

Flora of the Darwin Region

VOLUME 1

P.S. Short & I.D. Cowie (eds)



NELUMBONACEAE

I.D. Cowie

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Territory**

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NELUMBONACEAE

I.D. Cowie

Perennial *aquatics* with rhizomes; latex present, plant with short spines. *Leaves* floating, or emergent; petioles long; lamina simple, rolled and submerged when young, later somewhat orbicular, peltate, palmately nerved, margins entire to toothed; stipules present or absent. *Flowers* emergent, solitary, axillary, bisexual, actinomorphic, hypogynous, conspicuous. *Perianth lobes* 12–30, spirally arranged, free, outer 2 calyx-like, the others in *c.* 2 series. *Stamens c.* 200–400, free, spirally arranged; filaments filiform; anthers tetrasporangiate and dithecal, introrse-latrorse, dehiscing longitudinally; staminodes absent. *Gynoecium* superior, the carpels free, 12–40, in 2–4 whorls, and sunk into a spongy receptacle; carpels 1-celled, cells 1- (2)-ovulate, ovules anatropous. *Fruit* emergent, consisting of individual hard-walled nuts embedded loosely in the persistent, spongy receptacle. *Seeds* with endosperm absent or almost so, perisperm present.

A family of one genus and two species, with one species in the N.T.

Taxonomic reference: Royen (1962).

NELUMBO Adans.

A genus of two species, found in north-east America, tropical Asia and northern Australia.

N. nucifera Gaertn.

Rhizome internodes *c.* 20 cm long. *Petioles* 0.5–3.5 m long or more, with scattered short prickles. *Lamina* floating or emergent, orbicular to somewhat reniform, 18–70 cm diam., discolorous, glaucous with scattered stout papillae above, otherwise glabrous, margin entire, nerves 18–23. *Pedicels* 1–2 m long, with scattered short prickles. *Perianth* lobes many-nerved, mucronate to obtuse; outer 2 lobes greenish, elliptic, 4.5–5 cm long, 2–2.5 cm wide; remaining lobes pink, 5.5–15 cm long, 2–7 cm wide, decreasing in size towards the centre of the flower and grading from elliptic to spatulate-obovate. *Stamens* 2.5–3.5 cm long; filaments linear, 1–2 cm long; anthers 1–1.5 cm long, the appendage clavate, 3–4 mm long and reflexing to erect. *Stigma c.* 1 mm diam. *Receptacle* obconical, glabrous; at flowering 2–3 cm long, 1–2 cm wide; at fruiting 5–6 cm long, 4.5–7.5 cm diam., 10–20 seeded, becoming brown and deflexed with age. *Fruits* (“seeds”) almost black, ellipsoid, 14–16 mm long, 9–10 mm diam.,

minutely pitted, glabrous, held loosely in enlarged pits in the upper surface of the receptacle, dropping into the water as the receptacle reflexes, dries and shrinks. *Flowering:* Mar.–Dec. *Fruiting:* June–Dec. **Lotus Lily.**

Fig. 1 (unvouchered); Pl. 1–2 (unvouchered).

Found from India to China and extending to Australia (N.T., Qld). In the N.T. on most major floodplains between the Daly River and Arafura Swamp and extending south to the Roper River. Common at Corroboree Billabong on the Mary River floodplain and at Fogg Dam. Grows around billabongs and on permanent or near-permanent backswamps in water to 3.5 m deep. *Nelumbo nucifera* is the sacred lotus of south-east Asia and is grown there and elsewhere for the edible fruit and rhizomes.

In the N.T. Aboriginal people eat the new shoots, raw immature nuts, cooked nuts and the roasted rhizome (*e.g.* Yunupingu *et al.* 1995; Marrfurra *et al.* 1995).

