Hughie Jones - December 2017

Amur Cork Tree
Phellodendron amurense - Rutaceae

There is an area in the Russian Far East that has an unusual combination of subtropical and subarctic plants and animals. The Amur cork tree grows there and the Siberian Amur tiger travels through. Both survive the heat of summer and cold of winter and neither recognizes the countries that border it. These borders (China, North Korea, Mongolia, Japan) have been expanding and shrinking over time, yet life goes on in this remote area of joint borders. This area is called Primorsky Krai.

Throughout the ages, the Amur cork has been key as a traditional medicine tree in this area. The tree's bark has been used for the treatment of meningitis, pneumonia, and tuberculosis. In addition, the bark of the tree has compounds that may protect cartilage against arthritis, act as a chemopreventive agent for those with lung cancer, and prevent growth of prostate tumours. The oil of the fruits, which can also serve as an insecticide, is used in medicine to treat pancreatitis and reduce cholesterol and blood sugar levels.

The tree was brought to the United States around 1856 and has mostly been planted in parks and urban settings. But it is considered an invasive species in certain parts of northeastern America due to its ability to shade out other plants after dominating an area.

It is not surprising that the Amur cork outgrows other plants. This tree is resilient - it can withstand a number of climates and specimens have even been found in Antarctica.The Amur cork grows well in full sun but is also quite tolerant of shady areas, especially in its early years. And although the Amur cork grows well in moist soil, it is tolerant of dry soil. Also, it grows in a wide soil pH range (5.0 - 8.2). It seems to be programmed to grow almost anywhere.

The Amur cork tree is thriving in its native habitat unlike the Siberian Amur tiger. The most immediate threat to the survival of these tigers is poaching. There is a great demand on the black market to supply tiger bone used in traditional medicines.

The Amur cork tree, native to Russia, northern China, Korea and Japan, gets its name from the bark's thick appearance and corky/spongey texture. The inner bark is neon yellow just below the surface. Amur cork tree can grow up to 15 meters tall. It is a deciduous tree with pale gray-brown bark with shiny, dark green, pinnate leaves composed of 9 to 13 smaller leaves. Its small greenish-yellow flowers grow in clusters with the male and female flowers on separate trees. The 1-2 cm round fruit is black with a strong scent of turpentine.

VanDusen has only one Amur cork tree, planted in 1973 in bed 127D in the Sino-Himalayan Garden. Its pinnate leaves contrast beautifully with the large heart shaped leaves of the Big leaf poplar (*Populus wilsonii*) planted across from it. This quiet area seems far away from the rest of VanDusen. Some day I expect to see the tiger walking by.

Amur cork tree bark in VanDusen

Photo Credit: Jean-Pol Grandmont

The Asia-Pacific Journal - Northeast Eurasia as Historical Centre: Exploration of a Joint Frontier by Nianshen Song: http://apjjf.org/-Song/4392;
https://www.na.fs.fed.us/fhp/invasive_plants/weeds/amur-corktree.pdf
https://naturewalk.yale.edu/trees/rutaceae/phellodendron-amurense/amur-cork-75
https://www.worldwildlife.org/species/amur-tiger
The Tiger: A True Story of Vengeance and Survival - by John Vaillant