2. PSEUDOTAXUS W. C. Cheng, Res. Notes Forest. Inst. Nat. Centr. Univ. Nanking, Dendrol. Ser., 1: 1, 1947.

白豆杉属 bai dou shan shu

Nothotaxus Florin.

Shrubs evergreen, dioecious; branches usually whorled; branchlets subopposite or subwhorled, base with persistent bud scales; winter bud scales overlapping, ridged adaxially. Leaves spirally arranged, distichous; petiole very short or leaves sessile; blade linear, basally twisted, straight or slightly falcate, midvein raised both adaxially and abaxially, abaxial stomatal bands 2, white, resin canal absent, base obtuse, decurrent, apex mucronate. Reproductive structures axillary, solitary, sessile. Pollen cones globose, with 4 pairs of decussate basal bracts; microsporophylls 6-12, shieldlike, decussate; pollen sacs 4-6, radially arranged. Seed-bearing structures with 7 pairs of decussate basal bracts in 4 series each of 3 or 4 bracts. Ovule erect, sessile. Aril white when ripe, cupular, succulent. Seed ripening in 1st year, nutlike, ovoid, slightly flattened, enclosed within aril except for distal, exposed part, apex with a small mucro. Cotyledons 2. Germination epigeal. 2n = 24*.

• One species: China.

1. Pseudotaxus chienii (W. C. Cheng) W. C. Cheng, Res. Notes Forest. Inst. Nat. Centr. Univ. Nanking, Dendrol. Ser., 1: 1, 1947.

自豆杉 bai dou shan

Taxus chienii W. C. Cheng, Contr. Biol. Lab. Chin. Assoc. Advancem. Sci., Sect. Bot., 9(3): 240. 1934; Nothotaxus chienii (W. C. Cheng) Florin; ?Pseudotaxus liana Silba.

Shrubs to 4 m tall; bark grayish brown, peeling off in strips. Leafy branchlets ovate or elliptic in outline, 2.2- $5 \times 1.2 - 3.2$ cm, axis green or yellow-green in 1st year, dark green in 2nd year, terete, sometimes with nodular projections. Leaves borne at 40–45° to axis when young but at 50–90° on mature trees; petiole absent or less than 1 mm; blade bright green adaxially in 1st year, subsequently abruptly turning very dark green, linear, straight or slightly falcate, 1–2.6 cm × 2–4.5 mm, not leathery, midvein ca. 0.4 mm wide, stomatal bands ca. 0.5-1.1 mm wide, broader than or about as wide as marginal bands, of ca. 9 rows on young plants but of 13–19 rows on adult plants, marginal bands 0.2–0.3 mm wide, base obtuse and ± asymmetric, margin revolute, apex obtuse, mucronate, mucro pale whitish green, hooked, 0.4–0.7 mm. Aril campanulate, 5–7 mm. Seed ovoid, $5-8 \times 4-5$ mm, slightly flattened distally. Pollination late Mar-May, seed maturity Oct.

• Evergreen and deciduous broad-leaved forests. N Guangdong, N Guangxi, NW and S Hunan, SW Jiangxi, S Zhejiang; also cultivated in Zhejiang (Hangzhou Shi, etc.) as an ornamental.

A rare species. The wood is used as a carving material and for making utensils.

Pseudotaxus liana was described from Guangxi and at the same time recorded from Hunan and Jiangxi. In the protologue (Silba, Phytologia 81: 327. 1996, as "liiana"), it was said to differ from P. chienii in its broadly ovate or ovate-oblong leaves, 1.3–2.8 cm × 3.5–5.5 mm, which are thick and leathery; it was also compared with two species in the Podocarpaceae: Podocarpus brassii Pilger, from Indonesia (Irian Jaya) and Papua New Guinea, and Prumnopitys harmsiana (Pilger) de Laubenfels, from South America. Further study is needed to ascertain whether it is distinct from Pseudotaxus chienii

and, if so, to settle its generic, and possibly also familial, placement. If it is distinct, then some of the records of *P. chienii* may in fact belong to the new species.

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