

Hughie Jones - Oct. 2023

**Cathay silver fir/ Yin Shan**  
***Cathaya argyrophylla***  
***pine family***



*Cathay silver fir at VanDusen on October 2023. The Chinese stamp honours this tree.*

The discovery of Cathay silver fir (*Cathaya argyrophylla*) growing in southern China surprised the scientific world. It was thought to be extinct. But just like the dawn redwood (*Metasequoia glyptostroboides*), another thought-to-be extinct tree, Cathay silver fir had not disappeared. These two trees were both known by the local populations living near them. Often called a 'living fossil', a more accurate but less dramatic name is 'relict conifer'. This refers to a conifer population that had a much wider distribution in the past. The dawn redwood was brought into cultivation in 1948 and soon became the poster plant for relict conifers. Because mass production was possible, it could be widely planted in gardens and cities across the temperate regions of the world.

Much less well known is Cathay silver fir, another relict conifer. It used to be widespread during the Tertiary with fossil specimens from Canada, Europe and Russia. The Cathay silver fir was first discovered in 1938 on Golden Buddha Mountain in south-eastern Szechuan, China. After the Second World War this discovery was forgotten. Then the plant was rediscovered during a botanical expedition in 1955 in the Huaping region.

Rumours of a tree that combined characteristics of pines and firs in these mountains reached the expedition. Finally on May 16, 1955, in the misty forests on the southern slope of Mount Hongya a mature tree was found. Herbarium specimens were taken, and the following year a few more collections were made.



Picture of mature Cathay silver firs on their misty ridge in the Jin Fu Shan by Tony Kirkham.

The Chinese government thought the discovery of this unusual tree so important that in 1961 they founded a nature reserve in Huaping and prohibited exportation of this tree. They knew the dawn redwood seeds collected in the same region in 1948 had become a common tree across the world, benefitting other countries but not China. They kept the Cathay silver fir location a carefully guarded secret. Further populations were found in four provinces and it is now known at a dozen localities in the wild. The plants usually grow on inaccessible slopes and are well protected.

But regeneration in the wild is poor, and there was a concern that the species could be replaced by more rapidly growing ones. The Chinese authorities started to realize that the best way to protect this endangered species in the wild is to make it available to horticulture. Material was brought to the Shenzhen Botanical Garden for propagation, and in the mid 1990s it was offered in their *Index Seminum* (Seed Index). And VanDusen benefitted. We now have this rare conifer.



Our one VanDusen tree was planted in 2010. For years there was no sign of growth or of the yellow leaves turning green. It seemed to be stuck in some 'tree limbo'. Then after a dry summer followed by heavy fall rains in 2023, suddenly the leaves turned green and the tree had

a growth spurt. It was a long wait. Memory of an ancient mountain rain just might have gotten Cathay silver fir growing. And a bit of a push from the Tertiary ancestors.

Sources:

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