Nauclea orientalis

L.

Rubiaceae

LOCAL NAMES
English (yellow cheesewood,leichhardt pine); Thai (kanluang)

BOTANIC DESCRIPTION
Nauclea orientalis varies from a medium-sized to tall, well formed tree, with a height of 30 m and a diameter of 1 m. The stem is not buttressed. Its bark is deeply furrowed, outer blaze cream, yellowish, orange or pink, with reddish layers visible as well.

Leaves heart-shaped, deep green, glossy and oppositely placed, 10-27 x 6 x17 cm, petioles 2-3.5 cm long. Stipules large and obovate. If stipules on fresh twigs are carefully removed, a number of red glands resembling insect eggs are usually visible on the inner surface near the base.

Inflorescence are spherical heads about 3-5 cm in diameter. Flowers yellowish or orange, calyx difficult to distinguish, corolla tube 0.7-1 cm long, lobes 5-6. Stamens 5-6, anthers almost sessile at the mouth of the corolla tube, anthers about 1.5 mm long. Style and sigma white, 1.5-1.7 cm long, expanded into a conical or bullet shaped stigma at the apex.

Fruit a fleshy irregularly shaped globular mass containing many seeds. Each fruit is actually an aggregation of many fruits, each produced from a single flower in the inflorescence.

Seeds tiny, about 1.5 x 1.0 mm.

The name Nauclea is from the latin naucula meaning a little ship, the specific epithet orientalis is from latin and pertains to the east. The yellow cheesewood can be easily confused with Anthocephalus cadamba.

ECOLOGY
In Australia the yellow cheesewood occurs in a variety of vegetation types from sparse rheophyte shrublands to tall well-developed gallery rainforest where it reaches its best development. Common associates include Eucalyptus camaldulensis, Melaleuca argentea in the drier areas and Castanospermum australe, Beilschmiedia obtusifolia and Syzygium tierneyanum in the wetter areas. In the swampy areas it is often associated with Melaleuca dealbata and Melaleuca leucadendron. Occurs along the major rivers in the interior of the Peninsula, or at least near rivers. Usually N. orientalis is a pioneer species.

BIOPHYSICAL LIMITS
Altitude: 0-500 m
Mean annual temperature: 25 deg C
Mean annual rainfall: 800-3 800 mm
Soil type: Prefers alluvial soils along stream banks.

DOCUMENTED SPECIES DISTRIBUTION

Native: Australia, Indonesia, Malaysia, Thailand
Exotic:

The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS
Food: The fruit is edible but bitter tasting, eaten by the Aboriginal people of Australia.

Apiculture: The fragrant yellow flowers are a source of nectar and pollen.

Timber: Yields a soft easily-cut wood. Heartwood yellowish or orange easily cut but not durable when exposed to the weather, density 560 kg/ cu m. The timber can be used for framing and internal flooring and other uses not exposing it to the weather. It can be used for novelties where a timber with distinctive colour is desirable.

Poison: N. orientalis wood was shown to be toxic to the termite Cryptotermes domesticus under laboratory conditions.

Medicine: The leaves and bark of N. orientalis are used medicinally against abdominal pain, animal bites and wounds.

SERVICES
Erosion control: Controls soil loss on riverine areas.

Shade or shelter: The Leichardt tree is an excellent shade tree.

Reclamation: N. orientalis is a hardy species with dryland reclamation potential.

Soil improver: Leaf litter on decay replenishes soil fertility.

Ornamental: The yellow cheesewood is a beautiful tropical garden plant.

TREE MANAGEMENT
Best grown in medium loam, clay loam and always preferring semi-shaded conditions. Planting results, by direct seeding, best in summer. Natural regeneration of the small-seeded species, orientalis, requires a fairly clean forest/ garden floor for successful germination.

PESTS AND DISEASES
Sapwood susceptible to Lyctus attack.

FURTHER READNG

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SUGGESTED CITATION

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