

## Tree of the Month, November 2015: Windmill palm (*Trachycarpus fortunei*)

Windmill palm is one of the hardiest palms on the planet, thriving in climates where the winter temperatures stay above -13°C; this has made it a popular addition to many temperate gardens, evoking the tropics we wistfully dream of on dreary, rainy winter days.

Windmill palm is dioecious, with separate male and female palms. Yellow panicles of flowers bloom in the spring and females produce blue-black kidney-shaped fruits in the fall. The meterwide, fan-shaped leaves grow from the top of the trunk, which can be 6-12 meters tall and is made up of the overlapping bases and sheaths of fallen leaves from previous years of growth. The sheaths disintegrate into a fine, strong fibre that covers the trunk and can be woven into rope or twine; this is the source of another common name for this species, "the hemp palm". Although originating in China, windmill palm has also been cultivated in Japan for thousands of years.

Trachycarpus fortunei is named for Robert Fortune, the Scottish plant hunter who introduced the species to western horticulture. Fortune encountered the windmill palm in 1848 in Zhejiang Province in Eastern China. He had been hired by the East India Company to smuggle tea plants and information about tea production out of China and into the company's territory in India, thereby ending the Chinese monopoly on tea production. Fortune, who had previously spent several years in China hunting plants for the Horticultural Society of London and was familiar with the language and culture, disguised himself as a Chinese bureaucrat and ventured into parts of China where foreigners were generally forbidden to go. Although the East India Company paid him a meagre salary, Fortune was allowed to collect plants and sell them to British nurseries. Likely seeing the potential of a hardy palm that could thrive in Victorian gardens, he used terrariums to ship specimens of windmill palm to Kew Gardens in England. From there the palm has spread to gardens all over the world, from Europe to North America, Africa, Australia and New Zealand.

Trachycarpus fortunei has become invasive in some areas, as birds eat the fruit and spread the seeds beyond garden walls. It has recently established a fertile population in the forests of Southern Switzerland, making it one of the northernmost palm populations in the world. Climate change will likely open up new habitats for the windmill palm, allowing the species to expand further northward as winters become milder.

At VanDusen there are windmill palms in the Sino-Himalayan and Japanese collections.