

2. **TAIWANIA** Hayata, J. Linn. Soc., Bot. 37: 330. 1906.

台湾杉属 tai wan shan shu

Trees evergreen, monoecious; main branches horizontally spreading; branchlets pendulous, slender, long; winter buds small. Leaves spirally arranged, dimorphic: those of old branchlets densely arranged, subulate, scalelike, upwardly curved, triangular or quadrangular in cross section, with stomatal bands present on both surfaces, base short, decurrent, apex acute or obtuse, apiculate; those of young trees and new branchlets “S”-shaped-ovate or subulate, \pm quadrangular in cross section, laterally compressed, apex straight to incurved, sharply pointed. Pollen cones borne in terminal clusters; microsporophylls many, spirally arranged; microsporangia 2–4, ovate. Seed cones terminal, solitary, erect, small; bracts rudimentary; ovules 2 per bract axil; cone scales of mature cones cuneately narrowed into claw and \pm flat proximally, broadening distally into an exposed, rounded-spatulate, transversely convex portion, leathery, margin subentire, hyaline, densely and microscopically puberulent with extremely short, 2- or 3-celled hairs (margin thus appearing finely lacerate at low magnification), apical portion small, \pm incurved, obtusely truncate, concavely notched, with small, protruding mucro. Seeds flat, with narrow, lateral wings, base and apex both notched. Cotyledons 2.

One species: China, N Myanmar.

1. **Taiwania cryptomerioides** Hayata, J. Linn. Soc., Bot. 37: 330. 1906.

台湾杉 tai wan shan

Taiwania cryptomerioides var. *flousiana* (Gaussen)

Silba; *T. flousiana* Gaussen; *T. yunnanensis* Koidzumi.

Trees to 75 m tall; trunk to 3.5 m d.b.h.; bark brownish gray, cracking into long, irregular flakes; crown conical or broadly rounded. Leaves of old branchlets 1.5–8(–9) mm \times 0.8–2.5 mm, stomata in 8–13 rows on adaxial, long side and in 6–9 rows on 2 abaxial flanks. Leaves of young trees and new branchlets borne at 40–70° to axis, bluish green, 1–2.5 cm \times 1.2–2 mm, stomata in 3–6 rows on each surface. Pollen cones in clusters of 2–7; microsporophylls 10–36, each with 2 or 3 pollen sacs. Seed cones shortly cylindrical to ellipsoid or narrowly so, 1–2.2 cm \times 6–11 mm; cone scales 15–39, median scales broadly obdeltoid, 6–7 \times 7–8 mm, claw ca. 2/5 \times total length of scale. Seeds oblong-ovate, narrowly elliptic, or narrowly elliptic-obovate, 4–7 \times 2.5–4.5 mm (including wings 1–1.5 mm wide projecting 1–1.5 mm beyond apex of seed). Pollination Apr–May, seed maturity Oct–Nov. $2n = 22^*$, 33.

Coniferous, broad-leaved, or mixed evergreen valley forests on acid, red, or brown soils in warm or warm temperate regions with high summer and autumn rainfall but drier winters, usually scattered and associated with *Chamaecyparis formosensis*, *C. obtusa* var.

formosana, *Cunninghamia lanceolata*, *Pinus wallichiana*, or *Tsuga dumosa*, but sometimes forming pure stands; 500–2800 m. SE Guizhou (Leigong Shan), SW Hubei (Lichuan Xian, Maoba), SE Sichuan (Youyang Xian), Taiwan (Zhongyang Shan), SE Xizang (Zayü Xian), W Yunnan [N Myanmar].

A rare species in China, decreasing as a result of cutting for timber. It may attain an age of over 2000 years and, within its native range, can be used for afforestation. The wood is easily worked, and is used in building, making furniture and coffins (“Chinese coffin tree”), bridge and boat construction, and paper manufacture.

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