



*This submission illustrates how other countries are approaching public understanding of plant science. The Xishuangbanna Tropical Botanical Garden (XTBG), like some of our major botanical gardens, has a cadre of dozens of scientists conducting research on modern plant molecular biology, biochemistry, ecology, and systematics. Through tourism and multimedia outreach, XTBG brings rainforest plant science to the public. The effectiveness of the outreach is being assessed in partnership with the program in science education in the Information Technology in Science (ITS) Center for Teaching and Learning (<http://its.tamu.edu>) at Texas A&M University.*

**-L. R. Griffing**  
Chair, ASPB Education Committee

## Public Science Education at the Xishuangbanna Tropical Botanical Garden

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Located on the gourd-shaped peninsula surrounded by Luosuo River, a branch river of the Mekong River in Xishuangbanna Dai Autonomous Prefecture of Yunnan Province, the Xishuangbanna Tropical Botanical Garden (XTBG) is recognized as China's largest botanical garden with the most abundant diversity of plants. Founded by China's famous botanist Professor Cai Xitao, the garden has grown into an institute integrating scientific research, biological conservation, public science education, ecological tourism, and the development of science and technology (<http://www.xtbg.ac.cn/english/Research.htm>).

One major task of public education at XTBG is to enhance public concern about biodiversity conservation. XTBG has collected more than 10,000 species of tropical plants from China and other countries. Collections were arranged based on several principles, such as ecological features, economic uses, taxonomic groups, and the like. Most collection-displays have incorporated landscape design as well as educa-

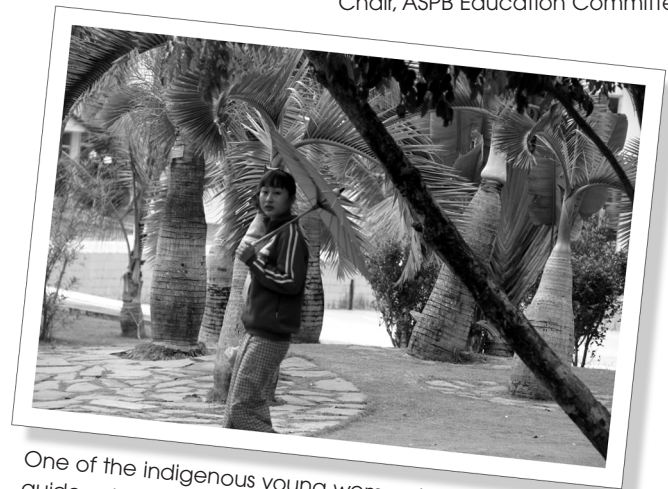
tional components so as to make the collections attractive to visitors. Regardless of XTBG's relatively inaccessible location, the garden receives about 400,000 visitors each year.

The area in which the garden is located has very rich cultural diversity. Xishuangbanna has 13 minority groups, including Dai, Han, Hani, Bulang, Jinuo, and Yao, with the Dai people accounting for one-third of the population. Most of the indigenous people live on fishing, hunting, and picking in the rainforest and have therefore accumulated a rich body of knowledge on plant resource use and on how to adapt to the local environment. One feature of XTBG's innovation in public science education is to explain and demonstrate the ethnobotanical knowledge, so as to stimulate visitors who live in this changed modern society to re-think their behavior and

attitude toward nature. A museum that deals primarily with tropical rainforest species and ethnobotany has therefore been established inside the garden.

XTBG covers 900 hectares, with 300 hectares open to the public for ecological tours and science education. To better guide tourists and to more effectively combine the spread of knowledge on biodiversity conservation with understanding of local cultures, XTBG established a team of 80 young tourist guides recruited from local minority groups. This well-trained team has played an important part in the public science education of XTBG. The tourist guides earn a living while sharing their native understanding of local cultures, allowing them to connect their plant-relevant knowledge with the public and their native families.

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One of the indigenous young women trained as tour guides at the XTBG.

A view of the forest and mountains from the XTBG.

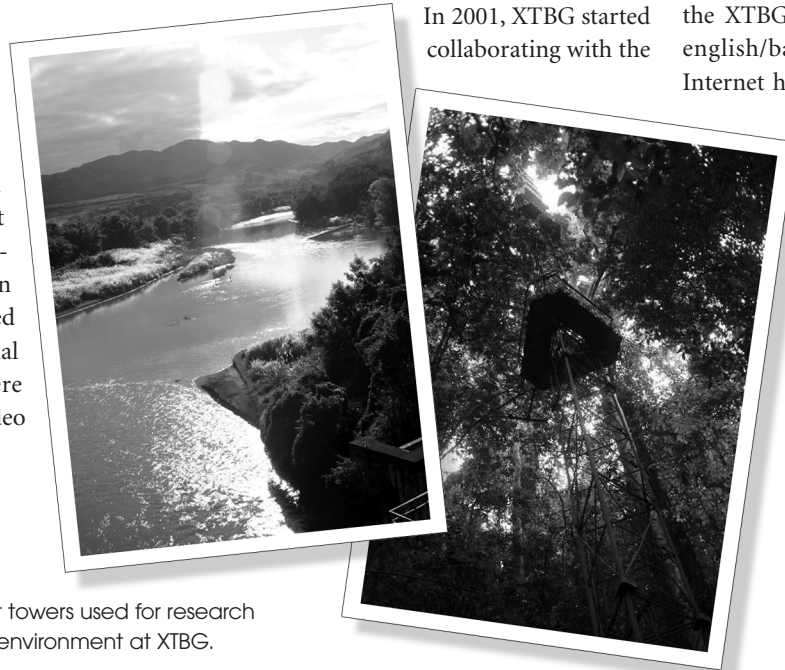
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XTBG provides outreach for our scientists at several different levels in order to get more people to understand the importance of biodiversity and ecology conservation, as well as to recognize and respect the excellence of local forest cultures. Public science education is not only pursued through our museum and tours, but also with modern media technologies. A dozen television programs have been produced and shown on both national and provincial channels. There are also two well-received video

CDs, the presentation “Approaching the Rainforest,” and a book titled *A Ramble in the Rainforest: Interesting Stories About Our National Forest Cultures*. In 2001, XTBG started collaborating with the

Virtual Science Museums of China (VSMC). XTBG initiated China’s first “On-line Virtual Botanical Garden” on VSMC and set up a set of web pages for public science education on the XTBG website ([http://www.kepu.net.cn/english/banna/index\\_fh.html](http://www.kepu.net.cn/english/banna/index_fh.html)). Using the Internet has offered more people easy access to rainforest plants, botany, and ecology.

Apart from knowledge of science, the public also has a desire to understand the process of research. The scientists at XTBG each give lectures to the public for at least one day each year. Through the face-to-face interaction, the XTBG scientists use their scientific vision to help inspire the public—especially young students, who are the plant scientists of tomorrow. 🌿



**Right:** A view of the Luosuo River that encircles the XTBG.

**Far right:** One of the rainforest towers used for research and to monitor the rainforest environment at XTBG.