

# Collecting *M. Biondii* in China

by Y. C. Ting

During the summer of 1976, with my wife and two children, I returned to my native country, the People's Republic of China, to visit relatives and friends. It was my first visit since I left there about 27 years ago. However, before I left the United States, I agreed to undertake an important task for the American Magnolia Society: collection of live material of the species *Magnolia biondii* (Chinese vernacular name, Wan Chun Hwa, "Hope for Spring flower") in the form of seeds, fruits, or cuttings, to bring to the United States.

I undertook this task because the geographical distribution of *M. biondii* is mainly confined to my native province, Honan, and adjacent areas within the scope of my planned visit, and because the Society generously helped underwrite some of my expenses. Unexpectedly, an earthquake occurred on July 28 of last year, and consequently my stay and collecting trip in China were cut short. Even though I brought back a few extracted seeds and fruits of *Magnolia* from northern China, none belonged to *M. biondii*. Therefore my last year's trip, so far as collection was concerned, was a total failure.

On the other hand, in July of last year during my stay in Honan I met with Dr. S. K. Wu several times. He is a returned graduate student from the United States and is now professor of plant genetics and breeding at Honan Agriculture College. We carefully discussed the matter of *Magnolia* collection. He seemed very interested and subsequently agreed to collaborate with me on the collecting plan; he also recommended Professor P. C. Ting, a botanist of the institution, to join us. Thus last year's trip, despite its failure in collection, led to establishment of a friendly and helpful contact with the Chinese scientists. In view of this I was not discouraged by the disappointment and looked forward to the opportunity to continue the collection effort.

As expected, in mid-July of this year I was informed by the Washington Liaison Office of the People's Republic of China that my application for a visa to visit China in 1977 had been granted. This meant I would have another

chance to visit my relatives in China and to make the *Magnolia* collection. By the first of August I arrived in Hong Kong. On August 9 I met with Dr. S. K. Wu and Professor P. C. Ting in Chengchow, Honan. To my surprise they told me that *M. biondii* had been found in Luan-Chuan, Sung Hsien, about 70 miles to the south of Lo-Yang. It is within the range of the Fu-Nieu Mountains. In addition they assured me that the fruits were still green and it would be better to collect them in September just a few days before I was due to return to the United States. I stayed in Honan for a week and spent most of my time there with relatives and visiting my friends, schools, communes, and factories.

On August 17 I arrived in Peking and during my stay there botanized around. I observed that regardless of the emphasis on food production, flowering plants or ornamentals are not abandoned in China. In the rural areas and in the city proper flowers are rampant. I saw *Magnolias* on several occasions, but none had fruits. They had small obovate leaves and looked like *Yu-lan* (*M. denudata*). I asked one of the botanists why the *Magnolias* produced no fruits this year. He said that it was probably due to cold damage.

On September 3, I returned to Chengchow, Honan, by train. We drove up a broad avenue bordered by London plane trees. Within a few minutes I checked into a modern hotel of six stories. After nine o'clock in the morning the hotel gardener guided me on a collection tour to the suburban areas of the city. On the river banks and in the narrow paths of the rice paddies there are apple, persimmon, and jujube (*Ziziphus*) trees. We collected some fruits of apples, persimmons, and jujube. One kind of persimmon with fruits as small as a cherry may be the wild type of the cultivated species. In the afternoon two boys about 18 to 20 years old from the service room of the hotel agreed to go out to the countryside to make some collections for me. In the evening they returned with a full basket of apples, persimmons, pears, peaches, and jujubes. They refused to charge for their

time, and said, "We are happy to serve you. We do not want any money."

After the boys left Dr. S. K. Wu and his two colleagues came and brought two packages of *M. biondii* fruits and two small bags of rhododendron seeds. The specimens were only one day old and some of the leaves were still green and turgid. Several of the Magnolia fruits had opened and the fresh, red seeds were exposed, which meant that the seeds were fully mature. The specimens came from Luan-Chuan, Sung Hsien, within the range of the Fu-Nieu Mountains as mentioned in the foregoing. The collectors learned of the distribution range of this species partly from my letters and partly from the Chinese botanical literature. The topography, altitude where the species grows, and similar collection information are not now available. If necessary I will be glad to write and ask them to provide detailed descriptions.

On September 5, I arrived in Canton, Kwangtung. In the afternoon Mr. Wei-cheng Chen, a lecturer in plant breeding at Honan Agriculture College, brought a bag of Magnolia-like fruits resembling grapes in clusters to the hotel. Mr. Chen said this species has showy yellow redolent flowers, is grown for ornamental purposes, and can also be used in medicine. The carpels contained four seeds instead of two and the species is probably *Michelia fuscata* (figo).

On September 6, I went to the Canton University (also named Sun Yat-sun University). Professor H. T. Chang, a systematic and ecological botanist, took me around the campus. We walked through bamboo groves and paths bordered with flowering shrubs. The campus is actually a garden with many ornamentals, aquatic flowers, and slim, stately royal palms.

Professor Chang pointed to a Magnolia and identified it as *M. liliflora* (quinquepetal), which was brought from the North about 20 years ago. A graft union stimulated my interest and I asked what was used as an understock. He said it was possibly *M. grandiflora*. *M. liliflora* does not grow well in the Canton area and the only way of keeping it here is by grafting it onto a stock adapted to tropical climate. In this environment it flowers profusely but never bears fruits. Professor Chang prepared about 10 six-inch cuttings from young branches of this plant for me to take back to the United States for rooting. Returning to the States, I found that

the cuttings as well as all the other fruits and seeds, were in good condition.

Following Professor J. C. McDaniel's advice by telephone, I have sent half of the fruits and of the approximately 100 seeds to him and the rest, plus the cuttings, to the Arnold Arboretum for propagation. These specimens are the property of the American Magnolia Society, which should dispose of them as it sees fit.

I would like to thank Professors S. K. Wu, P. C. Ting, and their colleagues at the Honan Agriculture College for their keen interest and help in this project. They told me several times, "We like to cooperate with American scientists. From now on we hope to have more contacts and exchanges in academic matters." The expert confirmation of *M. biondii* by Dr. S. A. Spongberg of Arnold Arboretum is sincerely appreciated. Once again I wish to express my gratitude to Professors A. E. Kehr, J. C. McDaniel, and the other members of our Society.

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