



63 * ULMACEAE ¹

Dennis I Morris ^{† 2}

Trees or shrubs, deciduous or evergreen, anemophilous, monoecious or the flowers bisexual. Leaves usually alternate, often distichous; stipules free or connate, usually caducous; lamina simple. Inflorescences axillary, cymose or racemose or the flowers solitary. Flowers small, ± actinomorphic, hypogynous or perigynous, unisexual or bisexual. Perianth (2–)5(–9), free or united. Stamens as many as the perianth and opposite them or 10–15, free or adnate to the perianth-tube; staminodes present or absent in female flowers. Carpels 2–3, fused; ovary unilocular or rarely bilocular; ovules solitary or 2 when the ovary is bilocular; styles free; stigmas decurrent; pistillode present or absent in male flowers. Fruit a nut, drupe or samara.

A family of about 18 genera and 200 species of tropical and temperate regions of both hemispheres. In Australia there are 4 genera (1 naturalized) and 9 or 10 species (4 or 5 naturalized). Ulmaceae are placed in the Rosales and appear to be related to Cannabaceae (widespread), Moraceae (mostly tropical & warm temperate) and Urticaceae (widespread).

External resources: accepted names with synonymy & distribution in Australia (APC); author & publication abbreviations (IPNI); mapping (AVH, NVA); nomenclature (APNI, IPNI).

1 * ULMUS

Ulmus L., *Sp. Pl.* 1: 225 (1753).

Trees, usually deciduous, producing suckers and forming thickets. Leaves broadly ovate, entire, oblique at the base, margins serrate or biserrate; leaves on suckers often differing from leaves on adult growth. Inflorescence a cluster of flowers or a cyme, appearing before the leaves. Flowers bisexual, protandrous. Perianth campanulate, 4–8-lobed, persistent. Stamens 5–6; anthers reddish. Fruit a samara, broadly winged, apex emarginate.

A genus of about 25 species of the northern hemisphere; 1 species naturalized in Australia.

1 * *Ulmus* × *hollandica* Mill., *Gard. Dict.*, ed. 8, no. 5 (1768)

Dutch Elm

Ulmus × *hollandica* var. *hollandica* sensu W.M.Curtis, *The Student's Flora of Tasmania* 3: 642 (1967). *Ulmus hollandica* sensu H.J.Hewson, *Fl. Australia* 3: 5 (1989).

Illustrations: Spencer, *Horticultural Flora of South-eastern Australia* 3: 110–112 (2002); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 400 (2006).

A tree up to c. 40 m high, often with 2 or 3 large branches from near the base, these ascending and spreading forming a rounded crown; suckers very numerous and having well-developed cork flanges; twigs pubescent during the first year, becoming smooth and brown in the second year; short shoots diverging approximately at right angles to the branches. Leaves of short shoots broadly ovate, acute, 6–14 cm long, base unequal, the long side forming a rounded auricle which is shorter than the petiole, margin serrated, the primary teeth with 1–3 lateral ones on the basal side, adaxial surface with pinnate veins impressed, minutely

1 This work can be cited as: Morris DI (2009). Ulmaceae, **version 2019:1**. In MF de Salas (Ed.) *Flora of Tasmania Online*. 2 pp. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery: Hobart). <https://flora.tmag.tas.gov.au/treatments/ulmaceae/>

2 Tasmanian Herbarium, Tasmanian Museum & Art Gallery, PO Box 5058, UTAS LPO, Sandy Bay, TAS 7005, Australia.

scabrous but finally becoming glabrous and shining, abaxial surface pubescent and with small tufts of hairs in the angles between the midrib and lateral veins. Leaves of sucker shoots often \pm symmetrical. Flowers in dense clusters, each flower subtended by an almost orbicular scarious brown bract; bract margins ciliate. Perianth c. 3.5 mm long, campanulate, 4-lobed; lobes rounded, ciliate. Stamens 4, long-exserted; anthers c. 1.5 mm long, blackish. Samaras broad-ovate to almost orbicular 2–3 cm long. Flowering Aug.-Oct.; fruiting Sep.-Oct.

Tas. (BEL, FUR, TNM, TNS, TSE); also naturalized in SA, Qld?, NSW?; native to Europe. Local on roadsides and in fence lines, the suckers sometimes covering considerable areas in adjacent paddocks. Although fruit is produced in abundance, seedlings are not known and it is presumed that the hybrid is sterile.

REFERENCES

ALA (Atlas of Living Australia) <http://www.ala.org.au/>

APC (Australian Plant Census) <https://biodiversity.org.au/nsl/services/apc>

APNI (Australian Plant Name Index) <https://biodiversity.org.au/nsl/services/apni>

AVH (Australia's Virtual Herbarium) (Council of Heads of Australasian Herbaria) <http://avh.chah.org.au/>

IPNI (International Plant Name Index) <http://www.ipni.org> or <http://www.us.ipni.org>

NVA (Natural Values Atlas) (Department of Primary Industries and Water: Hobart)
<https://www.naturalvaluesatlas.tas.gov.au/>

NOTE: Web addresses can and do change: a list of current web addresses is maintained in the web version of this treatment on the *Flora of Tasmania Online* website at <https://flora.tmag.tas.gov.au>

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