



79 VIOLACEAE ¹

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Herbs, shrubs or small trees. Leaves usually alternate, rarely opposite, petiolate, usually stipulate; stipules free or adnate to the petiole; lamina simple, entire or variously dissected, toothed or lobed. Inflorescence usually axillary, a cyme or raceme or sometimes a panicle, or flowers solitary; pedicels bearing live bracteoles. Flowers usually bisexual, actinomorphic or zygomorphic, hypogynous, often cleistogamous, 5-merous, in zygomorphic flowers the lowest petal commonly prolonged into a spur at the base. Stamens (3–)5, filaments very short, free or \pm connate anthers free or connate around the ovary, connective often prolonged above into a membranous appendage, some or all with a dorsal nectary. Ovary glabrous or pubescent, unilocular with 3(–5) parietal placentae; style simple or lobed. Fruit a loculicidal capsule or a berry. Seeds 2-many, smooth or minutely rugose, often arillate, with endosperm.

A cosmopolitan family of about 23 genera and 800–900 species: 3 genera (all native) and about 30 species (about 16 endemic, 3 naturalised) in Australia. Violaceae are placed in the very large order Malpighiales but the relationships of the family are not clear. They are in a group of families that include Salicaceae and Passifloraceae (see Stevens 2007 & references cited therein).

Key references: Adams & George (1982); Entwisle (1996); James (2000).

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

1: Herbs; flowers markedly zygomorphic; fruit a capsule

1 *Viola*

1: Shrubs; flowers only slightly zygomorphic; fruit a berry

2 *Melicytus*

1 VIOLA

Viola L., *Sp. Pl.* 1: 293 (1753).

Synonymy: *Erpetion* DC. ex Sweet, *The British Flower Garden* 2: t. 170 (1826).

Annual, biennial or perennial herbs, glabrous or pubescent. Leaves alternate, in basal rosette or along stem, petiolate; stipules free or adnate to the petiole; lamina orbicular, reniform or lanceolate, almost entire, serrate or crenate, the teeth glandular. Flowers axillary, solitary, on slender scapes (pedicels) bearing 2 small bracteoles, zygomorphic, 5-merous. Sepals entire or minutely toothed-fimbriate, with basal appendages (spurs). Petals spreading, usually white or cream and/or purple; anterior (lowest) petal spurred or saccate at the base; lateral petals often bearded within, rarely glabrous. Staminal filaments short or absent, the connective prolonged above; the two anterior stamens each with a dorsal nectary. Ovary glabrous or pubescent; styles often bent near the base; stigma clubbed, lobed or truncate. Fruit a globose to c. cylindrical capsule, glabrous or pubescent, elastically dehiscent into 3 boat-shaped valves, sometimes explosively, with 2-many seeds.

A genus of about 450 species, mainly in temperate regions; about 13 species (3 introduced) in Australia. Several species are widely cultivated and may self seed and persist in gardens, eg. *V. arvensis* Murray (Field Pansy, see below), *V. odorata* L. (Sweet Violet; Europe, N Africa, Middle East), Pansy (various *V. spp.*) and the native *V. hederacea* (Ivy-leaved Violet, see below).

