M. biondii, the 'Hope of Spring'

by August E. Kehr

The Chinese name for Magnolia biondii is "Hope of Spring." This name is especially appropriate because it flowers in midwinter, along with the earliest of the crocuses.

My first acquaintance with M. biondii was in reading an article written by Phil Savage in the fallwinter 1974 issue (Issue 18) of the Newsletter of the American Magnolia Society (predecessor of Magnolia) titled "The Beautiful Ivory Nude." In that article, principally about M. denudata, it was stated that although there had been reports of M. biondii being in cultivation and even for sale in England and the United States, these reports do not "appear to be factual." The article also said that M. biondii had been collected in western Honan, southern Shensi, western Hupeh, and eastern Szechwan.

This article commanded my attention because a former student of mine at Louisiana State University, Yu Chen Ting, was a native of Honan. He arrived in the United States in the late 1940s to obtain his higher education in plant science. While he was in this country the Revolutionary Army in China took over his birthplace and he was unable to return home to Honan. He received his master's degree from Cornell University and then came to Louisiana State University, where he earned his doctorate in cytogenetics under my direction. After graduation he accepted a position at Boston College which he still holds.

Early in 1976 Dr. Ting informed me that he had obtained clearance from the Washington, D.C., Liaison



Magnolia biondii. Photo by Barry E. Madierich.

Office of the Peoples Republic of China to visit his family in China for the first time in 27 years. It should be remembered that the government of the Peoples Republic of China was not officially recognized by the United States at that time, hence there was no Chinese Embassy in Washington, only a Liaison Office. Having just read Phil Savage's article with its mention of M. biondii, I wrote to Dr. Ting and asked if he might be able to find M. biondii in his home province of Honan. In his reply, he said that he would try to obtain live material.

I then wrote to Joe McDaniel. president of the Magnolia Society, to see if the Society might be willing to help defray the expenses of Dr. Ting's trip to China in 1976 with a small grant. Dr. McDaniel thought so, and wrote to members of the Society asking that they send their contributions to me. A total of 15 members responded and I was able to send a check for \$800 to Dr. Ting. The names of these contributors were never publicly acknowledged, so far as I know, and it is a pleasure to take care of this oversight.

The contributions, in the order received, were from: Frank Kolbe, Mrs. Fuller E. Calloway, Jr., Celo



M. biondii. Photo Barry E. Madjer-ich.

Wehr, Isaac Hunter, Paul S. Thompson, John Vermeulen, Tom Dodd, J.C. McDaniel, Carl Amason, Dr. Paul Bowman, Herbert Heckenbleckner, Iufer Nursery, Karl Flinck, Ralph Kreider, and August Kehr. All except Kolbe and Wehr were listed as members of the Magnolia Society in the latest membership roster. Later, an additional amount of \$65 was forwarded by Dr. McDaniel, but the contributors were not named.

Unfortunately, in July 1976, one of the most severe earthquakes in modern history struck China with huge loss of life and property. As a consequence, Dr. Ting had to give up his search for *M. biondii* that year. This information was reported to the Society in the fall-winter issue of the Society's Newsletter (Issue 23) by extracts from letters from Yu Chen Ting to A.E. Kehr on January 25, 1977, and from A.E. Kehr to J.C. McDaniel on January 28, 1977.

Dr. Ting's 1976 trip was not a total failure, however, because he met with Dr. S.K. Wu, professor of genetics and plant breeding at Honan Agricultural College. Dr. Wu had received his graduate training in the United States. Dr. Ting and Dr. Wu discussed a magnolia collection and agreed to collaborate in the project along with Professor P.C. Ting (no close relative of Yu Chen Ting) of the College's Botany Department. In July 1977, Dr. Ting received a visa from the Washington Liaison Office of the Peoples Republic of China for a second trip.

On August 9, 1977, he met with Dr. S.K. Wu and Prof. P.C. Ting in Chengchow, Honan. They had found *M. biondii* in Luan-Chuan, Sun Hsien, about 70 miles south of Lo-Yang in the Fu-Niew Mountains. The fruits were still green, and it was decided to defer collection for another month. On September 3, Dr. S.K. Wu and two colleagues brought two packages, containing about 100 seed of *M. biondii*, to Dr. Ting in Chengchow.