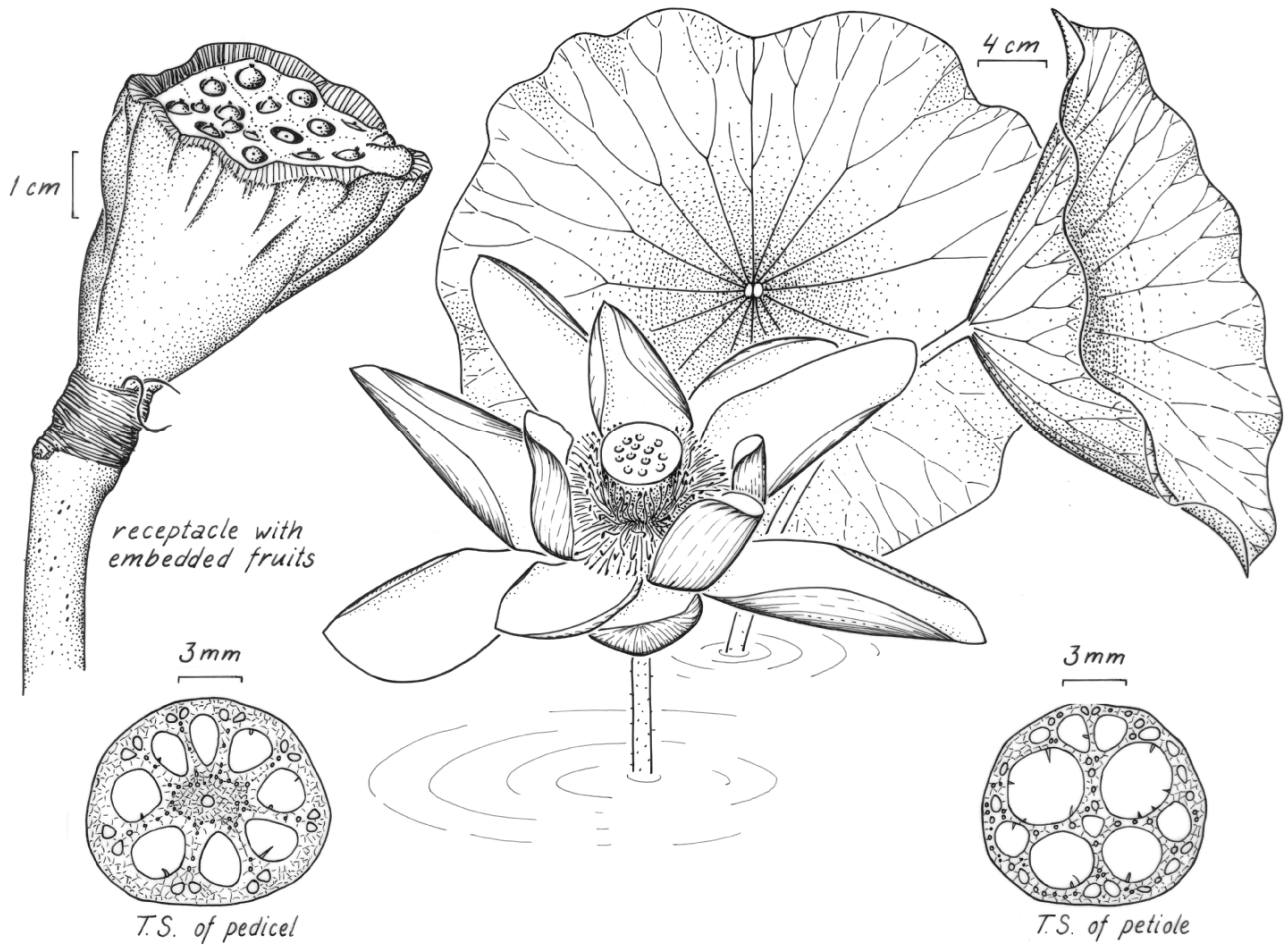
Nelumbo nucifera

Fig. 1

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Pl. 1 *Nelumbo nucifera* (Photo: J. Brock)



Pl. 2 *Nelumbo nucifera* (Photo: P.S. Short)