



## 112 SOLANACEAE <sup>1</sup>

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Annual or perennial herbs, shrubs or small trees, rarely climbers; prickles or spines present or absent, often with glandular, branched or stellate hairs. Leaves exstipulate, generally alternate in the vegetative parts of the plant, but often in pairs due to fusion of the main axis and an axillary shoot. Inflorescence terminal, paniculate or subumbellate cymes, or sometimes pseudo-axillary due to fusion of the main axis and peduncle, thus the inflorescence appearing to be extra-nodal, or flowers solitary. Flowers bisexual, actinomorphic or zygomorphic. Calyx tubular to campanulate, (3–)5(–9)-lobed, persistent, often enlarging in the fruiting stage, sometimes enclosing the fruit. Corolla campanulate or tubular, or cup, funnel- or salver-shaped, (3–)5(–9)-lobed, lobes valvate, plicate, imbricate or volutive in bud. Stamens (1–)4–5(–8), sometimes only 2 or 4 fertile, equal or unequal in length, adnate to the corolla tube and alternating with the corolla lobes; anthers 2-lobed, dehiscent longitudinally or by apical pores. Carpels 2, often with a nectar-secreting disc at base; ovary superior; style simple; stigma capitate or shortly 2-lobed. Fruit a capsule or a dry or fleshy berry, usually 2-celled. Seeds few to numerous, often flattened, stone-cell granules often present in pulp tissue.

A family of about 102 genera and 2500–2600 species, widely distributed in tropical and temperate regions with centres of diversity in Central and South America and, to a lesser extent, Australia. In Australia there are 23 (6 endemic, 16 naturalised) genera and about 200 (c. 140 endemic, c. 66 naturalised) species. In Tasmania, 6 genera and 18 (1 endemic) species. Solanaceae are placed in the Solanales, sister to Convolvulaceae (almost cosmopolitan). The other families in the Order are small: Montiniaceae (Africa & Madagascar), Sphenocleaceae (pantropical) and Hydroleaceae (tropical & warm temperate).

Solanaceae contains many important plant species in agriculture, horticulture and as weeds. Important food crops include *Capsicum annuum* L. (Capsicum, Chilli, Sweet & Chilli Peppers, Cayenne Pepper), *Lycopersicon esculentum* L. (Tomato), *Solanum tuberosum* L. (Potato), *S. melongena* L. (Eggplant), *S. betaceum* Cav. (Tamarillo), *S. muricatum* Aiton (Pepino) and *Physalis peruviana* L. (Cape Gooseberry). Several species are poisonous and potentially fatal if misused. Some have narcotic, hallucinogenic or pharmaceutical properties, including species of *Nicotiana* L. (Tobacco), *Datura stramonium* L. (Thornapple), *Hyoscyamus niger* L. (Common Henbane) and *Atropa belladonna* L. (Deadly Nightshade). Species of *Datura* L. and *Hyoscyamus* L., as well as some Australian species of *Duboisia* R.Br. (Corkwoods), are a source of hyoscyamine and atropine, used in the production of atropine and scopolamine – an anti motion-sickness medication, also popularly known as the “truth drug”. An Australian species, *Solanum aviculare* G.Forst. (Kangaroo Apple), is a source of solasodine, an alkaloid used in the manufacture of the contraceptive pill.

Popular ornamental plants include species of *Brugmansia* Pers., *Datura*, *Cestrum* L., *Iochroma* Benth., *Nicotiana*, *Nierembergia* Ruiz. & Pav., *Petunia* Juss., *Physalis* L., *Schizanthus* Ruiz. & Pav., *Solanum* L. and *Streptosolen* Miers.

Key reference: Purdie *et al.* (1982).

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

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

Note for key: fresh flowers and mature fruits are usually necessary for the determination of genera.

1. Fruit a capsule	2
1: Fruit a berry	6
2. Stamens 4, staminode present or absent	1 <i>Cyphanthera</i>
2: Stamens 5, all functional; staminodes absent	3
3. Fruiting calyx cartilaginous, hard, lobes rigid, ± sharp	<i>Hyoscyamus</i> +
3: Fruiting calyx soft or ± leathery, not hard, lobes not rigid or sharp	4
4. Flowers in panicles; calyx campanulate to shortly tubular	<i>Nicotiana</i> ++
4: Flowers solitary; calyx long-tubular	5
5. Flowers red, 8–10(–15) cm long; capsule smooth	<i>Brugmansia</i> +++
5: Flowers white, 4–6(–10) cm long; capsule variously spiny	2 <i>Datura</i>
6. Corolla stellate to rotate, rarely campanulate	7
6:	
Corolla urceolate, funnel-shaped or tubular	8
7. Flowers dull yellow with internal brownish markings; fruiting calyx inflated, entirely enclosing fruit	4 <i>Physalis</i>
7: Flowers white, blue or purplish, sometimes with yellow centres; fruiting calyx rarely inflated, not entirely enclosing fruit	6 <i>Solanum</i>
8. Shrubs with rigid, spiny branches, to c. 4 m high	3 <i>Lycium</i>
8: Scrambling, non-spinous perennial herbs or semi-woody, short-lived shrubs, to c. 1 m high	5 <i>Salpichroa</i>

+ *Hyoscyamus albus* L. (White Henbane; called *H. niger* L. by Curtis (1967)) is, in Tasmania, known only from a single collection (Hobart, 1876) and is not considered to be naturalised. All parts of the plant are toxic.

++ *Nicotiana sylvestris* Speng. & Comes (Woodland Tobacco) is not considered to be naturalised in the state but was collected from an east coast disused tip-site in 2009. It is an attractive, fragrant-flowered ornamental occasionally encountered in some older gardens.

+++ *Brugmansia sanguinea* D. Don (Red Angel's Trumpet) was at one time a popular garden ornamental; it is now occasionally found in or near old or neglected gardens and in waste places. All parts of the plant are highly toxic.

## 1 CYPHANTHERA

*Cyphanthera* Miers, *Ann. Mag. Nat. Hist. ser. 2*, 11: 376 (1853).

