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Flora of South Australia

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BERBERIDACEAE¹

J.Kellermann²

Shrubs, small trees or herbs (not in S.A.); leaves deciduous or evergreen, alternate, radical or cauline, simple or divided or modified into spines; stipules absent or reduced. **Inflorescence** paniculate, cymose, racemose, spicate or flowers solitary, bracteate; flowers regular, perianth in 2–3 whorls of 4–6 parts; outer whorl(s) sepal-like, inner whorl petal-like with nectariferous sacs or scales, sometimes nectaries absent; stamens as many or twice as many as petals, filaments sometimes absent; ovary superior, carpel 1, locule 1 with 1–several ovules, style short or absent and stigma sessile. **Fruit** a berry, capsule or papery bladder; seeds sometimes arillate.

A family of 12–16 genera and about 650 species, the herbaceous species distributed in northern America and Eurasia; shrubby species occur in the same area and extend into S America, E Africa, the Carribean and Malesia. In Australia 2 genera and 6 species are naturalised. The family includes many ornamental plants, and the species in Australia are all presumed to have escaped from cultivation.

Morley & Wilson (2007) have *Berberis* and *Mabonia* as distinct genera, but this division is not always recognised as there is a large number of species with characters from both genera. Many authors include *Mabonia* in an enlarged *Berberis* (e.g. Whittemore 1997). Phylogenetic analyses (Kim *et al.* 2004) support the merger and this is also accepted in this treatment.

References: Morley & Wilson (2007); Whittemore (1997).

1. BERBERIS L.

Sp. Pl. 1: 330 (1753); *Gen. Pl.* (ed. 5) 153 (1754).

(The name is derived from *berberys*, the Arabic name for the fruit.)

Mabonia Nutt., *Gen. N. Amer. Pl.* 1: 211 (1818), *nom. cons.*

Shrubs or small trees, wood and inner bark yellow; leaves evergreen or deciduous, alternate, simple or pinnate; normal leaves in fascicles on short axillary spurs; modified leaves develop into tripartite spines on long shoots, or spines absent. **Inflorescence** usually terminal on lateral shoots, racemose, fascicles or flowers solitary; perianth yellow, subtended by 2–3 bracts; sepals 6; petals 6 often smaller than sepals, each with 2 nectary glands at base; stamens 6; ovary with 1–many ovules; stigma sessile or with a short style. **Fruit** red, purple-red, pruinose or black; seeds 1–several. **Barberries.**

The genus is native to N and S America, Europe, Asia, Malesia and N Africa. There are several hundred species of *Berberis*, but the exact number is unknown; about 5 species are naturalised in Australia.

- 1. Leaves pinnate; branches spineless 1. **B. aquifolium**
- 1: Leaves simple; branches spiny 2. **B. darwinii**

