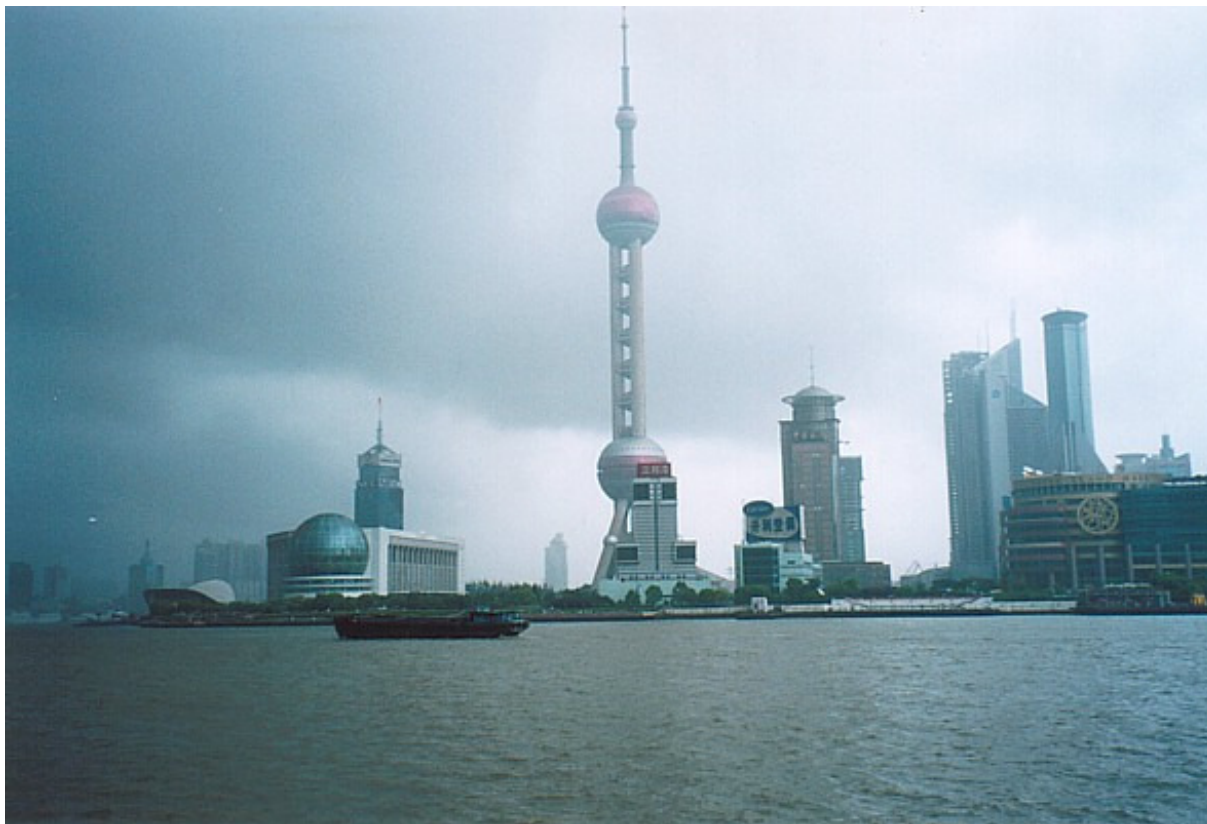


TRAVEL NOTES FROM CHINA

by James S. Lawrence of TGG ~ toadgully.com.au

In July 2004 my wife Noriko and I visited China to see my sister living in Shanghai. I also spent a few days in Henan Province with Prof Sun Zhiqiang of the Paulownia Research and Development Centre of China.



The space-age face of new Shanghai

Shanghai is a vibrant boom town. Masses of new apartment buildings are being constructed in neat rows, simultaneously, to accommodate the many thousands of people streaming in from the countryside. It almost goes without saying that not all in Shanghai are sharing the prosperity, but this city is the real powerhouse of China's increasingly market driven economy. Henan Province, contrastingly, is quite poor. It is the second most populous province of China, with many of it's close to 90 million residents scratching a living off the land, although it is also becoming a manufacturing hub with offshore companies able to tap into a cheap labour source.