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

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|---|-----------------------------|
| 1. Stipules up to 4 cm long, green, deeply lobed; plants annual | 1 <i>V. arvensis</i> |
| 1: Stipules small, brownish, entire or toothed but not deeply lobed; plants perennial | 2 |
| 2. Plants lacking stolons; anterior petal with a short basal spur | 3 |
| 2: Plants stoloniferous; anterior petal ± saccate at the base but lacking a spur | 5 |
| 3. Leaf lamina deeply cordate at the base; flowering stems ascending, up to 30 cm long | 2 <i>V. caleyana</i> |
| 3: Leaf lamina with base truncate or shortly cuneate; flowering stems up to 18 cm long | 4 |
| 4. Leaf lamina broad-ovate to broad-triangular; corolla 5–8 mm long, white with purple vein | 3 <i>V. cunninghamii</i> |
| 4: Leaf lamina oblong or lanceolate; corolla 10–17 mm long, purple, violet or almost white | 4 <i>V. betonicifolia</i> |
| 5. Corolla cream or very pale mauve inside, mostly concolorous; lateral petals glabrous | 6 |
| 5: Corolla blackish-purple to violet inside or discoloured; lateral petals bearded | 8 |
| 6. Corolla cream, minute, downfacing, hidden among the leaves; petals scarcely exceeding the calyx; low elevation sites | 5 <i>V. cleistogamoides</i> |
| 6: Corolla white to very pale mauve and concolorous inside, violet or blue-stained outside, > 6 mm diameter, forward-facing at anthesis, petals extending well beyond the calyx; montane to subalpine | 7 |
| 7. Leaf base cordate; lamina reniform or semicircular; petal tips truncate to emarginate | 8 <i>V. curtisiae</i> |
| 7: Leaf base decurrent; lamina ovate to rhomboidal; petal tips rounded | 10 <i>V. improcera</i> |
| 8. Scapes usually shorter than the leaves; corolla blackish-purple at least in bud, often paler at maturity | 9 <i>V. fuscoviolacea</i> |
| 8: Scapes longer than leaves; corolla purple with paler apices | 8 |
| 9. Leaves coriaceous, brittle, glossy dark green; lamina deltoid or rhomboidal with acute apex and base decurrent or truncate; occurring only in areas of ultramafic geology on the west coast | 6 <i>V. serpenticola</i> |
| 9: Leaves soft-textured, pale to mid-green; lamina reniform with base cordate (small specimens can have a decurrent base); widespread | 7 <i>V. hederacea</i> |

1 * *Viola arvensis* Murray, *Prodr. Stirp. Gott.* 73 (1770)

Field Pansy

Illustrations: Entwisle, *Fl. Victoria* 3: 365, fig. 74a (1996); James, *Fl. New South Wales* 1, rev. edn: 437 (2000); Richardson *et al.*, *Weeds of the South-East, an Identification Guide for Australia* 406 (2006).

Annual herb; stems decumbent to erect, to 20 cm high, angular, with an indumentum of short retrorse hairs; lacking stolons. Leaf: stipules pinnatifid, lower lobes linear to oblanceolate, mid-lobe leaf-like; petiole 5–25 mm long; lamina ovate to elliptic, c. 10–50 mm long, base truncate or cuneate, apex obtuse, margins crenate to serrate, sparsely hairy, the hairs short, appressed. Scapes to 8 cm long, longer than leaves, bracteoles in the upper third. Sepals lanceolate, 6–8(–12) mm long, ciliate or glabrous, basal spurs up to 4 mm long in fruit. Petals cream or yellow, often with purple veins, 6–10(–14) mm long; lower petal with a spur up to 4 mm long; lateral petals bearded. Capsule 5–7 mm long. Flowers & fruiting Aug.-Jan.

Tas. (TNS, TSE); also naturalised in NSW, Vic.; native of W Asia, Europe, N Africa. Scattered across northern and eastern Tasmania as a weed of pasture, arable land and gardens. A variable species for which there are a number of subspecies recognised.

2 *Viola caleyana* D. Don, *Gen. Hist.* 1: 329 (1831)

Swamp Violet

Illustrations: Entwisle, *Fl. Victoria* 3: 365, fig. 74e (1996); James, *Fl. New South Wales* 1, rev. edn: 437 (2000).

Perennial herb, usually glabrous; stems weak, straggling or ascending, up to 30 cm long; lacking stolons. Leaf: stipules to 9 mm long, brown, lanceolate, minutely toothed; petiole up to 10 cm long; lamina trian-

gular-ovate to almost orbicular, 2–5 cm long, margins shallowly crenate, base deeply cordate, upper surface occasionally with scattered short hairs towards the margins. Pedicels usually longer than the leaves, bracteoles at about the middle. Sepals lanceolate, 3–5 mm long, basal spurs up to 1.5 mm long. Petals white, rarely pale violet, 8–10 mm long; lower petal with a short broad spur; lateral petals sometimes sparsely bearded. Capsule 7–10 mm long. Flowering Dec.-Jan.; fruiting Jan.-May.

Tas. (BEL, TNM, TNS, TSE); also NSW, Vic. Rare and scattered across state; found in wetter areas such as stream banks, along drains and among rocks up to 250 m alt.

