UNIVERSITY OF COPENHAGEN

Københavns Universitet

Elaeodendron glaucum Pers.

Schmidt, Lars; Kundu, Maitreyee

Published in:
Seed Leaflet

Publication date:
2023

Document version
Publisher's PDF, also known as Version of record

Citation for published version (APA):
Schmidt, L. (Ed.), & Kundu, M. (2023). Elaeodendron glaucum Pers. *Seed Leaflet*, (184).

Download date: 17. Nov. 2026

UNIVERSITY OF COPENHAGEN

No. 184, September 2023

Elaeodendron glaucum Pers.

Taxonomy and Nomenclature
Species name: *Elaeodendron glaucum* Pers.
Family name: Celastraceae
Synonyms: *Barringtonia sphaerocarpa* C.A.Gardner, *Cassine glauca* Kuntze, *Celatrus glaucus* Vahl, *Magnifera glauca* Rottb, *Senacia glauca* Lam.
Vernacular (common name): Jamrashi, Ceylon tea

Distribution and habitat

The tree is native to East Asia including India, Pakistan, Bangladesh, Sri Lanka, Nepal Bhutan, Cambodia, and Indonesia. It is found throughout India up to an altitude of 1,200m in open forests or associated with Sal forests in the outer sub-Himalayan tracts. It is found in periodically very dry places, weathered coral chalk ground in the teak forest, and heterogeneous primary forests with numerous deciduous tree species. It grows well in clay soil. It is moderately shade-bearer, frost-hardy, and drought-resistant.

Use

The wood is pinkish-white to reddish-brown with numerous wavy, concentric, lighter bands. It is moderately hard, heavy, even, and closed-grained. The wood seasons well. It takes fine polish and is used in house construction, furniture, cabinet work, small implements, and picture frames. It is a moderately good fuel. It is sometimes grown as an ornamental plant. The bark produces a tannin, red-colored dye, and resins. The plant also yields good-quality gum. Its root and bark are used in local medicine. The leaves are used as sternutatoires (sneezing), in nerve diseases and to relieve headaches. The bark is used against swellings and snake-bite.

Botanical description

It is an evergreen or semi-deciduous tree, 18-25m tall, girth 40-95 cm. Bark brown, longitudinally cracked, red inside, exuding a watery sap when cut, branchlets are reddish. Leaves are simple, opposite, 3-16 x 1.5-7.5 cm, elliptic, ovate-oblong, thick, coriaceous, glabrous, shining above, glaucous beneath; margin crenate-serrate; petiole 0.5-1 cm long, channeled; leaf margin serrate. Inflorescence is an axillary dichotomous cyme, 7.5-12 cm long; peduncle 2.5-6.5 cm long, often red; Flower 5-merous, actinomorphic, white or greenish-yellow, 4-5mm across, 8-12 cm long; calyx 5-lobed, lobes rounded, margin membranous; stamens five, inserted on the margin of the disk, recurved; filaments recurved, anthers with a 2-lobed connective. Stamens are shorter than the petals. The disk is thick and fleshy. Ovary 4-celled united with the disk; style short; persistent in the fruits.

https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:160672-1/images

Fruit and seed description

The fruit is yellowish green, ovoid drupe, 1-15 cm long, 1-celled, 1-seeded, tipped with a persistent style. The outer covering dries into a brittle shell, which is filled by the oily seed with a reddish brown papery testa.

Flowering and fruiting habit

Flowering occurs from July to September. Fruit ripens in March-April. Bees and other insects are pollinators. Birds and mammals are seed dispersers.

Seed collection

The fruits are harvested from the tree by lopping the fruit-bearing shoots with a sickle attached to a long pole or plucking the fruits. The optimum time of collection is when the color of the fruits turns yellowish green and the seed turns white. The moisture content of fruits and seeds at this stage is about 55-60% and 25-35% respectively.

Processing and handling

After collection, immature fruits are discarded and ripe fruits are soaked overnight in water and rubbed between palms or with a jute sack or by depulper. The seeds are cleaned on wire mesh in running water. These are then allowed to dry under the sun and cleaned by a seed blower or by winnowing

Dormancy and pretreatment

The seeds are physiologically dormant. To improve germination seeds are treated with Gibberellic acid at the dose of 250 ppm. Soil is the best media for germination.

Storage and viability

Seeds are orthodox with desiccation tolerance to 4-5% moisture content and also tolerate freezing temperature. Seeds can remain viable for up to one year at ambient conditions if stored at 4-7% moisture content. Viability can be prolonged to more than 2 years if stored at 5 ^{o}C with 4-10% moisture content.

Sowing and germination

Propagation is done by seeds. Seeds are sown in the month of February-March. The germination percentage is 60-70%. Seedlings are moderately frost-hardy but liable to insect attack. One-year-old plants are planted out in the field at a spacing of 3mx3m in pits (45 cc) filled with soil with farmyard manure. The rate of growth is slow.

Pest and Diseases

Spongy yellow heart-rot, caused by *Fomes rimosus* has been found in this species.

Selected readings

Anon. 1992. The wealth of India: Raw Materials. Council of Scientific & Industrial Research, New Delhi, India.

Troup R. S. 1921. The silviculture of Indian trees. Vol I, pages 210-11. Government of India.

Author: Maitreyee Kundu,
E-mail: spalliwest@yahoo.co.in
Ed: Lars Schmidt, IGN, Copenhagen University

Seed Leaflets are a series of species wise extension leaflets for tropical forest species with special emphasis on seed technology. Leaflets are compiled from existing literature and research available at the time of writing. In order to currently improve recommendations, IGN encourages feedback from users and researchers who have experience with the species. Comments, corrections, improvements and amendments will be incorporated into future edited leaflets. Please write your comments to lsc@ign.ku.dk