.

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of Louvain for providing invaluable information.

Modern spellings of cited Chinese place names in the order they appear in this article: (Hsing-shan Hsien) Xing shan Xian, (Kiangsu) Jiangsu, (N. Honan) N. Henan, (Shensi) Shaanxi, (Kansu) Gansu, (Yang-tse) Changjiang, (Yellow River) Huang he, (Shantung) Shandong, (Fu-Niu-Shan) Fu-Niew mountains, (Chekiang) Zhejiang.

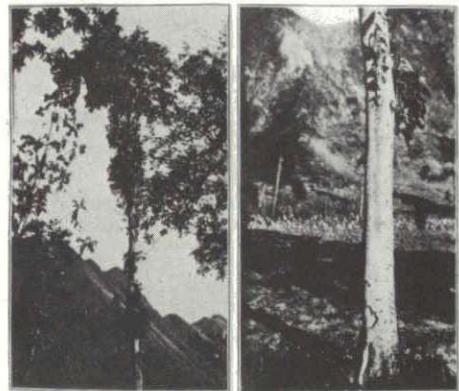
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These two photos, copied from Revue Horticole, vol. XIX, 1924, may give some idea of the form of M. biondii and the topography where Hers saw the tree in Honan.