3 *Viola cunninghamii* Hook.f., *Bot. Antarct. Voy. II. (Fl. Nov.-Zel.)* 1: 16 (1852)

Viola cunninghamii var. *radicata* Hook.f., *Bot. Antarct. Voy. II. (Fl. Nov.-Zel.)* 1(1): 16 (1852).

Illustration: Kirkpatrick, *Alpine Tasmania* 98, fig. 43d (1997).

Glabrous perennial herb with a vertical rootstock often branching shortly at the apex; lacking stolons. Leaves tufted; stipules brown, the free portion 3.5–4 mm long, entire or gland-toothed; petioles c. 0.5–6 cm long; lamina broadly ovate to broad triangular, base truncate or shortly cuneate, 4–25 mm long, 3–20 mm wide, margins with 3–5 shallow crenations, the teeth incurved, gland-tipped. Scape 2.5–6 cm long, longer than leaves. Sepals 3–5 mm long, the two lowest often broader than the rest, narrow to broad oblong. Petals white with purple veins, 5–8 mm long; lower petal with a short blunt spur; lateral petals sparingly bearded. Capsule 5–8 mm long. Flowering Nov.-Jan.; fruiting ?-Feb.

Tas. (TCH, TSR); also New Zealand. A rare species found at higher elevations, in the Central Highlands, Mt Field, etc, on the margins of creeks and rivers, and in alpine shrubberies and bogs, at 800–1100 m altitude.

4 *Viola betonicifolia* Sm., *Cycl. (Rees)* 37, no. 7 (1817) subsp. **betonicifolia**

Showy Violet

Viola betonicifolia var. *longiscapa* DC., *Prodr. (Candolle)* 1: 294 (1824); *V. longiscapa* (DC.) G.Don, *Gen. Hist.* 1: 322 (1831). *Viola phyteumifolia* G.Don, *Gen. Hist.* 1: 322 (1831) [as *V. phyteumaefolia*]. *Viola betonicaefolia* Benth., *Fl. Austral.* 1: 99 (1863), orth. var.

Illustrations (often as *V. betonicifolia*): Adams & George, *Fl. Australia* 8: 90, fig. 25 (1982); Seppelt, *Fl. S. Austral.* 2: 869, fig. 452a (1986); Entwisle, *Fl. Victoria* 3: 365, fig. 74d (1996); Kirkpatrick, *Alpine Tasmania* 98, fig. 43e (1997); Corrick & Fuhrer, *Wildflowers of Victoria* 235, fig. 819 (2000); Gilfedder *et al.*, *The Nature of the Midlands* 76 (2003); James, *Fl. New South Wales* 1, rev. edn: 437 (2000); Whiting *et al.*, *Tasmania's Natural Flora* 340 (2004).

Glabrous perennial herb, lacking stolons, rootstock short, erect. Leaves tufted in a basal rosette; stipules brown, to 7 mm long, adnate to the petiole, entire or lacinate; petioles (1–)2–15 cm long; lamina 1–6 cm long, 0.8–2.5 cm wide, lanceolate, trullate or occasionally ovate, base cuneate or truncate, apex obtuse, margins shallowly crenate, decurrent down the petiole, lower surface sometimes purplish. Scapes usually longer than the leaves, up to 18 cm long, bracteoles in the lower half. Sepals lanceolate to ovate, 3–6 mm long, the lower 2 often wider than the rest, basal spurs short. Petals purple, violet or almost white, (7–)10–17 mm long; lower petal with short blunt spur; lateral petals bearded. Capsule 7–12 mm long. Flowering Oct.-Mar.; fruiting Dec.-Mar.

Tas. (all regions except MIS); also SA, Qld, NSW, Vic.; also Papua New Guinea. Widespread across the island of Tasmania, mainly in central to eastern areas. Found in damp areas in open forest, grass and heathland, river and stream banks, rocky river beds, near sea level to c. 1400 m alt. The other subspecies, subsp. *novaguineensis* D.M.Moore, occurs in Queensland and Papua New Guinea.

5 *Viola cleistogamoides* (L.G.Adams) Seppelt, *Fl. S. Austral. (ed. 4)* 2: 870 (1986)

Viola hederacea subsp. *cleistogamoides* L.G.Adams, *Fl. Australia* 8: 386 (1982).