Shrubs or small trees; branches glabrous or glandular-pubescent to tomentose with stellate or branched hairs not spinescent. Leaves alternate, sessile or subsessile, rarely petiolate; lamina simple, often ± thick. Inflorescences terminal or apparently lateral, leafy paniculate or racemose cymes. Flowers bisexual, slightly zygomorphic. Calyx campanulate to cupular, 5-lobed; fruiting calyx soft. Corolla funnel-shaped to campanulate, 5 lobed, the lobes spreading, inrolled in bud. Stamens 4, in 2 equal pairs, didynamous, inserted at the base of the corolla-tube, a staminode sometimes present; anthers 1-locular, dorsifixed, not cohering around the style, dehiscing by a terminal, semi-circular slit. Ovary 2-locular; stigma capitate or shortly 2-lobed. Fruit a smooth capsule. Seeds ± reniform.

An Australian genus of 9 species; 1 species endemic in Tasmania.

Key reference: Curtis (1967).

**1 *Cyphanthera tasmanica*** Miers, *Ann. Mag. Nat. Hist. ser. 2*, 11: 377 (1853)

*Tasmanian Rayflower*

*Anthocercis tasmanica* (Miers) Hook.f., *Bot. Antarct. Voy. III. (Fl. Tasman.)* 1: 289 (1857).

*Illustrations*: Stones & Curtis, *The Endemic Flora of Tasmania* 5: No. 199 (1975), as *A. tasmanica*; Whiting et al., *Tasmania's Natural Flora* 321 (2004); Minchin, *Wildflowers of Tasmania* 202, No. 301 (2005).

Erect shrubs 2–4 m high, yellowish tomentose, with stellate or dendroid hairs. Leaves shortly petiolate; lamina very variable in size on the one plant, 1–5 cm long, 0.5–1.8 cm wide, lanceolate to oblong, base narrowed, margins entire, slightly to markedly recurved, apex blunt. Flowers apparently axillary, shortly pedicellate, 1–3 crowded toward the ends of numerous short branches, very variable in size. Calyx 4–8 mm long, lobes about as long as the tube, acuminate. Corolla creamish-yellow, inner surface often with purplish striations; tube about as long as or slightly longer than the calyx; lobes 1–2 times as long as the tube, narrow lanceolate, spreading widely. Ovary surrounded at the base by a thick, lobed disc, bilocular; style filiform; stigma obscurely 2-lobed. Capsule spherical, dehiscent by 2 bifid valves. Seeds mostly 4, reddish-brown, reticulate. Flowering & fruiting Jun.–Feb.

Tas. (BEL, TSE), endemic. An uncommon species, localised in the central east of the state, in open heaths and woodlands, favouring dry, stony or sandy soils; re-colonises rapidly following fire, from sea-level to c. 650 m alt. Listed as *Rare* under *The Tasmanian Threatened Species Protection Act 1995*. Curtis (1967) suggested that variation in the size of the flowers, on single plants and between plants, may indicate the species being functionally unisexual. Further research, with fresh material, is necessary to determine this hypothesis.

## 2 \* DATURA

*Datura* L., *Sp. Pl.* 1: 179 (1753).

Annual or short-lived perennial herbs; branches glabrous, or pubescent with simple or glandular hairs not spinescent. Leaves alternate, petiolate; lamina entire or lobed. Flowers solitary in the forks of stems, bisexual, actinomorphic. Calyx tubular (4–)5(–9)-lobed, basal portion persisting in fruit; fruiting calyx soft, reflexed. Corolla funnel- or trumpet-shaped, lobes 5 or 10, corolla limb folded and twisted in bud. Stamens 5, inserted in lower portion of corolla tube; staminodes absent; anthers 2-locular, basifixed, loosely cohering around style, dehiscent by longitudinal slits. Ovary 2-locular or falsely 4-locular in the basal half; stigma 2-lobed. Fruit a spiny or tubercular capsule. Seeds reniform to ± 'D'-shaped, flat or inflated, numerous.

A genus of about 10 species, from warm-temperate to tropical Central and South America; 6 species introduced into Australia, 2 in Tasmania.

Some species are sources of several narcotic substances; all species are very poisonous and possibly fatal if ingested and many are also toxic to stock.

Mature fruit is helpful for the identification of the species.

- |  |                        |
|--|------------------------|
| 1. Corolla 4–6 cm long; capsule with ± 40–60 stout spines, 1–2 cm long, the longest near the capsule apex  | 1 <i>D. ferox</i>      |
| 1: Corolla 6–10 cm long; capsule with more than 100 slender spines of various lengths though < 2 cm long, all evenly distributed, not longer at capsule apex | 2 <i>D. stramonium</i> |

**1 \* *Datura ferox*** L., *Amoen. Acad.*, Linnaeus ed. 3: 403 (1756)

*Longspine Thornapple*

*Illustrations*: Haegi, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1239, fig. 562a (1986); Conn, *Fl. New South Wales* 3: 371 (1992); Jeanes, *Fl. Victoria* 4: 343, fig. 66b (1999); Richardson et al., *Weeds of the South-East, an Identification Guide for Australia* 387 (2006).

Robust herbs to c. 1.5 m tall; branches glabrous or pubescent with simple hairs. Leaves: petiole to c. 8 cm long; lamina mostly 8–14 cm long, 6–16 cm wide, broad-ovate to rounded-triangular with a few toothed or sinuate lobes, glabrous, base ± truncate, apex acute. Flowers erect, on short, indistinct pedicels. Calyx 3–4 cm long, 5-lobed, lobes 4–7 mm long. Corolla white, 4–6 cm long, limb 5-lobed, the lobes terminating in a

point 1–2 mm long. Stamens not exerted; anthers 3–4 mm long. Capsule to c. 4 cm long, ± ellipsoid, erect, opening by 4 valves; spines ± 40–60, 1–2 cm long, the longest near the capsule apex, conical, stout, sharp; persistent calyx base to 8 mm long. Seeds black or grey, 4–5 mm long, numerous. Flowering & fruiting Jan.–Jun.

Tas. (BEL, FUR, TNM, TSE, TSR, TWE); also naturalised in WA, NT, SA, Qld, NSW, Vic.; native to Central America, but now widely distributed and naturalised in many countries world-wide. An uncommon, sporadic weed of crops, disturbed areas and older, neglected gardens, from sea-level to about 100 m alt. All parts of the plant are highly toxic. A declared weed for the purpose of the *Weed Management Act 1999*.