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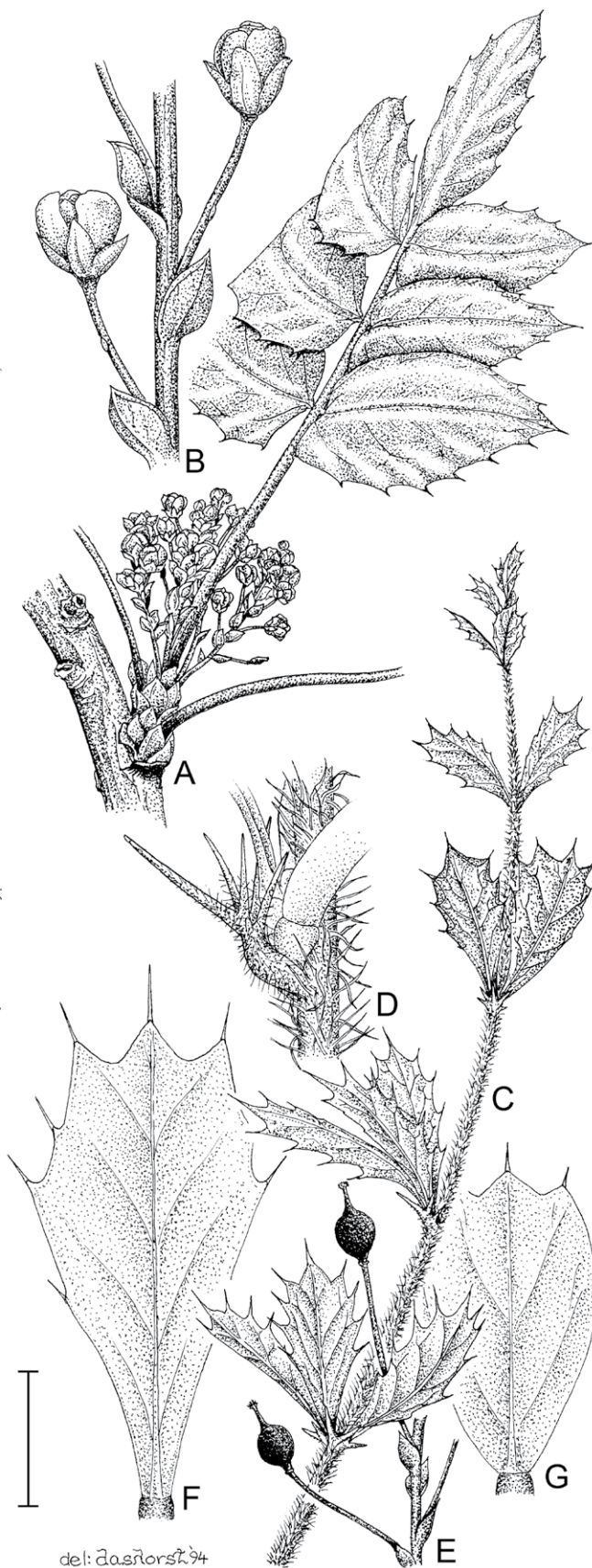


Fig. 1. A–B. *Berberis aquifolium*: A, flowering shoot; B, inflorescence bracts and bracteoles. **C–F. *B. darwinii***: C, leafy shoot; D, axillary spur; E, fruits; F–G, leaves. Illustration by G.R.M. Dashorst, reproduced with permission from Morley & Wilson, *Flora of Australia* 2: 360, Fig. 68C–D, E–H (2007).

1. ****Berberis aquifolium*** Pursh, *Fl. Amer. Sept.* 1: 219, pl. 4 (1814). — *Mabonia aquifolium* (Pursh) Nutt., *Gen. N. Amer. Pl.* 1: 212 (1818). — **Illustr.:** *Fl. N. America* 3: 285 (1997).

Shrub to 2 m, stems spineless, bark grey-brown, suckering underground; leaves compound, to 30 cm long, leaflets 5–9 (–11), obliquely ovate, to 10 × 5 cm, base obtuse or truncate, margin with 15–35 spines, glossy above, pale and dull below. **Flowers** yellow; pedicel to 10 mm long, **Fruit** globose, c. 6 mm long, dark blue, pruinose; stigma sessile, persistent. **Oregon grape. Fig. 1A, B.**

S.A.: *NL, *SL; *N.S.W.; *Vic. Native to the W coast of N America. Flowers: Sep.

2. ****Berberis darwinii*** Hook., *Icon. Pl.* 7: t. 672 (1844). — **Illustr.:** *Fl. N.S.W.* 1: 168 (1990), as *B. aristata*; *Fl. Victoria* 3: 65, fig. 14A–D (1996); Heywood et al., *Fl. Pl. Fam. World* 60, fig. 1A–B (2007).

Evergreen spinose shrub to 3.5 m; branchlets subterete, red-brown, shortly pilosa; leaf simple, lamina obovate to ovate-oblong, 1–2 cm long, 0.5–1.2 cm wide, base cuneate, margin ± spiny-toothed, 3-spined at apex, thick, glossy darkgreen above, paler green below; spines slender, 3–5-partite, 3–7 mm long. **Flowers** golden, flushed with red; pedicel 6–10 mm long, red. **Fruit** globose, c. 7 mm long, dark blue, pruinosa when ripe; style 4 mm long, persistent. **Darwin's barberry. Fig. 1C–F.**

S.A.: *SL; *N.S.W.; *Vic.; *Tas. Native to southern S America; cultivated and naturalised in many countries. Flowers: Jan. (one specimen); Sep.–Nov. in other states (Walsh 1996).

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