Illustrations: Seppelt, *Fl. S. Austral.* 2: 869, fig. 452b; 870, fig. 453a (1986); Entwisle, *Fl. Victoria* 3: 365, fig. 74i (1996); Corrick & Fuhrer, *Wildflowers of Victoria* 235, fig. 820 (2000); James, *Fl. New South Wales* 1, rev. edn: 439 (2000).

Glabrous perennial herb; stems short, erect; stolons well developed. Leaves: stipules red-brown, to 3 mm long, glandular-laciniate; petioles narrowly winged, 5–20 mm long; lamina broadly ovate to rhomboid, 5–10(–15) mm long, 4–11 mm wide, base cuneate, apex obtuse, margins with 1–2(–3) coarse rounded incurved teeth. Scapes 5–25(–50) mm long, usually shorter than the leaves, bracteoles above the middle. Sepals lanceolate, 1.6–3.5 mm long, basal spurs small. Petals cream, usually with a brownish or white central streak, 2.0–2.3(–4) mm long; lower petal c. 1 mm wide, without spur; lateral petals bearded. Capsule 3–5 mm long, seeds ovoid 1.0–1.5 mm long, blackish at maturity. Flowering Sep.–Dec.; fruiting Sep.–Dec. (Mar.).

Tas. (BEL, FLI, KIN, TCH, TNM, TSE); also SA, NSW, Vic. Found mostly in coastal and near-coastal areas of the eastern half of the state in open forest, heath and sedgeland, stable dunes, frequently in damp situations, near sea level to c. 250 m alt.

6 *Viola serpentinicola* de Salas, *Mulleria* 36: 113 (2018)

Serpentine Violet

Perennial, often mat-forming, stoloniferous herb; stems vertically contracted; stolons well-developed. Leaves tufted, appearing to form a basal rosette; stipules triangular to narrowly triangular, 4–6(–7) mm long; petiole longer than lamina, (5–)15–30(–60) mm long, glabrous, often tinged red; lamina coriaceous and brittle, discolorous with adaxial surface glossy dark green, deltoid to rhomboidal, sometimes reniform in etiolated specimens, base truncate to cuneate, often decurrent, apex acute or obtuse, rarely rounded, sometimes apiculate, margins distinctly crenate, (5–)7–15(–20) mm long, (5–)9–20(–25) mm wide. Scape (1–)3–8(–12) cm tall, much longer than the leaves, glabrous or hirsute; bracteoles near or above the middle, 4–5 mm long. Sepals lanceolate, 3.5–4.5 mm long, 1.0–1.3 mm wide, basal spur very short. Corolla markedly discolorous, violet near the center and much paler at the apices; petals 5–9 mm long, apices slightly emarginate to rounded; anterior petal rectangular to obovate, lacking a spur, with 3 main veins; lateral petals reflexed to moderately twisted, bearded, beard sometimes very scant. Capsule 6–7 mm long, green mottled purple. Flowering & fruiting Oct.–Mar.

Tas. (TWE), endemic. Endemic to areas of serpentinite geology in western Tasmania, where it is common to abundant, particularly on exposed ground and areas of disturbance such as tracks, roadsides and quarries.

7 *Viola hederacea* Labill., *Nov. Holl. Pl. Spec.* 1: 66, t. 91 (1805)

Ivy-leaved Violet, Ivyleaf Violet

Erpetion hederaceum (Labill.) G. Don, *Gen. Hist.* 1: 335 (1831); *Viola hederacea* var. *genua* Domin, *Biblioth. Bot.* 89(4): 981 (1930), *nom. inval.*

Illustrations: Seppelt, *Fl. S. Austral.* 2: 869, fig. 452c; 870, fig. 453b (1986); Entwisle, *Fl. Victoria* 3: 365, fig. 74f–g (1996); Cameron, *A Guide to Flowers and Plants of Tasmania*, 3rd edn, 83, pl. 195 (2000); Corrick & Fuhrer, *Wildflowers of Victoria* 236, fig. 821 (2000); James, *Fl. New South Wales* 1, rev. edn: 437–438 (2000); Kirkpatrick, *Alpine Tasmania* 98, fig. 43b (1997); Woolmore et al., *King Island Flora* 79 (2002); Gilfedder et al., *The Nature of the Midlands* 76 (2003); Whiting et al., *Tasmania's Natural Flora* 341 (2004); Richardson et al., *Weeds of the South-East, an Identification Guide for Australia* 406 (2006); Simmons et al., *A Guide to Flowers and Plants of Tasmania*, 4th edn, 129 (2008).