**2 \* *Datura stramonium* L., Sp. Pl. 1: 179 (1753)**

*Common Thornapple*

*Illustrations:* Purdie *et al.*, *Fl. Australia* 29: 191, fig. 51 (1982); Haegi, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1239, fig. 562e (1986); Conn, *Fl. New South Wales* 3: 371 (1992); Jeanes, *Fl. Victoria* 4: 343, fig. 66a (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 387 (2006).

Robust herbs to c. 1.5 m tall; branches glabrous or pilose with simple hairs. Leaves: petiole to c. 10 cm long; lamina 8–35 cm long, 5–20 cm wide, rhombic to angular-ovate, with a few deep lobes that are sinuate or coarsely toothed, ± glabrous, base cuneate, apex acute to acuminate. Flowers erect, on short, indistinct pedicels. Calyx 2.5–4(–5.5) cm long, lobes 4–8 mm long. Corolla white, sometimes with pale lavender markings, 6–8(–10) cm long, limbs 5-lobed, lobes terminating in a slender point c. 10 mm long. Stamens not exerted; anthers 3–6 mm long. Capsule to 4.5 cm long, ovoid, erect, opening by 4 valves; spines 100–200, variable in length, longest less than 2 cm long, not longer at apex, conical, slender, sharp; persistent calyx base to 10 mm long. Seeds black or grey, 2.5–4.5 mm long, numerous. Flowering & fruiting Jan.–Jun.

Tas. (BEL, FUR, TNM, TNS, TSE, TSR); also naturalised in WA, SA, Qld, NSW, Vic.; origin uncertain but probably Central America. An uncommon, sporadic weed of agricultural areas, waste places and older gardens, from sea-level to c. 150 m alt. All parts of the plant are highly toxic. A declared weed for the purpose of the *Weed Management Act 1999*.

**3 \* LYCIUM**

*Lycium* L., *Sp. Pl.* 1: 191 (1753).

Shrubs with rigid, spiny branches, glabrous or with scattered glandular hairs. Leaves alternate or clustered, sessile or shortly petiolate; lamina simple, usually ± fleshy. Inflorescences axillary clusters or flowers solitary. Flowers bisexual, actinomorphic. Calyx tubular to campanulate, sometimes 2-lipped or unevenly 4–5-lobed, accrescent in fruit; fruiting calyx soft. Corolla urceolate, funnel-shaped or tubular, 4–5-lobed, lobes imbricate in bud. Stamens usually 5, unequal, inserted near base of corolla tube; staminodes absent; anthers 2-locular, dorsifixed, not cohering around style, dehiscent by 2 longitudinal slits. Ovary 2-locular; stigma capitate. Fruit a fleshy berry. Seeds ovoid, numerous.

1. Lateral spinous branches leafless, usually shorter than 10 mm; leaves ovate to elliptic; berry ± ellipsoid

1 *L. barbarum*

1: Lateral spinous branches leafy, usually longer than 10 mm; leaves mostly obovate; berry ± globose

2 *L. ferocissimum*

**1 \* *Lycium barbarum* L., Sp. Pl. 1: 192 (1753)**

*Chinese Wolfberry, Chinese Boxthorn, Goji*

*Illustrations:* Haegi, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1244, fig. 566b (1986); Conn, *Fl. New South Wales* 3: 351 (1992); Jeanes, *Fl. Victoria* 4: 363, fig. 70e (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 388 (2006).

Sparsely branched shrubs to 2.5 m high; ± glabrous; branches weak, arching; lateral branches few, reduced to short, leafless spines. Leaves clustered or solitary, shortly petiolate; solitary leaves with lamina usually 30–50 mm long, 5–15 mm wide, ovate to elliptic, scarcely fleshy, green, base attenuated into a short petiole, margins entire, apex acute, persistent; cluster leaves with lamina mostly 8–15 mm long, 2–5 mm wide, narrow-ovate to elliptic. Flowers usually solitary in axils; pedicels 5–15 mm long. Calyx campanulate, 3–4 mm

long, lobes triangular, 1–2 mm long, fruiting calyx 2-lipped. Corolla pale lilac with deeper lilac blotches on each lobe, lobes ovate, 10–12 mm long. Stamens exerted by 3–8 mm beyond orifice of corolla; anthers 1–2 mm long. Berry red, 5–9 mm long, ellipsoid. Seeds c. 20, yellowish, c. 2 mm long. Flowering & fruiting Mar.–Apr.

Tas. (TNM, TSE); also naturalised in SA, Qld, NSW, Vic., New Zealand; native to central China. Doubtfully naturalised in Tasmania and known from only three collections, two at Brighton (1971) and one at Ross (1977).

**2 \* *Lycium ferocissimum*** Miers, *Ann. Mag. Nat. Hist.*, ser. 2, 14: 187 (1854)

*African Boxthorn*

*Illustrations:* Purdie *et al.*, *Fl. Australia* 29: 191, fig. 48 (1982); Haegi, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1244, fig. 556c (1986); Conn, *Fl. New South Wales* 3: 350 (1992); Jeanes, *Fl. Victoria* 4: 363, fig. 70d (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 388 (2006).

Diffuse, intricately branched shrubs to 4 m high, mostly glabrous; major branches rigid, widely spreading, and bearing short, divaricate branches often ending in stout, leafy spines. Leaves clustered on the short branches, shortly petiolate; lamina 10–40 mm long, 4–10 mm wide, usually obovate, slightly fleshy, bright green, base attenuated, margins entire, apex obtuse to rounded. Flowers usually solitary in axils; pedicels 5–15 mm long. Calyx ± tubular, 4–7 mm long, lobes triangular, 1–2 mm long, fruiting calyx often 2-lipped. Corolla white or variously marked with lilac nearer the base of the lobes, lobes sub-orbicular, 10–12 mm long. Stamens exerted by 2–4 mm beyond orifice of corolla; anthers 1.0–1.5 mm long. Berry orange-red, 5–15 mm diam., ± spherical. Seeds 35–70, dull yellow, c. 2.5 mm long. Flowering & fruiting Jun.–Feb.

