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Alnus viridis and infraspecific taxa are synonymized within A. alnobetula and respective infraspecific based on nomenclatural research showing that name A. viridis was actually based on Betula viridis. No other changes are made to the key.

## **References:**

Greuter, W. and E.V. Raab-Straube. 2011. Euro Med Notulae, 5. Willdenowia, 41(1):129-138. https://doi.org/10.3372/wi.41.41117.

## Alnus Hill Alder

 $\circlearrowleft$  catkins pendent, main bracts  $\pm$  peltate, subtending (1)2(-4) bracteoles and 3-6 fls, each fl with (3)4-parted perianth and 1-6 stamens;  $\supsetneq$  catkins conelike, scales hardened and persistent, each with (1)2 naked fls and 2-3 bracteoles; trees or shrubs with simple, dentate to lobed lys. (Old L name for the pl).



1a Catkins developing and fl with the lvs, on twigs of current year, the 3 catkins with slender peduncles (0.5-)1-3 cm; frs with wings at least 1/2 as wide as nutlet; If bls ovate, 3-10 cm, not revolute, only slightly paler beneath than above, finely 1-2-serrate and  $\pm$  sinuate; winter buds  $\pm$  sessile, sharply acute; thicket-forming shrubs, 2-4(-8) m; moist places, lowl to subalp; AK s, on both sides Cas, to n CA, e to n RMS and across Can to Atl; green a., mt a.; 2 intergrading subspp. in our area (*A. viridis*)

**1 A. alnobetula** (Ehrh.) K.Koch **a1** Margin of fertile st lvs once-serrate, unlobed, bl firm, dark green, broadly ovate; gen lowl; AK to NWT, s to BC, Alta, and Sask, and rarely from s VI to n CA and inl to c ID; siberian a. (*A. v.* subsp. *f.*) subsp. **fruticosa** (Rupr.) Raus

**a2** Margin of fertile st lvs doubly serrate or lobed and serrate, bl thin, light- to yellow-green, narrowly to broadly ovate; lowl to subalp; AK to CA, both sides Cas, e to Alta and n RMS; Sitka a. (*A. crispa* subsp. s., A. s, A. v., subsp. s.)

subsp. sinuata (Regel) Raus

1b Catkins developing and fl before the lvs, on twigs of previous year, the  $\triangle$  catkins

with stout polynology of 1 (1.5) are giften for wingless on the local cather resolute and

with stout peduncles < 1(-1.5) cm; either frs wingless or If bls slightly revolute and gen much paler beneath than above; winter buds stalked, blunt to acute

29 Fr with wing 1/5-1/2 as wide as putlet: If bls strongly revolute, broadly elliptic to

**2a** Fr with wing 1/5–1/2 as wide as nutlet; If bls strongly revolute, broadly elliptic to ovate-elliptic, 5–15 cm, sinuate and irreg serrate-dentate, paler (rusty-gray) beneath than above, new twigs not puberulent, gen glab; trees to 25 m; moist lowl; AK s, in and w Cas, to CA, also n ID and Sanders Co, MT (where intermediate to no 3) to se WA and ne OR; red a., OR a. (*A. oregana*)

2 A. rubra Bong.

**2b** Fr wingless or nearly so, If bls neither revolute nor rusty-gray beneath, new twigs and petioles strongly puberulent; shrubs or trees

**3a** Lf bls lobed and serrate, or deeply double serrate, elliptic or ovate-oblong, 3–7(–11) cm; stamens mostly 4, filaments scarcely 1/2 as long as anthers; thicket-forming shrubs, 2–5(–12) m; moist to wet places, lowl to high mont; AK s, mostly e Cas, to CA, e to NS, s in RM to NM; mt a. (*A. i.* var. *occidentalis*, *A. t.*), ours subsp. **tenuifolia** (Nutt.) Breitung

3 **A. incana** (L.) Moench

3b Lf bls ± unlobed, finely serrate, narrowly elliptic or oblong-rhombic, 4–8 cm; stamens 1–3, filaments mostly subequal to anthers; trees, 5–30 m; sc WA, s in OR, both sides of Cas and in Wi Va, to Baja Cal, e to w ID, white a.; hybrids with no 2 known from Wi Va

4 A. rhombifolia Nutt.