These seeds were then brought by Dr. Ting to the United States, where half were entrusted to Dr. McDaniel's propagation facilities and the other half to the propagators at Arnold Arboretum. Such a distribution of rare seeds to more than one propagator is sometimes carried out to help offset the risk of possible accidental or other unintended losses that can sometimes occur if all propagation is done by one person at one place. Dr. Ting gave details about disposition of the seeds in the fall-winter 1977 issue of the Newsletter (Issue 24).

In the spring-summer 1978 issue of the Newsletter (Issue 25) Dr. McDaniel reported that there were only 21 "sinkers" (i.e., presumed good seeds) in his lot of seed, which he had planted in his greenhouse in March 1978. Jack Alexander, head propagator at the Arnold Arboretum, reported that he was also getting about the same rate of germination of *M. biondii* seed.

In the spring-summer 1979 issue of the Newsletter (Issue 27) there was an account of the distribution plans for plants of *M. biondii* by Arnold Arboretum. Arnold's propagators had raised about 25 seedlings from those brought from China by Dr. Ting. The article read in part: "Arnold Arboretum will distribute a small number of the seedlings to major nurserymen who are expert propagators as a hedge against possible loss through

unforeseen events. The rest will be retained at Arnold for propagation and eventual distribution on a large scale."

I don't know what happened to the seedlings grown at the University of Illinois at Urbana by Dr. McDaniel. Neither do I know how many persons were recipients of plants from Arnold. However, I did receive a plant from Arnold Arboretum in 1980, and in 1982 I grafted a twig high on a plant of *M. kobus* where it grew nicely. Meanwhile, the original plant died in 1983.

(Editor's note: Arnold announced that it had a stock of rooted cuttings and would distribute a cutting, as available, to every bona fide member of the Society who requested a plant, for a small fee to cover packing and transportation costs. To accommodate persons who did not receive one of the first group of cuttings, Arnold said it was producing another batch and from these would take care of the remaining requests).

In the fall of 1985, my grafted twig of *M. biondii* had developed at least 100 flower buds, unusually prolific in this respect for initial flowering. At that time I decided to report on this at the Mobile meeting in March 1986, even though I did not expect flowering to occur until after the meeting.

But on February 21, 1986, while I was pruning some nearby Magnolia plants, I glanced up more or less accidentally at the sizable graft high in the nearby M. kobus tree. What a surprise, and what a sight to see M. biondii in full flower! I will remember this moment with great pleasure for the rest of my life. It was unbelievable to see a magnolia in full flower in midwinter, especially since we had a snowfall accumulation on February 15 that kept us snowbound until February 18. This period of normal winter weather for this mountainous area of western North Carolina was followed by truly warm weather with temperatures in the 70s (Fahrenheit) on February 20.

I'm certain there were a few flowers on *M. biondii* prior to February 15 for I found some brown flowers which had been open before the February 15 snowstorm and were frozen at that time by sub-freezing temperatures.

On February 22 I cut several branches with open flowers and brought them inside because freezing temperatures were forecast for that night. It was from these branches that the photographs were taken by Mr. Barry E. Madjerich. Despite temperatures of 28 F. with wind on February 23, there were still half-opened buds left uninjured, indicating a level of cold tolerance for partially opened buds.

I believe this marks the first flowering of M. biondii in the United States and perhaps anywhere outside of China. However, M. biondii was reported to be in Hamilton, Ontario, Canada, and in Schneverdingen, West Germany, prior to the importation by Dr. Ting. Neither of these two reports has ever been adequately confirmed. I received live material about 1974 from Canada but failed to propagate it. I have since mislaid the correspondence on the matter and the dates and places are from memory only.

The material from West Germany was sent to Dr. J.C. McDaniel by Gunter Horstmann, Rotenburgestrasse 3043
Schneverdingen, West Germany. Dr. McDaniel indicated in 1976 that he would "graft them and see what grows." However, I can find no further record of these six small scions or their subsequent disposition. If Canada and West Germany are verified as prior sources of M. biondii, these must have come from importations other than those entered by Dr. Ting. Nor were they