Tas. (FUR, KIN, TNS, TSE); also naturalised in WA, NT, SA, Qld, NSW, Vic., New Zealand; native to South Africa. One of a number of spiny shrubs used as an impenetrable fencing material by indigenous South African tribes-people to surround and protect their kraals (stock enclosures). Originally introduced into the state and widely planted as a hedge plant, now escaped and widespread in neglected pastures, urban wastelands, along fence-lines, roadsides, coastlines and invading degraded bushland, from sea-level to about 250 m alt. A declared weed for the purpose of the *Weed Management Act 1999*.

## 4 \* **PHYSALIS**

*Physalis* L., *Sp. Pl.* 1: 182 (1753).

Annual or perennial herbs, or short-lived shrubs; glabrous or pubescent with simple glandular hairs, or forked or stellate hairs; branches not spinescent. Leaves alternate, petiolate; lamina simple, entire, toothed or lobed. Flowers solitary in leaf axils, sometimes in the forks of the stems, bisexual, actinomorphic. Calyx tubular to campanulate, often ribbed, persistent; fruiting calyx enlarging, papery and enclosing fruit. Corolla broad-campanulate to rotate, with 5 short lobes, folded in bud. Stamens 5, inserted near the base of the corolla tube, equal or unequal; anthers 2-locular, basifixed, not cohering around the style, dehiscing by longitudinal slits; staminodes absent. Ovary 2-locular; style stout; stigma obscurely 2-lobed or capitate. Fruit a berry, enclosed by the inflated calyx. Seeds lenticular, numerous.

A genus of c. 100 species in North and South America, also in Asia; 8 species in Australia, 7 introduced, 1 considered native; 1 species introduced in Tasmania. Some species produce edible fruit for which they are sometimes cultivated.

**1 \* *Physalis peruviana*** L., *Sp. Pl.* ed. 2, 2: 1670 (1763)

*Cape Gooseberry*

*Physalis edulis* Sims, *Bot. Mag.* 27: t. 1068 (1807).

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1253, fig. 572a (1986); Conn, *Fl. New South Wales* 3: 369, Pl. 16 (1992); Smith & Walsh, *Fl. Victoria* 4: 343, fig. 66f (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 390 (2006).

Semi-woody, short-lived shrubs to c. 1 m high, sparsely to densely pubescent with simple or glandular hairs. Leaves alternate, arising from the angles of zig-zag branches, or 2 per node; petiole 1–5 cm long; lamina 5–9

cm long, 3–8 cm wide, broadly ovate, base cordate, younger leaves often  $\pm$  oblique, veins impressed on the adaxial surface, prominent on the abaxial surface, margins entire or irregularly, distantly and shallowly lobed, apex acuminate. Flowers on pedicels 5–12 mm long. Calyx 5–8 mm long, lobes 4–6 mm long, triangular-acuminate. Corolla dull yellow with 5 large brownish-purple blotches near the base. Style 5–10 mm long; stigma capitate. Fruiting calyx papery, 10-ribbed, 25–40 mm long, inflated, persistent and enclosing the fruit. Berry yellowish-green, 10–20 mm diam.,  $\pm$  spherical. Seeds yellowish. Flowering & fruiting Nov.–May.

Tas. (FUR, KIN, TSE, TSR); also naturalised in WA, SA, Qld, NSW, Vic.; native to South America. Occasionally cultivated as an ornamental and for its edible berries; doubtfully established in the south of the state, but occasionally escaping from cultivation and persisting in neglected gardens and waste places, from sea-level to about 250 m alt.

## 5 \* SALPICHROA

*Salpichroa* Miers, *London J. Bot.* 4: 321 (1845).

Scrambling or climbing perennial herbs; glabrous or pubescent with simple hairs; non-spinous. Leaves alternate, petiolate, sometimes 2 per node, but not truly opposite; lamina simple, entire. Flowers solitary in leaf axils, often arising together with a short lateral branch at the node, distant, bisexual, actinomorphic. Calyx deeply 5-lobed, scarcely accrescent in fruit; fruiting calyx soft. Corolla tubular or urceolate, 5-lobed, the lobes reflexed, valvate in bud. Stamens 5, equal, inserted in the throat of the corolla tube; staminodes absent; anthers 2-locular, dorsifixed, not cohering around the style, dehiscing by 2 longitudinal slits. Ovary 2-locular; stigma capitate. Fruit a succulent berry. Seeds lenticular, numerous.

A South American genus of about 20–25 species; 1 species naturalised in Australia.

1 \* *Salpichroa organifolia* (Lam.) Thell., *Mém. Soc. Sci. Nat. Math. Cherbourg* 38: 452 (1912)

*Pampas Lily-of-the-valley*

*Physalis organifolia* Lam., *Tabl. Encycl.* 3(1): 28 (1794).

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1253 fig. 572c (1986); Conn, *Fl. New South Wales* 3: 351 (1992); Jeanes, *Fl. Victoria* 4: 363, fig. 70a (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 391 (2006).

Scrambling, rhizomatous herbs, sparsely to densely pubescent with a stout, extensive rootstock; stems slender but tough, much branched and trailing up to 150 cm, older stems quadrangular. Leaves often 2 per node; petiole 0.5–3.0 cm long; lamina 1.0–1.5 cm long, 5–13 mm wide, ovate to ovate-rhombic, both surfaces sparsely to densely pubescent, base attenuate margins entire, apex obtuse to rounded. Flowers pendulous; pedicels slender 5–8 mm long, hirsute. Calyx 2–4 mm long, campanulate; lobes narrow-triangular, 1.0–2.5 mm long. Corolla white to creamish, urceolate, tube 6–8 mm long,  $\pm$  constricted at the throat and also below the middle near the attachment of the stamens, adaxial surface woolly-hairy at this level, lobes narrow-triangular, recurved, 2–3 mm long. Anthers 2 mm long, slightly exerted and surrounding the style. Ovary inserted on a thick, fleshy disc; style filiform, the lower portion hairy. Berry yellowish-cream, 12–15 mm long, ovoid-oblong. Seeds pale yellow, 1.5–2.0 mm diam., narrowly winged. Flowering & fruiting Oct.–Apr.

Tas. (TNS); also naturalised in WA, NT, SA, Qld, NSW, Vic.; apparently native to temperate South America and widely naturalised. Doubtfully naturalised in Tasmania where known only from three collections made at Burnie (1951–1952) and these were noted to be from plants that apparently were escapes from cultivation.

## 6 SOLANUM

*Solanum* L., *Sp. Pl.* 1: 184 (1753).

