

Cambridge University Botanic Garden

Taiwania cryptomerioides Hayata Taxodiaceae :(Taiwania) :1 accession (1 lineage: 20150193): 20150193 ... SD wild collected in Viet Nam : Viet Nam: Yen Bai Province: Mu Cang Chai District: Nam Co : Municipality: Near Phinh Ngai village. Secondary evergreen : broad-leaved woodland and scrub on mountain soil. 1742 m. : 21°54'06.1"N, 104°17'47.4"E. Tree 45 m tall (collected from : tree no 732). Nguyen Duc Canh & Nguyen Quang Hieu s.n. 24 : Dec 2014.: CPC Vietnam



Range:

- Native to eastern Asia, it grows in the mountains of central Taiwan, mainland China (Guizhou, Hubei, Sichuan, Yunnan); Myanmar and Vietnam (1). IUCN Vulnerable Status (2)

(1) <http://globaltrees.org/threatened-trees/trees/chinese-coffin-tree/>

Tree description:

- A giant of the tree world, a conifer that can grow to 80m high and 3m across
- Needle-like leaves, but after it reaches an age of over 100 years, these leaves undergo a gradual transition, eventually turning into scales

Seed type and characteristics:

- The cones are small (less than 3cm long) and have around 20 thin, fragile coverings, each containing two seeds
- Seed cones solitary at the tips of branchlets, the scale leaves transitioning into cone scales, light green and 4-5 mm long when young, developing and maturing in one season to more or less cylindrical light brown cones, which mature in early winter (Vietnam: Luu & Thomas 2004) (3)
- Seed is by far the best option for propagating *Taiwania*, giving vigorous, straight-growing trees with robust roots. Luu & Thomas (2004) give some useful details. The seed is very light in weight and can be dried and stored at 4°C for several years without losing viability, which in Vietnamese samples has been about 40%, though Wang *et al.* (2009) have found that the germination rate of *Taiwania* seed in forest nurseries in China is about 10% of seeds sown. Sown in warmth in spring germination occurs in three to four weeks, and growth is rapid. Young seedlings should be protected from hot sun, and if grown in cold climates given protection from frost for the first few years (3)
- Best grown in moist, rich, acidic, well-drained soils in full sun. Tolerates light shade. Soils should not be allowed to dry out. Site in a location protected from winter winds (4)

Sapling growing requirements:

- Sown in warm greenhouse gave excellent germination and a batch of seedlings was grown-on without trouble in the same conditions (3)
- Three planted in grounds of Colesbourne Park where lost leaders to early, late or midwinter frost (3)
- Performs very much better in regions with hot (or at least warmer) summers, but with good rainfall in winter at least (3)
- Very tolerant of different soil conditions (including limestone), but do need good drainage (T. Christian, M. Gardner, pers. comms. 2011) (3)

CCI partners:

- Global Trees Campaign <http://globaltrees.org/threatened-trees/trees/chinese-coffin-tree/>

Other useful links:

- Royal Botanic Garden Edinburgh <http://www.rbge.org.uk/science/genetics-and-conservation/international-conifer-conservation-programme/conifers-of-cambodia-lao-pdr-and-vietnam>
- International Conifer Conservation Programme <http://www.rbge.org.uk/science/genetics-and-conservation/international-conifer-conservation-programme>
- http://conifersaroundtheworld.com/blog/taiwania_cryptomerioides

(2) <http://www.iucnredlist.org/details/full/31255/0>

(3) http://www.dendrology.org/site/images/web4events/pdf/IDS_10_Tree_of_the_Year.pdf

(4) <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d285>