Perennial herb, glabrous or puberulous; stems short; stolons well developed. Leaves tufted; stipules usually reddish-brown, to 5 mm long, free, laciniate; petioles longer than the lamina, 2–8 cm long, glabrous or occasionally with short stiff patent hairs; lamina reniform, ± semicircular or rhomboid, base shortly cuneate, truncate or shallowly cordate, apex obtuse, margins shallowly crenate, 2.5–10 mm long, 2.5–30 mm wide, glabrous or occasionally with short stout hairs, these sparse and ± restricted to the area towards the margins or more rarely dense and evenly distributed. Scape 2.5–9 cm long, usually longer than the leaves, glabrous or with short stiff patent hairs, bracteoles near the middle. Sepals lanceolate, 2.5 mm long, basal spur very short. Corolla discolorous, violet and white; petals 5.5–10 mm long, apices rounded to slightly emarginate;

anterior petal without a spur; lateral petals bearded. Capsules 4–6 mm long, stained purple at maturity. Flowering & fruiting Oct.-Mar.

Tas. (all regions except MIS); SA, Qld, NSW, Vic.; naturalised in New Zealand. Widespread in a variety of mostly moist habitats from coastal dunes to alpine shrubberies at 1200 m alt.

Most of the subspecies of *V. hederacea* described by Adams & George (1982) have been elevated to species in the time since (see for example Seppelt 1986; Entwisle 1996; James 2000), with only *V. hederacea* subsp. *seppeltiana* remaining. Recent research (Thiele *et al.* 2018) suggests that that taxon should form part of the *V. sieberiana* group, which is no longer recognised in Tasmania. The name *V. hederacea* var. *petiolaris* DC. (basionym of *Erpetion petiolare* (DC.) G.Don) is based on Tasmanian material but the name can not be applied (see Adams & George 1982, p. 100).

8 *Viola curtisiae* (L.G.Adams) K.R.Thiele, *Muelleria* 36: 109 (2018)

Curtis' Violet, Winifred's Violet

Illustrations: loc. cit.

Perennial herb; stems contracted, sometimes somewhat bulbous at the base; stolons well-developed; Leaves tufted; stipules 2–3 mm long, narrowly triangular or trifid, with gland-tipped teeth; petioles (0.5–)2–5 cm long; lamina semicircular to slightly reniform, 6–15 mm long, 8–22 mm wide, glabrous or sparsely hispid with scattered, unicellular hairs. Flower scapes 1–3 cm long, mostly shorter than the leaves, occasionally subequal or slightly longer, bracteoles at the base or in the basal half. Sepals 2.5–4 mm long. Corolla concolorous, cream inside, slightly stained purple outside; petals 5–6 mm long, all emarginate or bilobed; anterior petal without a spur, sometimes purple-veined; lateral petals glabrous. Capsules 6–8 mm long, cream at maturity. Flowering & fruiting Dec.-Feb.

Tas. (TSR); also Vic. Known originally from subalpine woodland at Mt Field National Park at an altitude of c. 1050 m alt., and recently documented from Mt Wellington and in Victoria around Mount Erica, on the Baw Baw Plateau (Entwisle 1996; Thiele *et al.* 2018). Likely more widespread on montane woodland in Tasmania.

9 *Viola fuscoviolacea* (L.G.Adams) T.A.James, *Muelleria* 9: 35 (1996)

Viola hederacea subsp. *fuscoviolacea* L.G.Adams, *Fl. Australia* 8: 386 (1982).

Illustrations: Entwisle, Fl. Victoria 3: 369, fig. 75a (1996); James, *Fl. New South Wales* 1, rev. edn: 438 (2000), as *V. sp. A*.