Herbs, shrubs or small trees, annual or perennial, sometimes trailing, occasionally climbing, armed with sharp prickles, or unarmed, pubescent with glandular, simple or stellate hairs, rarely quite glabrous. Leaves mostly petiolate, usually alternate or sometimes paired; lamina simple or pinnate, entire or variously lobed. Inflorescences cymose, often scorpioid, terminal, lateral, axillary or pseudo-axillary, sometimes leaf-opposed, rarely flower solitary. Flowers usually bisexual, actinomorphic but sometimes  $\pm$  zygomorphic. Calyx campanulate, rotate or cup-shaped, usually 5-lobed, often enlarging in fruit; fruiting calyx soft. Corolla stellate to rotate, rarely campanulate, usually 5-lobed, lobes folded in bud. Stamens 5, usually equal, inserted in throat of corolla; staminodes absent; anthers 2-locular, basifixed, sometimes cohering around style, or free, dehiscing by terminal slits or pores, rarely by longitudinal slits. Ovary usually 2-locular; stigma capitate or bifid. Fruit a berry, succulent or cartilaginous or hard, sometimes enclosed by the persistent calyx (not in Tas.). Seeds lenticular to sub-orbicular, usually numerous.

An almost cosmopolitan genus of about 1500 species found in warm to temperate regions, chiefly in Central and South America but also in Australia and South Africa. In Australia there are 117 (94 native, 87 endemic) species. In Tasmania there are 11 (3 native) species.

A number of species have edible fruits and tubers including *Solanum tuberosum* (Potato), *S. melongena* (Eggplant), *S. betaceum* (Tamarillo) and *S. muricatum* (Pepino), whilst some are often used as ornamental plants; however, many are toxic to varying degrees, particularly the fruit, and should be handled with caution.

Mature plants of many species show great variation, especially in leaf morphology and indumentum. Juvenile leaves often differ from adult leaves; in the key, leaf characters are derived mostly from the adult stage. Ripe fruits are essential for the determination of some species.

Key reference: Richardson *et al.* (2006).

- |   |                             |
|---|-----------------------------|
| 1. Plants with stellate hairs and long, scattered spines throughout   | 5 <i>S. marginatum</i>      |
| 1: Plants with simple or glandular hairs, stellate hairs and spines absent  | 2                           |
| 2. At least some leaves deeply lobed or divided, entire leaves may also be present  | 3                           |
| 2: Leaves entire or shallowly lobed   | 6                           |
| 3. Shrubs to 3 m high; leaves (5-)10-30 cm long, entire or $\pm$ evenly divided into 2-4(-6) distant, broad-linear lobes; flowers 2-5 cm diam.; mature berries green or yellowish-orange, 2.0-3.5 cm diam.                | 4                           |
| 3: Prostrate or scrambling herbs or shrubs; leaves 3-5(-8) cm long, entire, or with 1-2 basal lobes, or irregularly pinnate to pinnatisect; flowers 0.8-1.5 cm diam.; mature berries red or olive-brown, 1.0-1.5 cm diam. | 5                           |
| 4. Corolla lobes acute to rounded; mature berry green with whitish markings, $\pm$ spherical  | 3 <i>S. vesicum</i>         |
| 4: Corolla lobes emarginate; mature berry yellowish-orange, ellipsoid   | 4 <i>S. laciniatum</i>      |
| 5. Lower leaves entire, upper leaves with 1-4 $\pm$ uneven basal lobes; mature berry bright red   | 1 <i>S. dulcamara</i>       |
| 5: All leaves irregularly pinnatifid to pinnatisect; mature berry pale olive-brown  | 11 <i>S. triflorum</i>      |
| 6. Mature berry red; peduncle usually 1-2 flowered  | 10 <i>S. pseudocapsicum</i> |
| 6: Mature berry black, green or green with purplish markings; peduncle mostly with 2 or more flowers  | 7                           |
| 7. Plants sprawling; mature berry green or green with purplish markings   | 8                           |
| 7: Plants mostly erect; mature berry black  | 9                           |

8. Indumentum mainly of non-glandular hairs; calyx 2–3 mm long, slightly enlarged in fruit, lobes 0.5–1.0 mm long; berry 8–10 mm diam. 8 *S. opacum*
- 8: Indumentum of glandular hairs; calyx 1.5–2.5 mm long, accrescent in fruit, lobes 1.0–2.5 mm long, broad-triangular; berry 6–9 mm diam. 9 *S. physalifolium*
9. Mature berry very glossy; > 40 seeds per fruit 7 *S. nodiflorum*
- 9: Mature berry dull; < 40 seeds per fruit 10
10. Stigma 2–3 mm above anther tips; corolla 15–20 mm diam. 2 *S. furcatum*
- 10: Stigma enclosed or not more than 1 mm above anther tips; corolla 8–12 mm diam. 6 *S. nigrum*

**1 \* *Solanum dulcamara* L., *Sp. Pl.* 1: 185 (1753)**

*Bittersweet, Woody Nightshade*

*Illustration:* Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 393 (2006).

Straggling or climbing woody perennials with slender stems to 0.5–1+ m; stems sparsely pubescent with simple hairs, older stems glabrescent, finely ridged; prickles absent. Leaves: petiole 1–4 cm long, lamina (2–)5–11 cm long, (1.5–)3–5 cm wide, lobed or entire, base rounded, cordate or sometimes hastate, glabrous to sparsely pubescent, concolorous, apex acuminate; lamina of lower leaves entire; lamina of upper leaves ± divided with a large terminal lobe and 1–4 smaller but deep lobes or leaflets nearer the base. Inflorescences cymose, 4–10 flowered, not deflexed at maturity; peduncles 1–4 cm long; pedicels 0.5–10 mm long. Calyx 2–3 mm long, lobes 0.25–0.5 mm long, apex rounded. Corolla lavender-purple, rarely whitish, 8–10 mm diam., stellate, lobes lanceolate, glabrous or the apices of lobes minutely ciliolate. Anthers 3.0–4.5 mm long. Stigma exerted beyond tips of anthers by 1–2 mm. Berry bright red, ovoid, c. 8 mm long. Seeds fawn, c. 1.5–2.0 mm long; stone-cell granules absent. Flowering & fruiting Dec.–Apr.

