

Cabramatta.' TYPE: NEW SOUTH WALES: Central Coast: Duck River, Parramatta, Woolls (holo NSW). Although Blakely cited other localities, this was the single specimen fully cited, and was also the single specimen labelled 'Type' by Blakely. Included in *E. parramattensis* by Pryor & Johnson (1971).

[*E. tereticornis* Sm. var. *sphaerocalyx* F. Muell. ex Maiden, Crit. Revis. Eucalyptus 4: 316 (1917), pro. syn., nom. invalid. This name was applied to specimens collected at 'Duck Creek' [Duck River], Parramatta, by Woolls, i.e. the type material of *E. parramattensis* var. *sphaerocalyx* Blakely (see above).]

Tree to 15 m tall. Adult leaves 7–15 cm long, 1–2 cm wide; intramarginal vein to 1 mm from margin; petiole 10–20 mm long. Peduncles 5–10 mm long; pedicels 2–8 mm long. Mature buds 5–8 mm long, 4–5 mm wide. Fruit 3–5 mm long, 5–7 mm diam.

DISTRIBUTION: from east of Mudgee to near Hilltop, with extensive stands in the region between the Hunter and Culoul Ranges (Figure 1).

ECOLOGY: this taxon characteristically occurs on infertile sandy soils, often on sites of impeded drainage.

Hybrids are recorded with *E. longifolia* Link, *E. resinifera* Smith subsp. *resinifera* and *E. punctata* DC.

CONSERVATION STATUS: not considered to be at risk.

SELECTED SPECIMENS (from 77 examined): NEW SOUTH WALES: Central Coast: Howes Valley, *Cabbage* 1526, 8 Jul 1906 (NSW); 10.2 km N of Mellong Ck on Putty road, *Brooker* 5934, 28 Apr 1978 (CANB, NSW); SW corner of Castlereagh State Forest, *Coveny* 11884 & *Goodwin*, 13 Sep 1984 (NSW, BRI, CANB, CBG, K, MEL, PERTH); 1.5 km S of Agnes Banks, *Crisp* 7484, *Taylor & Weston*, 29 Oct 1984 (CBG, AD, NSW); Cabramatta, *Boorman*, Jul 1917 (NSW); Douglas Park, *Johnson* NSW 84442, 21 Nov 1965; Shepherds Swamp, Hilltop, *Maiden & Boorman*, Sep 1902 (NSW). Central Western Slopes: Munghorn, *Ingram*, 15 Apr 1952 (NSW); 5 miles [8 km] N of Ulan on Cassilis road, *Johnston* 59 & *Vos*, 5 Nov 1968 (CANB, NSW); c. 3–4 miles [5–6 km] SE of Kindalwry Mtn, S of Rylstone, *Johnson* 4515, 3 Oct 1965 (NSW).

1B. *Eucalyptus parramattensis* C. Hall subsp. *decadens* L. Johnson & Blaxell, subsp. nov.

Ab subspecie typica alabastris fructibus foliisque omnibus majoribus.

TYPE: NEW SOUTH WALES: North Coast: 1 mile [1.6 km] W of Saltash on Raymond Terrace road, L.A.S. *Johnson*, 15 Apr 1964 (holo NSW 228221).

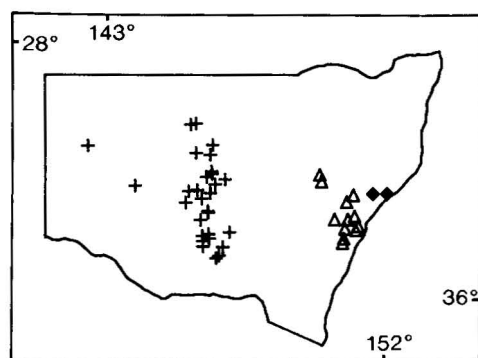


Figure 1. Distribution of *E. parramattensis* C. Hall subsp. *parramattensis* (Δ), *E. parramattensis* subsp. *decadens* (◆) and *E. vicina* (+).

