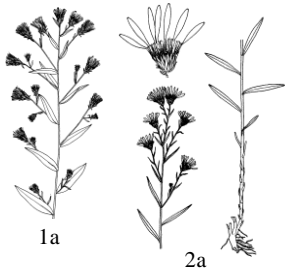


Treatment updated to synonymize *Eucephalus* within *Doellingeria*.

Allen, G., L. Brouillet, J. Semple, and H. Guest. 2019. Diversification of the North American *Doellingeria*-*Eucephalus* Clade (Astereae: Asteraceae) Inferred from Molecular and Morphological Evidence. *Systematic Botany*, 44(4): 930-942.

**Doellingeria** Nees Aster; Whitetop

Heads radiate or discoid, hemispheric to turbinate, in racemiform to corymbiform or paniculiform arrays; ray fls, if present, ♀ and fertile, blue, purple, pink, or white; phyllaries in 3–6 ± unequal series, chartaceous with green tips; recep ± flat, naked; disk fls ♀, fertile, 10–35, yellow; anthers entire or minutely sagittate at base; style brs with introrsely marginal stigmatic lines and lanceolate, minutely hairy appendage; achenes 1–2-ribbed, with 1–2 nerves on each face, glab to strigose; pappus of ∞ capillary bristles; per herbs with alt, cauline, sessile, entire, simple lvs. (Gr *eu*, good, and *kephalotos*, with a head, alluding to the “elegant” calyx). (*Aster* in part; *Eucephalus*). See also *Aster*, *Canadanthus*, *Eurybia*, *Ionactis*, *Oreostemma*, *Sericocarpus* and *Symphotrichum*.



**1a** Rays absent; pls 6–12 dm; lvs 5–9 × 1–3 cm, gen glandular-puberulent; invol and peduncles stipitate-glandular; open oak or conif for; endemic to c Lane and c Douglas cos, OR; wayside a. (*A. v.*, *E. v.*)

**1 D. vialis** (Bradshaw) Semple, Brouillet & G.A. Allen

**1b** Rays present, 7–25 mm

**2a** Sts and lvs glab and glaucous; lvs 4–10 × 0.5–1.5 cm, linear to narrowly elliptic-lanceolate, 5–12 × as long as wide; rays purple, 12–20 mm; sts 4–15 dm; open conif for, meadows, and brushy slopes; endemic to s WA Cas, from Mt Adams to CRG; Klickitat a. (*A. g.*; *E. g.*)

**2 D. glaucescens** (A. Gray) Semple, Brouillet & G.A. Allen

**2b** Sts and lvs ± pubescent to glandular or subglab, not glaucous; lvs various

**3a** Lvs tangled-cottony beneath, 3–7 × 0.5–2 cm; rays lavender-purple, 12–20 mm; pls 2–8 dm; meadows and open woodl, up to timberl; Cas, c WA to CA; Cas a. (*A. l.*; *E. l.*); 2 intergrading vars.

**3 D. ledophylla** (A. Gray) Semple, Brouillet & G.A. Allen

**a1** Rays gen ca 13 or 21; peduncles glandular or glandless, often with some cottony pubescence; c WA to c OR (*A. l. var. l.*, *E. l. var. l.*) var. **ledophylla**

**a2** Rays gen ca 8 or 5; peduncles evidently glandular, not otherwise hairy; c OR to CA (*A. l. var. c.*, *E. l. var. c.*)

var. **covillei** (Greene) Semple, Brouillet & G.A. Allen

**3b** Lvs glab, scab, villous, pilose, or glandular-puberulent beneath, never tangled-cottony; rays white to lavender or purple

**4a** Larger lvs 5–10 × 1.5–3.5 cm, glab, or somewhat hairy or glandular beneath; pls gen 6–15 dm; rays white to pink, 15–25 mm; open, mont conif for to subalp meadows; in and e of Cas, s BC to s WA, e to Alta, WY, CO, NV; Engelmann’s a. or w.

**4 D. engelmannii** (D.C. Eaton) Semple, Brouillet & G.A. Allen

**4b** Lvs 1.5–6 × 0.3–1.5 cm; pls 1–7 dm

**5a** Rays purple, gen 5 or 8, 7–12 mm; herbage scab-puberulent, not glandular except in the infl; lvs 2–5 × 0.3–1 cm; dry, open places, foothills to mid elev in mts; ne OR to sw MT, s to NV, UT, and nw CO; elegant a. (*A. perelegans*, *E. e.*)

**5 D. elegans** (Nutt.) Semple, Brouillet & G.A. Allen.

**5b** Rays white, gen 8 or 13 (21); herbage glandular-pubescent, occ also pilose, not markedly scab; heads few or solitary

**6a** Phyllaries linear-lanceolate, mostly 1–2 mm wide; rays 10–15 mm; pls 2–5.5 dm; subalp meadows and scree; endemic to OM and c VI; OM a. (*A. p.*, *E. p.*) **6 D. paucicapitata** (B.L. Rob.) Semple, Brouillet & G.A. Allen

**6b** Phyllaries ovate-lanceolate, mostly 2–3 mm wide; rays ca 7–10 mm; pls 1–4 dm; open, rocky slopes and cliffs; endemic to Cas of n OR (Clackamas Co s to Linn and Jefferson cos); Gorman’s a. (*A. g.*, *E. g.*)

**7 D. gormanii** (Piper) Semple, Brouillet & G.A. Allen