Tas. (TCH, TNS, TSE); native to Asia, North Africa & Europe. Uncommon, occasional along creek banks, in wet drains and ditches, and in damp, waste places, from sea-level to c. 350 m alt.

**2 \* *Solanum furcatum* Dunal ex Poir., *Encycl.* (Lamarck) Suppl. 3: 750 (1814)**

*Forked Nightshade, Broad Nightshade*

*Illustration:* Jeanes, *Fl. Victoria* 4: 350, fig. 67c (1999).

Perennial herbs with slender, straggling stems to c. 1 m long; stems narrowly winged, sparsely pubescent with simple hairs; prickles absent. Leaves: petiole 1–3 cm long; lamina 3–10 cm long, 2–5 cm wide, ovate-lanceolate, slightly discoloured, both surfaces sparsely pubescent, base cuneate, margins entire to shallowly lobed or sinuate-toothed, apex acute to obtuse. Inflorescences usually branched or forked, with up to 24 flowers; peduncles 1–3 cm long; pedicels 0.3–1.0 mm long. Calyx 2–4 mm long, lobes 1.0–1.5 mm long, broad-triangular, often rounded at the apex. Corolla white with yellow centre, occasionally tinged purple, 15–20 mm diam., stellate, lobes triangular, margins and apices of lobes minutely ciliolate. Anthers 2.2–3.3 mm long. Stigma exerted beyond tips of anthers by c. 2–3 mm. Berry dull purplish-black, spherical, 6–9 mm diam., less than 40 seeds per fruit. Seeds light brown, c. 2 mm long; stone-cell granules to 1.2 mm wide. Flowering & fruiting Nov.–May.

Tas. (KIN); also naturalised in Vic; native to S America. The species is questionably naturalised, there being only five records for the state, all in the north-west of the main island, two from Smithton and three from near Edith Creek, from sea-level to c. 100 m alt.

**3 *Solanum vescum* F.Muell., *Trans. & Proc. Victorian Inst. Advancem. Sci.* 1: 69 (1855)**

*Gunyang*

*Solanum vescum* var. *davidii* Geras., *Rastitel'nost Resursy (Akademiya nauk SSSR) Leningrad* 7: 424 (1971).

*Illustrations:* Conn, *Fl. New South Wales* 3: 358 (1992); Jeanes, *Fl. Victoria* 4: 354, fig. 68d (1999).

Erect, much-branched shrubs to c. 2 m high, glabrous except for minute simple and glandular hairs on very young parts and flowers; prickles absent. Leaves with lamina lobed or entire, base attenuated, concolorous, glabrous, apex acuminate. Lobed leaves: petiole to 3 cm long; lamina 10–50 cm long, broad-ovate, lobes 2–



4(-8), 5-10 cm long, 0.8-1.2 cm wide. Entire leaves: petiole 0.5-1.0 cm long, often present as a narrow decurrent wing; lamina 5-15 cm long, 0.5-1.5 cm wide, linear-lanceolate. Inflorescences simple or forked at the base, flowers numerous; peduncle absent or to 7 cm long; pedicels 2-3 cm long, elongating to 3-5 cm in fruit. Calyx 3.5 mm long, lobes 2-3 mm long, triangular. Corolla violet-dark blue, mostly 35-40 mm diam., ± rotate, not, or scarcely notched, glabrous. Anthers 3-5 mm long. Berry green to yellowish-green, often mottled, ± spherical, 20-25 mm diam. Seeds grey-brown, 2-3 mm long; stone-cell granules 1-3 mm long. Flowering & fruiting Jul.-Apr.

Tas. (BEL, FUR, KIN, TCH, TNM, TNS, TSE, TSR, TWE); also in Qld, NSW, Vic. Widespread but local in damp forests, shrubberies and waste places, often a primary coloniser in recently cleared or burnt areas, from sea-level to c. 750 m alt.

#### 4 *Solanum laciniatum* Aiton, *Hortus Kew.* (W.Aiton) 1: 247 (1789)

*Kangaroo Apple*

*Solanum aviculare* sensu G.Bentham *Fl. Austral.* 4: 447 (1868); J.D.Hooker, *Bot. Antarct. Voy. III. (Fl. Tasman.)* 1: 182 (1852); L.Rodway, *Tasman. Fl.* 137 (1903), non G.Forst. (1786).

*Illustrations:* Purdie *et al.*, *Fl. Australia* 29: 111, fig. 33 (1982); Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1265, fig. 576a (1986); Conn, *Fl. New South Wales* 3: 358 (1992); Jeanes, *Fl. Victoria* 4: 354, fig. 68b (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 394 (2006).

Erect, much-branched shrubs to c. 3 m high; stems often purplish, glabrous except for minute glandular hairs on young growth; prickles absent. Leaves with lamina lobed or entire, base attenuated, concolorous, glabrous, apex acuminate. Lobed leaves: petiole 1-4 cm long; lamina 9-38 cm long, broad-ovate, lobes 2-4(-6), 2-13 cm long, 0.3-2.0 cm wide. Entire leaves: petiole 0.5-1.0 cm long; lamina 5-20 cm long, 1-4 cm wide, lanceolate. Inflorescences simple or forked at the base, up to 10-flowered; peduncles 0-4 cm long; pedicels 1.5-3.0 cm long. Calyx 4-6 mm long, lobes 2-3 mm long, triangular, enlarging in fruit. Corolla deep purple-blue, 30-50 mm diam., rotate, lobes notched, glabrous. Anthers 3-4 mm long. Berry yellow to orange-yellow, 15-20 mm diam., ovoid to ellipsoid. Seeds reddish-brown, 2.0-2.3 mm long; stone-cell granules usually 2.0-2.5 mm long. Flowering & fruiting all year.

Tas. (BEL, FUR, KIN, TNM, TNS, TSE, TSR, TWE); also in WA (naturalised), SA, NSW, Vic., New Zealand. Widespread but infrequent in damp, shaded forests, shrubberies and along creek banks, often colonising recently burnt or disturbed areas, from sea-level to c. 400 m alt.

#### 5 \* *Solanum marginatum* L.f., *Suppl. Pl.* 147 (1782)

*White-edged Nightshade*

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1265, fig. 576d (1986); Jeanes, *Fl. Victoria* 4: 358, fig. 69i (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 395 (2006).