The first thing you notice about the way Paulownia are grown in Henan is the intensive management they receive. Each farming family in this region has only about 1/5 of a hectare (about 1/2 an acre) to work. So while it may appear in some areas that there is a Paulownia plantation of reasonable size, the fact is that it is actually divided up into many small portions of land, each of which has a family to look after it. You don't see much wasteland. Under the trees crops such as peanuts and vegetables are grown, and you see people working the land, collecting branches to feed to their goats tied up in the village, or wood for the fire. Needless to say, they prune the trees and ultimately fertilise and maintain them almost as a by-product of their other activities.

The Paulownia Research and Development Centre has created many strong clones of Paulownia over the years and conducted research into growing techniques such as pruning. However it seems not a lot has really changed in terms of the most common methods used to grow Paulownia in China. The first step is they plant root cuttings at close spacing and grow them for one season. The result is a field of 'poles' usually ranging between 3 to 5 metres tall. These are then dug and sold to the farmers at the local market who then plant them at their final spacing in time for the start of the next season. There are a couple of problems with this method. Firstly, root cuttings

A surprisingly healthy Paulownia in a Shanghai backstreet.

are a low-tech propagation method prone to failure and disease. Secondly, poles are problematic as when they are transplanted the wind often pushes them over before they can properly establish roots, so you see many plantations growing on an angle, and also they suffer from transplant shock which means they can not have branches removed during the establishment period which results in trees with poor form and too many low branches on the log.

I have great respect for the research efforts of the Chinese scientists so I explained to Prof Sun our recommended method of planting Headstarters™ at their final spacing and asked for his honest critical opinion. He actually said he agrees that it is a better method. So why do the Chinese persist with the pole method? I was told that basically, they lack the resources needed to produce more high-tech nursery stock (despite the fact that in research they have experience with the most modern techniques, they don't have the funding to extend it to a commercial or broad scale) but I also got the feeling that it's largely a case of 'that's just how we do it' and to educate and change the minds of the local growers is beyond the scope of the researchers. I believe there is much we can learn from the Chinese - Paulownia is, after all, a tree they have grown for thousands of years - but I also think it's fair to say our methodology has come a long way and from what I saw, we in Australia can produce trees as good as, and in some cases better than the Chinese plantations.



PRDC experimental plantation: the person in the background is cultivating peanuts

Many thanks to Prof. Sun for taking me on a guided tour to see Paulownia plantations and a music instrument factory that uses Paulownia timber. Thanks also to Prof. Wang and his colleagues for their hospitality and kindly taking time out to meet with me and discuss Paulownia.



**Prof. Sun (in blue jeans)
with colleagues at PRDC
Experimental Plantation**

The 70 hectare Paulownia Research and Development Centre's Experimental Paulownia plantation in Henan province was planted in 1997 and contains various clones grown under different management regimes.



Paulownia grow best with excellent drainage and a low water table. The trees in the PRDC Experimental Plantation have favourable conditions, growing on the fertile ancient flood plain of the HuangHe (Yellow) River.



An unpruned section of the PRDC Experimental plantation.



A moderately pruned section of the PRDC Experimental plantation.



This PRDC clone preservation plantation has received no management at all, hence the poor growth.

Visit to Lankao - Paulownia country, including instrument factory

The people of Lankao, Henan province, love Paulownia. You see them planted everywhere and much of the area's activities are related to Paulownia. At the time of my visit a severe storm had passed through a couple of days earlier and there was damage to houses and many trees had lost limbs and few large ones had fallen. People were busy cleaning up, feeding leaved branches to goats and sorting firewood and timber.



A typical scene from Lankao countryside. Widely spaced and partly harvested Paulownia trees intercropped with maize.



A Lankao road lined with Paulownia trees.



James Lawrence with the biggest Paulownia in Lankao, planted in the 1960's



Paulownia logs in roadside storage with maize intercropping in the background.

As part of my tour Prof. Sun kindly took me to visit the skilled artisans at Kaifeng Central Chinese Musical Instruments Co., Ltd, at Lankao. Paulownia timber has excellent acoustic properties and is the only timber used to make the soundboards of various Chinese instruments.



One of the staff at Kaifeng tuning a new instrument.



The people at Kaifeng were kind enough to have a professional musician play for me - but this is not him! This is Prof. Sun, who plays classical guitar, having fun attempting to play this traditional instrument. It sounded ok.

A Paulownia behind one of the ancient buildings of the Shaolin Monastery.