Perennial herb; stems short; stolons well developed. Leaves tufted; stipules red-brown, free, 1–2 mm long, linear-lanceolate, lacinate; petioles 8–20 mm long; lamina broadly ovate to ovate-rhomboid, 3–6 mm long, 3–8 mm wide, occasionally with scattered short stiff hairs, base cuneate to truncate, apex obtuse, margins shallowly crenate, the teeth incurved, gland-tipped. Scapes usually shorter than the leaves, glabrous or with short stiff patent hairs, bracteoles below the middle. Sepals lanceolate, 1.5–2 mm long, acute, basal spurs short. Petals dark violet in the bud, often paler at maturity, 2–4 mm long; lower petal lacking a spur; lateral petals bearded, sometimes very sparsely. Capsule 4–6 mm long. Flowering & fruiting Oct.-Mar.

Tas. (BEL, FLI, TCH, TSE, TSR, TWE); NSW, Vic. Widespread and found on stream, river and lake margins, damp areas in grass and sedgeland, gravely and sandy soils, near sea level to 1080 m alt.

10 *Viola improcera* L.G.Adams, *Fl. Australia* 8: 387 (1982)

Dwarf Violet

Illustrations: Entwisle, Fl. Victoria 3: 369, fig. 75b (1996).

Perennial glabrous herb; stems well developed, short, erect, often clothed in decayed petioles; stolons well-developed, sometimes deeply buried. Leaves tufted; stipules pale green or scarious, free, 3–5 mm long, linear-lanceolate, lacinate with gland-tipped teeth; petioles 5–30 mm long, narrowly winged; lamina longer than wide, ovate to rhomboidal, 6–14 mm long, 3–9 mm wide, base cuneate to long-decurrent, tapering gradually into petiole, margins crenate, apex obtuse to acute, frequently mucronate. Scapes c. as long as or

slightly shorter than leaves, 8–25 mm long, elongating after anthesis, bracteoles near or above the middle. Sepals lanceolate, c. 2.5 mm long, c. 1 mm wide, slightly spurred at the base. Petals white to pale blueish-violet inside, concolorous with only the anterior petal veins darker, stained blueish-violet outside to variable degrees, 4–5 mm long, 2–3 mm wide, anterior petal without a spur, lateral petals glabrous, not or scarcely twisted. Capsule narrow-ovoid to ellipsoid, 5–6 mm long, uniformly dark purple. Seeds ovoid, glossy black. Flowering & fruiting Dec.–Jan.

Tas. (BEL); NSW, Vic, ACT. Very rare and listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999*. Found in scrub patches at high elevation scree slopes in Ben Lomond, at 1,200–1,300 m, where it seems to prefer sunny, north-facing aspects and relatively dry soils.

2 MELICYTUS

Melicytus J.R.Forst & G.Forst., *Char. Gen. Pl.* 1: 123, t. 62 (1775).

Synonymy: *Hymenanthera* R.Br., *Narr. Exped. Zaire* 442 (1818).

Shrubs or small trees, glabrous. Leaves alternate, frequently clustered on short lateral branches; stipules minute, caducous; lamina linear to oblong to narrowly obovate, entire or toothed. Flowers axillary, solitary or in clusters, bisexual or unisexual, slightly irregular, 5-merous. Sepals shortly united at the base. Petals ± equal. Staminal filaments united above, connective ending in a scarious, often toothed, appendage and with a dorsal nectary. Carpels 2–3, joined; style short, simple; stigma 2–3 lobed. Fruit a small globular berry with 1–4 seeds.

A genus of 11 species in Australia, New Zealand and Norfolk Island; 2 species in Australia.

Key reference: Stajsic *et al.* (2015)

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| 1. Plant dioecious with unisexual flowers. Leaves > 20 mm long and 2.5 mm wide, lateral nerves evident. | 1 <i>M. dentatus</i> |
| 1: Plant monoecious with hermaphrodite flowers. Leaves < 20 mm long and 2 mm wide, lateral nerves obscure or absent. | 2 <i>M. angustifolius</i> |

1 *Melicytus dentatus* (DC.) Molloy & Mabb., *Bot. Mag.* 17: 234 (2000)

Hymenanthera dentata DC., *Prodr. (DC.)* 1: 315 (1824). *H. banksii* F.Muell., *Pl. Victoria* 1: 69 (1862), *nom. superfl.*

Illustrations (some as *H. dentata*): Stajsic *et al. Austral. Syst. Bot.* 27: 317, Fig. 7 (2014); Tonkinson, *Fl. Victoria* 3: 369, Fig. 75f (1996); James, *Fl. New South Wales* 1: 440 (1990).