Much branched, spreading shrubs to c. 2 m high, most parts dull green to silvery white with dense, minute, stellate hairs; slender, yellowish, straight prickles to 10 mm long present on stems and leaves. Leaves: petiole 1.5-2.5 mm long; lamina, 10-15 cm long, 6-10 cm wide, elliptic to ovate, 6-10-lobed, the apex rounded to obtuse, discolorous, adaxial surface sparsely pubescent, becoming pale blue-green and glabrescent but the margins with persistent, silvery stellate hairs, abaxial surface densely pubescent, both surfaces with scattered, long, slender prickles, mainly along the midrib and major lateral veins, base obliquely cordate. Inflorescences 2-10 flowered, often crowded towards the apices of the stems; peduncle absent; pedicels 2.0-2.5 cm long; distal flowers male, proximal flowers bisexual. Calyx 8-10 mm long, lobes 5-10 mm long, unequal, narrow-triangular to oblong. Corolla white with purplish striations, 30-40 mm diam., rotate, abaxial surface pubescent. Anthers 5-7 mm long. Berry marbled green and white when immature, pale to deep yellow when ripe, spherical, 3-5 cm diam., glabrous, very hard. Seeds light brown, 2.0-2.5 mm long; stone-cell granules absent. Flowering & fruiting Jul.-Apr.

Tas. (TNM, TSE); also naturalised in WA, SA, Qld, NSW, Vic., New Zealand; native to South Africa and the Mediterranean region. Rare, very sparingly naturalised in Tasmania, local in waste places and some older, neglected gardens, from sea-level to c. 150 m alt. A declared weed for the purpose of the *Weed Management Act 1999*.

**6 \* *Solanum nigrum* L., *Sp. Pl.* 1: 186 (1753)***Black Nightshade, Blackberry Nightshade*

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1267, fig. 577a (1986); Conn, *Fl. New South Wales* 3: 356 (1992); Jeanes, *Fl. Victoria* 4: 350, fig. 67e (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 395 (2006).

Erect to spreading herbs or short-lived perennial shrubs to c. 1 m high with dark green or purple-green angular stems, the angles of the stems prominent and either smooth or rough with raised tubercles; prickles absent. Leaves: petiole 2–3(–7) mm long; lamina 4–13 cm long, 3–7 mm wide, ovate, base truncate to cuneate, concolorous, both surfaces sparsely pubescent to glabrescent, margins entire or shallowly lobed, apex acute or acuminate. Inflorescences simple, 4–12 flowered; peduncle 1–2 cm long; pedicels to 10 mm long. Calyx 1.5–2.5 mm long, lobes 0.3–1.2 mm long, triangular. Corolla white, 8–12 mm diam., stellate, lobes ovate to oblong, abaxial surfaces papillose-puberulose. Anthers c. 2 mm long. Stigma enclosed or not more than 1 mm above anther tips. Berry dull black to purplish-black, spherical, 6–8(–10) mm long, usually less than 40 seeds per fruit. Seeds fawn, 1.8–2.4 mm long; stone-cell granules rarely present. Flowering & fruiting all year.

Tas. (BEL, FUR, KIN, TNM, TNS, TSE, TSR); also naturalised in WA, NT, SA, Qld, NSW, Vic.; native to Europe. Widespread and frequent weed of gardens, agricultural sites, disturbed areas and waste places, from sea-level to c. 150 m alt.

**7 \* *Solanum nodiflorum* Jacq., *Collectanea* [Jacquin] 2: 288 (1789)***Glossy Nightshade*

*Solanum americanum sensu* A.M.Buchanan, *A Census of the Vascular Plants of Tasmania*, ed. 4: 53 (2005) *non* Mill. (1768) [for discussion see Manoko *et al.* (2007), APC, APNI].

*Illustrations:* Conn, *Fl. New South Wales* 3: 356 (1992); Jeanes, *Fl. Victoria* 4: 235, fig. 44c (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 392 (2006).

Short lived perennial shrubs to c. 130 cm; stems green or purplish, glabrous or sparsely pubescent with simple hairs, often angled or narrowly winged; prickles absent. Leaves: petiole 1–4 (–8) cm long; lamina 2–12 cm long, 1–7 mm wide, ovate to ovate-lanceolate, base cuneate, concolorous or slightly discolourous, both surfaces sparsely pubescent to glabrescent, margins entire or shallowly lobed, apex acute to acuminate. Inflorescences simple, 4–12 flowered; peduncle to 2.5 cm long, lengthening in fruit; pedicels 5–8 mm long. Calyx 1–2 mm long, lobes 0.4–1.2 mm long, rounded. Corolla white or purplish with a yellow centre, 6–8(–9) mm diam., stellate lobes ovate to oblong, apices minutely ciliate-glabrescent. Anthers 1.5–2.0 mm long. Berry purple-black, very glossy, spherical, 6–9 mm diam., usually more than 40 seeds per fruit. Seeds fawn or purplish, 1.0–1.6 mm long; stone-cell granules c. 0.5 mm diam. Flowering & fruiting Sep.–Apr.

Tas. (FUR); also naturalised in WA, NT, Qld, NSW, Vic.; possibly native to Qld, NSW. The species is doubtfully naturalised in Tasmania and known only from a single collection made in 1993 from the West Tamar River, in northern Tasmania.

**8 *Solanum opacum* A.Braun & Bouché, *Index Seminum Hort. Berol.* 8: 18 no. 38 (1853)***Greenberry Nightshade*

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1267, fig. 577d (1986); Conn, *Fl. New South Wales* 3: 356 (1992); Jeanes, *Fl. Victoria* 4: 350, fig. 67b (1999).

Procumbent to prostrate annual herbs; stems often twining, c. 1 m long, green, pubescent with small, simple non-glandular hairs; prickles absent. Leaves: petiole 1–4 cm long; lamina 3–7 cm long, 1–4 cm wide, ovate-lanceolate, base cuneate to attenuated, concolorous, both surfaces sparsely pubescent to glabrescent, margins entire or ± shallowly and irregularly lobed, apex acute to acuminate. Inflorescences simple, 2–5 flowered; peduncle 1.5–2.0 cm long, deflexed from base in fruit. Flowers on pedicels 7–10 mm long. Calyx 2–3 mm long, lobes 0.5–1.0 mm long, broadly triangular to rounded, ± enlarged in fruit. Corolla white, 8–12 mm diam., stellate, lobes ovate to oblong, margins minutely ciliate. Anthers 1.5–2.0 mm long. Berry green,

spherical, 8–10 mm diam. Seeds fawn or green, 1.5–2.2 mm long; stone-cell granules c. 0.8 mm diam. Flowering & fruiting Nov.-Jul.

