# Flora of Tasmania



# 84 \* RESEDACEAE 1

### Matthew L Baker<sup>2</sup>

Annual to perennial herbs, rarely shrubs (not in Tas.). Leaves alternate; stipules small, often reduced to glandular teeth; lamina simple, entire to deeply pinnatifid. Inflorescence a terminal spike or raceme. Flowers bisexual or rarely unisexual, irregular, occurring in axils of bracts; receptacle hypogynous to perigynous. Sepals 4–8, green, valvate in bud. Petals (0, 2)4–8, white to yellow, free, unequal, entire or lobed, the posterior 1–2 largest, the lateral 2 and the anterior 1–2 progressively smaller and less lobed. Stamens 3–50+, inserted on a nectar-secreting disk; filaments free or joined at the base; anthers bilocular. Carpels (2)3–6(7), free (not in Tas.) or united forming a unilocular ovary that is open at the top; ovules numerous, placentation parietal or basal; stigmas as many as carpels and borne on apical lobes of each carpel. Fruit a dry open capsule or berry (not in Tas.). Seeds reniform to suborbicular.

A family of 6 genera and about 80 species native to central and south-western Asia, Africa, southern Europe, Atlantic Islands and south-western North America, widely naturalized elsewhere. 1 genus and 5 species introduced in Australia, 3 species introduced in Tasmania. Resedaceae are placed in the Brassicales near Gyrostemonaceae (Australia; see Ronse de Craene & Haston 2006).

Key references: Pearce (1982); Entwisle (1996).

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

## 1 \* RESEDA

Reseda L., Sp. Pl. 1: 448 (1753).

Annual to perennial herbs, rarely shrubs; mostly with basal rosettes and erect or spreading stems. Leaves entire to pinnatifid; stipules glandular. Inflorescence a raceme. Sepals 4–7, usually equal. Petals 4–7, unequal, variously lobed, clawed at the base. Stamens 7–40. Carpels 3–6; ovules numerous. Capsule unilocular, opening at the apex.

A genus of about 60 species; native to central and south-western Asia, eastern and northern Africa, southern Europe, north Atlantic Islands, and widely naturalized elsewhere. 5 species introduced in Australia.

1. Leaves entire; sepals 4 1 R. luteola

1: At least some leaves lobed or pinnatifid; sepals 5 or 6

2. Petals white, usually 5; capsule with 4 apical lobes 3 R. alba

2: Petals white to cream, 5 or 6; capsule with 3 apical lobes 3

3. Capsule c. twice as long as broad; seeds smooth; limb of posterior petals 3-lobed 2 R. lutea

3: Capsule c. as long as broad; seeds rugose; limb of posterior petals 9–15-lobed R. odorata \*

\* Reseda odorata L. (Sweet Mignonette), a native of north Africa and south-eastern Europe, is cultivated throughout the world. In Tasmania, it was recorded for the first time in 2000 from a roadside at Lughrata, Flinders Island. In South Australia it is recorded as sparingly naturalized. For a full description of this species see Pearce (1982).

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## 1 \* Reseda luteola L., Sp. Pl. 1: 448 (1753)

Dyer's Rocket, Wild Mignonette

Illustrations: Curtis & Morris, The Student's Flora of Tasmania 1, rev. edn: 52, fig. 13 (1975); Entwisle, Fl. Victoria 3: 461, fig. 93f-g (1996); Harden, Fl. New South Wales 1, rev. edn: 487 (2000); Richardson et al., Weeds of the South-East, an Identification Guide for Australia 356 (2006).

Erect perennial herbs, to 150 cm high, glabrous; stems ribbed, hollow. Leaves simple; basal leaves oblanceolate, 7–13 cm long, 0.7–1.4 cm wide, entire, often with crisped margins, toothed at the base, apex obtuse occasionally apiculate; cauline leaves linear-lanceolate, 5–11 cm long, 0.7–1.5 cm wide, entire, occasionally with crisped margins, apex obtuse, acute or apiculate. Inflorescence a raceme, extending to 63(–80 in Vic.) cm long in the fruiting stage; bracts persistent, narrow lanceolate, 2–5.5 mm long, base sheathing; pedicels 2–3 mm long. Sepals 4, green with pale margins, 1.5–2.5 mm long, oblong, obtuse. Petals usually 4, pale yellow-green, 3–5 mm long; posterior petal largest, 5–7 lobed, lateral petals mostly 3 lobed, anterior petal entire or absent, all with a scale-like claw at the base. Stamens 10–20. Capsule ovoid, 3–4 mm long, 5–7 mm wide, divided nearly half way into 3 acuminate apical lobes. Seeds brownish-black, to 1 mm long, smooth, shining. Flowering Oct.-May; fruiting Nov.-Jul.