Erect to spreading dioecious shrub, rarely monoecious (not in Tasmania), (1–)2–5(–6) m tall. Branches mostly angled 45–50°, often tapering to a spiny tip. Leaves subsessile or sessile, (6–)25–40(–67) mm long, (2–)4–6(–11) mm wide, oblong or narrowly elliptic to narrowly obovate, lateral veins usually evident, margins toothed with 1–20 teeth on the distal half of each side, apex acute to obtuse; adaxial lamina glabrous or hispidulous near the base; abaxial lamina glabrous, paler. Inflorescence axillary on older leaves or leaf-scars, 1–2 per axil, 1–2(–4)-flowered; flowers unisexual; pedicel pruinose (wax soon wearing off), pedicel with 2 bracteoles; bracteoles 0.5–1.2 mm long, ± deltoid, margins erose, apex rounded. Sepals pruinose (wax soon wearing off), unequal, imbricate, green with a pale membranous margin sometimes suffused purple, 0.6–1.8 mm long, outermost ± triangular, inner ones rounded, margins erosulate-ciliate. Corolla ± fleshy, broad-cylindrical. Male flowers: pedicel (2.5–)3–6 mm long. Corolla yellow, 3–4 mm long, 3–4 mm across at the widest point. Anthers sessile, 1.4–1.8 mm long, oblong, with a denticulate or fimbriate appendage approximately 1.3 mm long. Female flowers: pedicel (1.5–)1.8–2.5 mm long. Corolla off-white to pale yellow, 2.0–2.7 mm long, 1.7–2.7 mm across at the widest point. Staminoides 0.7–0.8 mm long, with or without an appendage up to 0.8 mm long. Ovary glabrous, approximately 1.5 mm long, ovoid; style approximately 1 mm long, persistent; stigmas 2, approximately 0.7 mm long, flared, soon withering. Fruit a berry, ripening to

mauvish- or blueish-grey or white, 7–8 mm long, 5–7 mm diameter, ellipsoid to ovoid; mesocarp fleshy, sweet; pyrenes 1–2, 3–4 mm long. Flowering Aug.–Oct., fruiting Dec.–Mar.

Tas. (TNM); also Vic., NSW, Qld. Very rare and probably extinct in Tasmania, with only two records from Launceston in the 19th or early 20th Century.

2 *Melicytus angustifolius* (DC.) Garn.-Jones, *New Zealand J. Bot.* 25(1): 127 (1987)

Tree Violet

Hymenanchera angustifolia R.Br. ex DC., *Prodr.* (DC.) 1: 315 (1824). *Hymenanchera dentata* var. *angustifolia* (DC.) Benth., *Fl. Austral.* 1: 105 (1863).

Spreading to procumbent monoecious shrub, 0.3–2.0(–4) m tall. Branches divaricately branched or not, stiff or pliable, branchlets tapered abruptly to a thick, stiff spine. Leaves tapering gradually to the base; lamina (4–)9–22(–27) mm long, (1.2–)2.0–3.0(–4.5) wide, oblong to obovate, margin entire or rarely with 1 or two shallow teeth on each side, apex obtuse to rounded; adaxial lamina glabrous, lateral veins evident; abaxial lamina glabrous, rarely hispidulous near the base when young, lateral veins indistinct. Inflorescence axillary on older leaves or leaf-scars, solitary but rarely up to 3 flowers; flowers bisexual; pedicel 1.0–1.5(–2.0) mm long, with 2(–3) bracteoles; bracteoles 0.5–1.0 mm long, 0.5–1.2 mm wide, rounded or deltoid, wider than long, margins entire or slightly fimbriate. Sepals unequal, green, pruinose, sometimes suffused purple, (0.6–)1.5–1.7(–2.0) mm long, 1.2–1.8(–2.5) mm wide, outermost ± triangular, inner ones rounded, margins membranous, ruminant-ciliate. Corolla ± fleshy, campanulate, cream, usually mauve in the distal half, 2.2–3.2 mm long, 3.5–3.8 mm wide at the widest point. Anthers sessile, 1.1–1.3 mm long, spatulate-obovate, with a fimbriate or denticulate appendage 1–1.3 mm long. Ovary glabrous, 1.0–1.5 mm long, narrowly ovoid; style 1.0–1.5 mm long, stigmas 2, approximately 0.7 mm long, ovate, flat with a papillose margin. Fruit a berry, maturing bluish-grey to white, rarely mottled, 7–8 mm long, 5–7 mm diameter, ellipsoid to ovate-globose; mesocarp fleshy, sweet; pyrenes (1–)2, 3–4 mm long. Flowering Sep.–Mar.; fruiting Oct.–Apr.