Tas. (BEL, FUR, KIN, TNS); also in SA, Qld, NSW, Vic.; New Guinea. Rare, known only from a small number of collections from King Island and the north of the state, from sea-level to c. 100 m alt. Listed as *Endangered* under *The Tasmanian Threatened Species Protection Act 1995*.

**9 \* *Solanum physalifolium*** Rusby, *Mem. Torrey Bot. Club* 6: 88 (1896), var. ***nitidibaccatum*** (Bitter) Edmonds, *Bot. J. Linn. Soc.* 92(1): 27 (1986) *Cherry Nightshade, Hoe Nightshade, Hairy Nightshade*

*Solanum nitidibaccatum* Bitter, *Repert. Spec. Nov. Regni Veg.* 11: 208 (1912). *Solanum sarrachoides sensu* R.W.Purdie *et al.*, *Fl. Australia* 29: 100 (1982), *non* Sendtner (1846).

*Illustrations:* Conn, *Fl. New South Wales* 3: 356 (1992); Jeanes, *Fl. Victoria* 4: 350, fig. 67g (1999).

Much branched, ascending to decumbent annual herbs; stems pale to dark green, 50–70 cm long, pubescent to somewhat viscid with glandular hairs; prickles absent. Leaves: petiole 0.5–2.0 cm long; lamina usually 4–6 cm long, 1–4 cm wide, ovate, base truncate to cuneate, slightly discolorous, both surfaces sparsely pubescent to glabrescent, margins entire or shallowly lobed, apex acute to acuminate. Inflorescences simple, 2–10 flowered; peduncle c. 1 cm long; pedicels 4–10 mm long. Calyx 1.5–2.5 mm long, accrescent in fruit, lobes 1.0–2.5 mm long, broad-triangular. Corolla white, 5–10 mm diam., stellate, lobes ovate to oblong, apices minutely pubescent-glabrescent. Anthers erect, free, 1.5–2.0 mm long. Berry green to purplish-green, sometimes with whitish-yellow mottling, broadly ovoid, 6–9 mm diam. Seeds light brown, 1.5–2.0 mm long; stone-cell granules 0.4–0.8 mm diam. Flowering & fruiting Dec.-Apr.

Tas. (TNS, TSE, TSR); also naturalised in SA, Qld, NSW, Vic.; native to South America. An uncommon weed of roadsides, waste places and neglected gardens, from sea-level to c. 100 m alt.

**10 \* *Solanum pseudocapsicum*** L., *Sp. Pl.* 1: 184 (1753) [as *S. pseudo-capsicum*]

*Winter Cherry, Jerusalem Cherry*

*Illustrations:* Symon, *Fl. S. Austral.* [J.H.Black], ed. 4, 3: 1271, fig. 578a (1986); Conn, *Fl. New South Wales* 3: 359 (1992); Jeanes, *Fl. Victoria* 4: 354, fig. 68g (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 396 (2006).

Small, erect shrubs to c. 1.5 m high, glabrous or sparsely pubescent on younger parts; prickles absent. Leaves: petiole 0.5–1.0 cm long; lamina 4–10 cm long, 1–3 cm wide, oblong-lanceolate, rarely oblanceolate, concolorous, abaxial surface with veins prominent, base attenuated, margins slightly undulate, apex acute to acuminate. Inflorescences simple or forked; peduncle absent or to 1 cm long, 1–2 flowered. Flowers on pedicels c. 10 mm long. Calyx 4–5 mm long, lobes 2–3 mm long, narrow-triangular. Corolla white, 10–15 mm diam., deeply stellate, lobes ovate, glabrous. Anthers 2–4 mm long. Stigma exerted. Berry bright red-orange, spherical, 10–15 mm diam. Seeds yellowish, 3–4 mm long; stone-cell granules absent. Flowering & fruiting Feb.-May.

Tas. (BEL, FUR, TNM); also naturalised in WA, SA, Qld, NSW, Vic.; native to South America. All parts of the plant are toxic. Once widely cultivated as a garden ornamental now only rarely found in older gardens and as an escape in disturbed urban bushland and waste places, from sea-level to c. 100 m alt.

**11 \* *Solanum triflorum*** Nutt., *Gen. N. Amer. Pl.* [Nuttall] 1: 128 (1818)

*Cutleaf Nightshade*

*Illustrations:* Purdie *et al.*, *Fl. Australia* 29: 111, fig. 34 (1982); Symon, *Fl. S. Austral.* 3: 1273, fig. 579d (1986); Conn, *Fl. New South Wales* 3: 357 (1992); Jeanes, *Fl. Victoria* 4: 350, fig. 67h (1999); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 396 (2006).

Procumbent, spreading annual herbs, green, sparsely pubescent with simple hairs; stems sprawling to c. 1 m long, sometimes rooting at the nodes; prickles absent. Leaves: petiole 0.5–1.0 cm long; lamina 2–4 cm long, 1.0–1.5 cm wide, elliptic-ovate or pinnatifid to pinnatisect, margins thickened and recurved ± concolorous, sparsely hairy to glabrescent, base attenuated, apex acute to apiculate. Inflorescences simple, 1–3-flowered,

usually with a small, terminal leaflet; peduncle 1–3 cm long; pedicels 3–10 mm long. Calyx 3–5 mm long, lobes 1.5–2.0 mm long, lanceolate to narrow-triangular, reflexing slightly in fruit. Corolla white or pale lavender, 5–6 mm diam., stellate, lobes pubescent. Anthers c. 2.5 mm long. Berry pale olive-brown, spherical. Seeds pale brownish-yellow; stone-cell granules c. 1–2 mm long. Flowering & fruiting Dec.–Mar.

Tas. (TSE); also naturalised in WA, SA, Qld, NSW, Vic.; native to North America. Rare and doubtfully naturalised in Tasmania where known only from a few collections, mainly near Seven-mile Beach in the south-east of the state. Found growing in sandy soils near sea level.

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- 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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