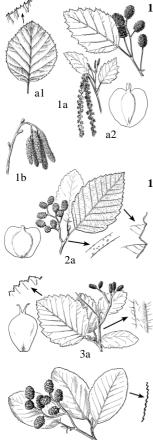
Alnus viridis and infraspecific taxa are synonymized within *A. alnobetula* and respective infraspecific based on nomenclatural research showing that name *A. viridis* was actually based on *Betula viridis*. No other changes are made to the key.

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

 3° 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; 2° catkins conelike, scales hardened and persistent, each with (1)2 naked fls and 2–3 bracteoles; trees or shrubs with simple, dentate to lobed lvs. (Old L name for the pl).



1a Catkins developing and fl with the lvs, on twigs of current year, the $\sqrt[3]$ catkins with slender peduncles (0.5–)1–3 cm; frs with wings at least 1/2 as wide as nutlet; lf bls ovate, 3–10 cm, not revolute, only slightly paler beneath than above, finely 1–2-serrate and ± sinuate; winter buds ± 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 yellowgreen, 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 3° catkins with stout peduncles < 1(-1.5) cm; either frs wingless or lf bls slightly revolute and

gen much paler beneath than above; winter buds stalked, blunt to acute
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.