Tree to 10 m tall, usually less than 7 m. Adult leaves 10–20 cm long, 1.5–3.5 cm wide; intramarginal vein to 2.5 mm from margin; petiole 15–25 mm long. Peduncles 7–10 mm long; pedicels 3–7 mm long. Mature buds 7–10 mm long, 4–6 mm wide. Fruit 5–7 mm long, 7–9 mm diam. Figure 2.

Subspecies *decadens* is distinguished from *E. parramattensis* subsp. *parramattensis* by its larger buds, fruits and leaves.

DISTRIBUTION: NEW SOUTH WALES: Lower Hunter Valley, Williamtown and Kurri Kurri districts (Figure 1).

ECOLOGY: *E. parramattensis* subsp. *decadens* is restricted to low-lying, often swampy areas on poor sandy soils. It is associated with *E. signata* F. Muell., *E. globoidea* Blakely and *Angophora bakeri* C. Hall.

The epithet is from the Latin *decadens*, falling down, referring to the general 'tumble-down gum' habit of the trees. Since it was drawn to attention by the late Rod W. Earp, it has been familiarly known to L. Johnson and associates as 'Earp's Dirty Gum', alluding to the 'dirty grey' bark.

CONSERVATION STATUS: 2V. Under significant threat from residential development.

SELECTED SPECIMENS (from 14 examined): NEW SOUTH WALES: North Coast: Williamtown, Earp, 29 Dec 1955 (NSW), Johnson, 27 Jan 1962 (NSW); Tomago, Bartrim, Sep 1979 (NSW); 1 km NE of Kurri Kurri, B.G. Briggs 3280 & Johnson, 15 Mar 1970 (NSW).

2. *Eucalyptus disclusa* L. Johnson & Blaxell, sp. nov.

Ab *E. seeana* distinguitur: folia adulta juveniliaque latiora, fructus major disco plus elevato, calyptra longior angustiorque.

TYPE: QUEENSLAND: Rainbow Falls, Blackdown Tableland, M.I.H. Brooker 3776, 31 Aug 1972 (holo NSW; iso CANB).

Tree to 12 m tall, usually less than 8 m. Bark smooth, dark grey or brownish grey, with paler patches. Seedling leaves petiolate, ovate, rounded, opposite for about 7 nodes. Juvenile leaves petiolate, ovate, acute or acuminate, disjunct, to 12 cm long, 6.5 cm wide. Adult leaves lanceolate, slightly falcate, 8–18 cm long, 15–30 mm wide; petiole 20–30 mm long; lateral veins irregular, reticulate, at 30°–45° to midrib; intra-marginal vein distinct, 1–3 mm from margin, with reticulate secondary veins between margin and intramarginal vein. Umbellasters axillary, usually 7-flowered, occasionally 11-flowered; peduncles terete or 2-angled, 10–20 mm long; pedicels 5–8 mm long. Mature buds 12–15 mm long, 3–5 mm diam.; calyptra 3½–6 times longer than hypanthium, evenly conical and acute; outer calyptra shed when buds small, scar prominent. Stamens all fertile; filaments upright, not inflexed in bud; anthers ovoid, dorsifixed, versatile, dehiscing by slits. Fruits globular, 5–7 mm long, 5–7 mm diam., 3–4-locular; calyptra scar and stemophore visible on most fruits as narrow bands around top of hypanthium; disc narrow, raised, ultimately incurved or horizontal, sometimes enclosing valve bases; valves broadly triangular, vertically exserted. Seeds dark brown, dull, angular, 0.5–0.8 mm long; chaff similar, longer, thinner. Figure 3.

E. disclusa is nearest to *E. seeana* Maiden, from which it is distinguished by the ovate juvenile leaves (lanceolate in the latter), lanceolate adult leaves (narrow-lanceolate in the latter), larger fruits (to 5 mm long in the latter) with more raised disc, and longer, narrower calyptra (usually less than 3 times longer than hypanthium in the latter).

DISTRIBUTION: QUEENSLAND: Blackdown Tableland, Leichhardt District, west of Rockhampton (Figure 4).



Figure 2. *E. parramattensis* subsp. *decadens*. **a**, adult leaves and buds. **b**, median section of bud. **c**, **d**, anther. **e**, fruit (all from Johnson, 27 Jan 1962). Scale bar: a, e = 1 cm; b = 5 mm; c, d = 0.1 mm.