Tas. (BEL, FLI, TCH, TNM, TSE, TSR); also SA, NSW, Vic. A widespread species usually found in dry areas under light forest or woodland or along river banks; in developed areas often found on fence lines.

1. Branches non-divaricate, pliant. Rare plant of estuarine habitat in northern Tasmania.

2a subsp. *angustifolius*

1: Branches divaricately branched, rigid. Widespread in various habitats.

2b subsp. *divaricatus*

2 *Melicytus angustifolius* (DC.) Garn.-Jones subsp. *angustifolius*

Tasmanian Tree Violet

Illustrations: Stajsic et al. *Austral. Syst. Bot.* 27: 319, Fig. 8 (2014).

Erect to spreading shrub 2.0–3.5 m tall, up to 4 m wide. Branches weakly spinose, slender, pliant, angled mostly 45–60° to main stem, with poorly developed short shoots.

Tas. (TNM), endemic; restricted to riparian habitats in the central north. A more open and pliable shrub than subsp. *divaricatus*.

2 *Melicytus angustifolius* subsp. *divaricatus* Stajsic & R.Douglas, *Austral. Syst. Bot.* 27(4): 320 (2014)

Hymenanchera banksii var. *angustifolia* Stirling, *Trans. & Proc. Bot. Soc. Edinburgh* 22: 351 (1905).

Illustrations: Tonkinson, *Fl. Victoria* 3: 369, fig. 75g (1996—as *H. dentata*); James, *Fl. New South Wales* 1, rev. edn: 440 (2000—as *H. dentata*); Wapstra et al., *Tasmanian Plant Names Unravelling* 294 (2010—as *M. dentatus*); Howells (ed.) *Tasmania's Natural Flora* 377 (2012—as *M. dentatus*); Stajsic et al. *Austral. Syst. Bot.* 27: 320–321, Figs. 10, 11 (2014).

Rigid, erect to spreading to procumbent shrub 0.3–2.0(–4) m tall, up to 4 m wide. Branches spine-tipped, stiffly and divaricately branched, with well-developed, stoutly-spiny short shoots.

Tas. (BEL, FLI?, TCH, TNM, TSE, TSR, TWE?); also SA, NSW, Vic. Widespread in a variety of habitats. At lower altitudes it is a dense rounded shrub with intermeshed branches, at higher altitudes (up to 1400 m alt.) it often appressed to boulders with leaves 1 cm long or less.

REFERENCES

- Adams LG, George AS (1982) Violaceae. *Flora of Australia* **8** 91–110.
- 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/>
- Entwisle T (1996) Violaceae (except *Hymenanthera*). *Flora of Victoria* **3** 361–369.
- IPNI (International Plant Name Index) <http://www.ipni.org> or <http://www.us.ipni.org>
- James TA (2000) Violaceae. *Flora of New South Wales* **1**, rev. edn, 435–441.
- NVA (Natural Values Atlas) (Department of Primary Industries and Water: Hobart) <https://www.naturalvaluesatlas.tas.gov.au/>
- Seppelt RD (1986) Violaceae. *Flora of South Australia* **2** 865–871.
- Stajsic V, Walsh NG, Douglas R, Messina A, Molloy PJ (2015) A revision of *Melicytus* (Violaceae) in mainland Australia and Tasmania. *Australian Systematic Botany* **27** 305–323
- Stevens PF (2008) Angiosperm Phylogeny Website. Version 9, June 2008. <http://www.mobot.org/MOBOT/research/APweb>
- Thiele KR, de Salas MF, Walsh NG, Messina A, Little RJ, Prober SM (2018) *Viola curtisiae*, a new rank for a poorly understood species, with notes on *V. hederacea* subsp. *seppeltiana*. *Muelleria* **36** 107–111
- 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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