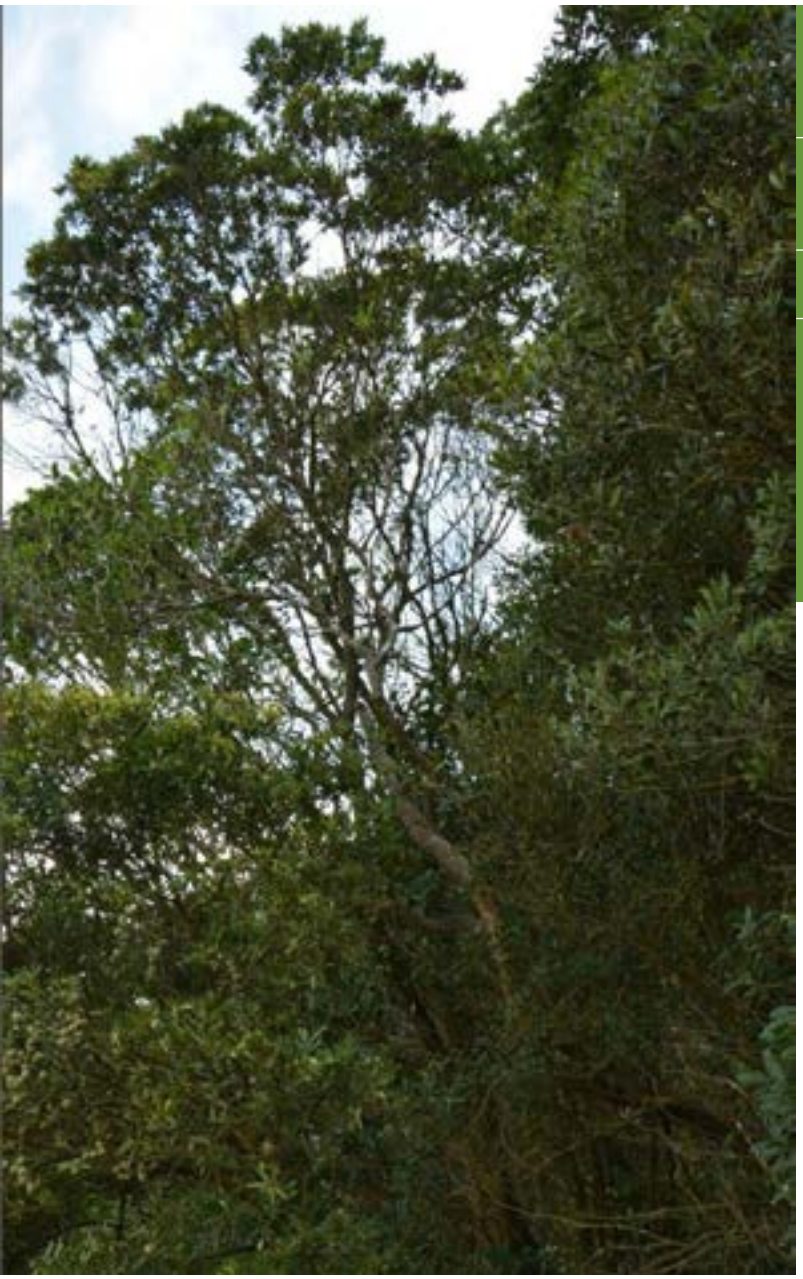

Habit and habitat – steep slopes on Hong Kong island (image © J.S. Strijk, www.asianfagaceae.com).

SCIENTIFIC NAME: *Quercus bambusifolia* Hance

COMMON NAME(S): **Sồi lá tre; Sồi tre; Gie lá tre** (Vietnam)

FAMILY: Fagaceae

Joeri S. Strijk *(Alliance for Conservation Tree Genomics ACTG)*
Karina Orozco & Amy Byrne *(The Morton Arboretum)*

Threat status

EN **Endangered.**

Distribution

China, Hong Kong, Vietnam.
Dense forests in mountains, reported from 600-2200 m.

Botanic description

Tree, up to **12 m** or large shrub. **Branches** slender, when young with simple or glabrescent hairs, later glabrous, angular, dark purple or purplish, lenticels few and barely visible. **Buds** ovoid, rounded, hairy.

Leaves persistent for several years, linear-lanceolate, subelliptic, clearly rounded or more rarely obtuse at the apex, attenuate or wedge-shaped at the base, up to 3.5-6 (-8) cm long and (6-) 10-12 (-16) mm wide, leathery, glabrous, shiny and green above, initially silky with few spaced, appressed hairs, then (nearly) glabrous, glaucous below, with entire, slightly recurved edges, very rarely provided with one or two obscure teeth. **Secondary veins** up to 7-14 pairs, very obscure on both surfaces, the base at an angle of 30-32 ° with the median. **Tertiary venation** not visible. **Petiole** up to 2-3 (-5) mm long, reddish brown. **Stipules** narrow, linear, hairy, approximately equal to the petiole length.

Technical illustration (Flora of Hong Kong).

Fruiting branch – note the bicoloured acorns and mint green undersides of leaves (image © J.S.

Male catkins slender, up to 1.5-5 cm, axis tomentose, brownish, base bare. **Male flowers** with a perianth of 6 oval lobes, woolly, pubescent, anthers small, short, subrounded, somewhat hairy, filaments short. **Female catkins** short, up to 1-1.5 cm long, axis glabrous or puberulous, base bare, bearing towards the top few flowers, often three, hairy; styles 3-4, mediocre, distant, rather large, a little divergent; stigmas a little thick, capitate, a little lobed.

Infructescence short, 0.5-1 cm long, bare at the base, often bearing towards the top a single fruit that ripens annually. **Cupule** sessile, enveloping the base or up to half of the nut, subhemispherical, up to 1.4-1.8 cm. in diameter and 1-1.2 cm high, puberulous or glabrescent on the outside, silky on the inside, bearing 5-6 very appressed zones, the middle ones spaced apart, barely visible, almost entire, the upper ones close together. **Nut** ovoid, very exserted, up to 1.5-2.4 cm high and 1.4-1.7 cm in diameter, mucronate, very silky, glabrescent when ripe. **Scar** a little convex, up to 7 mm in diameter, rough, pale. **Cotyledons** generally fused.

Fruiting branch – note the light green colours of young leaves flushes (image © J.S. Strijk, www.asianfagaceae.com).

Phenology

Flowering:
June.

Fruiting:
October.

Method of dispersion and/or pollinating agent:
Rodents (squirrels; rats; mice?).

Light requirements or ecological guild:
To be confirmed.

Uses

None reported.

Recommended seed collecting practice for nursery propagation

When fruits are ripe, collect seeds directly from the tree by shaking the branches using long bamboo poles. As seed viability decreases rapidly after falling on the ground and these are prone to predation damage and pests, collecting directly from the tree should be given priority over collecting fruits from the ground. If seed-set is less abundant, infructescences and seeds available on the ground can also be collected for use in nursery propagation.

Spiny fruits and infructescences should not be dehusked (i.e. no removing of the spiny cupules to expose the nuts). This exposes the nuts to pests and desiccation during transport and storage, and complicates identification of collected materials. Infructescences should also not be 'peeled' to remove individual fruits. Groups of trees in this species, fruiting in close proximity of each other can be sampled for seeds as a '*local population*' and collected materials can be mixed in the same bag. Seeds collected from trees separated from each other by more than 100-150m should not be mixed, but be kept in separate bags. If possible, geographic information should be collected for each *'local population'* and each bag of seeds collected from it. It would also be good practice to include some small branches and leaf material from the fruiting trees with each collected bag of seeds to aid in identification.