Tas. (BL, FLI, TCH, TNM, TNS, TSE, TSR); also naturalized in WA, SA, Qld, NSW, Vic.; native to Europe, widely naturalized in temperate regions. A common weed of roadsides and waste places. First collected in Tasmania in 1876.

## 2 \* Reseda lutea L., Sp.Pl. 1: 449 (1753)

Cut-leaved Mignonette

Illustrations: Entwisle, Fl. Victoria 3: 461, fig. 93d-e (1996); Harden, Fl. New South Wales 1, rev. edn: 487 (2000); Richardson et al., Weeds of the South-East, an Identification Guide for Australia 356 (2006).

Erect to ascending perennial herb, to 60 cm high, glabrous or papillose; stems ribbed, hollow. Leaves simple to pinnatifid; basal leaves obovate, entire or sometimes divided, 3–8 cm long, soon withering; cauline leaves deeply pinnatifid, with 3–7 often bifid lobes, the apices apiculate, each lobe 1–6 cm long, 1–8 mm wide with crisped margins. Inflorescence a raceme, to 40 cm long; bracts caducous, narrowly lanceolate, 1.5–6 mm long; pedicels 4.5–6.5 mm long. Sepals 6, green with pale margins, 1.5–4.5 mm long, linear. Petals usually 6, cream; posterior pair of petals 3-lobed; lateral pair of petals 2–3-lobed; anterior pair of petals 1(–3)-lobed. Stamens 12–20. Capsule oblong, 7.5–12 mm long, 4.5–6.5 mm wide, tuberculate, with 3 short apical lobes. Seeds black, to 1.5 mm long, smooth, shining. Flowering & fruiting Sep.-Nov.

Tas. (FLI, TSE); also naturalized in WA, SA, Qld, NSW, Vic.; native to Europe, widely naturalized in temperate regions. An occasional weed of waste places and roadsides. In Tasmania, not as common as *R. luteola*, but occurring in similar habitats. Differs from *R. luteola* by having a dissected leaf and generally shorter racemes. First collected in Tasmania in 1875.

## 3 \* Reseda alba L., Sp. Pl. 1: 449 (1753)

White Mignonette

Illustration: Entwisle, Fl. Victoria 3: 461, fig. 93a-c (1996).

Erect annual herb, 30–60 cm high, glabrous or papillose and somewhat glaucous; stems ribbed, hollow. Leaves deeply pinnatifid, with lobes ± paired along the blade and ending with a single terminal lobe; basal leaves with 5–10 pairs of lobes, each lobe 2–15 mm long, 1–5 mm wide, with the margins crisped; cauline leaves with 5–8 pairs of lobes, each lobe 4–40 mm long, 1–7 mm wide. Inflorescence a raceme to 15 cm long; bracts persistent, 2.5–7 mm long, up to 3 cm wide; pedicels 2.5–7.5 mm long. Sepals 6, green with pale margins, lanceolate, 3–5 mm long. Petals 5(6), white, ± equal, 4.5–6 mm long, 3(–5)-lobed; central lobe slightly longer than lateral lobes. Stamens 10–15. Capsules oblong, narrowed at the apex, 5.5–12 mm long, 2–3.5 mm wide, with 4 short apical lobes. Seeds brownish, to 1.25 mm long, tuberculate, dull. Flowering & fruiting Sep.-Nov.

Tas. (FLI, KIN, TSE); also naturalized in WA, SA, Vic.; native to Europe, widely naturalized in temperate regions. Occasional garden escapee on dry banks, road sides and coastal sand. First collected in Tasmania in 1984.





### **REFERENCES**

APC (Australian Plant Census) http://www.chah.gov.au/apc/about-APC.html

APNI (Australian Plant Name Index) http://www.anbg.gov.au/cgi-bin/apni

AVH (Australia's Virtual Herbarium) (Council of Heads of Australasian Herbaria) http://www.anbg.gov.au/avh.html Entwisle TJ (1996) Resedaceae. *Flora of Victoria* **3** 459–461.

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

NVA (Natural Values Atlas) (Department of Primary Industries and Water: Hobart) http://www.dpiw.tas.gov.au/inter.nsf/WebPages/LJEM-6TV6TV?open

Pearce RD (1982) Resedaceae. Flora of Australia 8 359-361.

Ronse de Craene LP, Haston E (2006) The systematic relationships of glycosinolate-producing plants and related families: a cladistic investigation on morphological and molecular characters. *Botanical Journal of the Linnean Society* **151** 453–494.

NOTE: Web addresses can and do change: a list of current web addresses will be maintained on the *Flora of Tasmania Online* website [www.tmag.tas.gov.au/floratasmania].

### INDFX

В
Brassicales
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Mignonette
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Reseda1
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Reseda odorata	
Resedaceae	1
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Sweet Mignonette	1
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