Swietenia macrophylla – Honduran Mahogany

Swietenia macrophylla, commonly known as Honduran or Big leaf Mahogany is the source of the well-known and highly sought after Mahogany timber. This is a tropical tree to some 45 to 60m in height with a heavily buttressed base and about 2m in diameter. It is found naturally in high rainfall areas from Southern Mexico to Brazil and Peru in central South America, primarily in near coastal locations. There are several species of mahogany and they can cross-pollinate and hybridise readily. The smaller leaved West Indian mahogany has been used as a street tree in tropical Florida. Although they are botanically different and grow in slightly distinct but sometimes overlapping locations naturally, all produce the valuable timber known to us as Mahogany.

Swietenia macrophylla is an evergreen tree in areas of very high rainfall, but can be deciduous in lower rainfall locations. It has an open crown with thick rising branches and dense foliage with bark that is grey and smooth when young, turning dark brown, ridged and flaky when old. Leaves are from 35 to 50cm long, alternate, glabrous and paripinnate or divided with 4 to 6 pairs of leaflets, each leaflet from 9 to 18cm in length.

Flowers are somewhat insignificant, small and white in large branching panicles 10 to 20cm long, these are then followed by woody globe-like fruit up to 15cm in length. The fruit splits when ripe like a 5 sided parasol releasing large reddish-brown winged seed.

Although quite a fast-growing species, the Honduran Mahogany can take up to 100 and more years to mature. Mahogany has long been harvested for its valuable lumber and is known for its beautiful color, grain and durability, it is often used for high end furniture and is the most important export timber of the tropical Americas. Being both valuable and scarce, Mahogany harvesting has encouraged vigorous debate between environmental groups, loggers and government agencies and this has promoted its cultivation as a plantation tree in tropical locations.

Propagation

Propagation from seed is straightforward without the need of pre-treatment. Seed cold stored at 3°C is orthodox and can be stored for up to two years with only slight reduction in viability. In the Forest Tree Seeds Laboratory in the China Experimental Field of the National Institute of Forest, Agricultural, and Cattle Research, located in Campeche, Mexico, seeds are placed in germinators with continuous light and a constant temperature of 28°C. Under these optimum conditions mahogany seeds begin to germinate 15 and 18 days after sowing.