## 2. AGATHIS Salisbury, Trans. Linn. Soc. London 8: 311. 1807, nom. cons.

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Trees monoecious; branches usually whorled on young trees, becoming irregularly arranged on mature ones, with orbicular scars of deciduous branchlets; winter buds globose, small. Leaves spirally arranged on main branches, opposite or alternate on lateral branchlets, leaving cushion-shaped scars on falling, pinkish or reddish when young, finally dark green, greatly variable in size and shape even on same branchlet, leathery, with numerous, indistinct, parallel, thin veins; petiole flattened, short. Pollen cones axillary, solitary, upright, cylindric, hard; microsporophylls densely arranged. Seed cones globose or broadly ovoid; bracts densely arranged, flabellate, apex thickened. Seeds detached from bracts, with a lateral wing on 1 side and a small protrusion (occasionally developed into a wing) on other. Cotyledons 2.

Twenty-one species: Indonesia, Malaysia, Papua New Guinea, Philippines; Australia, New Zealand, SW Pacific Islands; one species (introduced) in China.

1. Agathis dammara (Lambert) Richard & A. Richard in A. Richard, Comm. Bot. Conif. Cycad. 83. 1826.

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Pinus dammara Lambert, Descr. Pinus 1:61. 1803; Agathis alba Jeffrey; A. loranthifolia Salisbury; Dammara alba Rumphius ex Blume.

Trees to 40 m tall; trunk to 45 cm d.b.h.; bark reddish gray, thick; crown conical; branches slightly drooping; winter buds terminal on branchlets, with a few densely arranged scales. Leaves with petiole 3–8 mm; blade dark green, oblong-lanceolate or elliptic, ± recurved, 5–12 × 1.2–5 cm, usually smaller on cone-bearing branchlets, leathery, margin thickened, apex usually obtuse, occasionally mucronate. Pollen cones 5–7.5 × 1.8–2.5 cm. Seed cones subglobose or broadly ovoid, to 10 cm; bracts 2.5–3 cm, apex reflexed. Seeds obovoid, ca. 1.2 cm × 7 mm; wing developed on 1 side, membranous, almost cuneate-oblong.

Cultivated. Fujian, Guangdong [native to Indonesia, Malaysia].

The trunk richly contains the famous "dammar" resin, which is widely used in industry and medicine. The tree is commonly grown as an ornamental, and also yields timber used for construction.

Flora of China 4: 10. 1999.