

U. dioica segregated from *U. gracilis* based on molecular phylogenetic evidence; splitting the taxa also resolves a nomenclatural issue regarding illegitimate name *U. dioica* subsp. *holosericea*. *Urtica dioica* (L.) subsp. *holosericea* is an illegitimate name (IPNI, accessed 11/23/2022). Recent molecular phylogenetic studies show that *U. dioica* is a separate northern Eurasian species and that the North American plants are best treated as *U. gracilis* Aiton (Henning et al., 2014; Grosse-Veldman et al., 2016). The combination *U. gracilis* Aiton subsp. *holosericea* (Nutt.) W.A. Weber is legitimate.

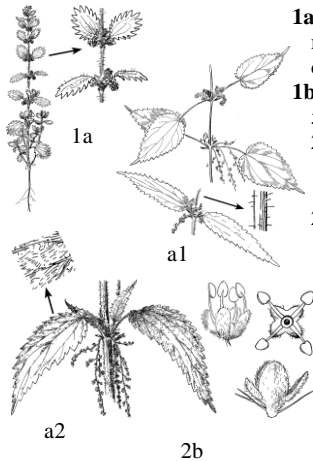
References:

Grosse-Veldmann, B., N. M. Nürk, R. Smissen, I. Breitwieser, D. Quandt, and M. Weigend. 2014. Pulling the sting out of nettle systematics – A comprehensive phylogeny of the genus *Urtica* L. (Urticaceae). *Molecular Phylogenetics and Evolution* 102: 9–19.

Henning, T., Quandt, D., Grosse-Veldmann, B., Monro, A., Weigend, M., 2014. Weeding the nettles II: a delimitation of “*Urtica dioica* L.” (Urticaceae) based on morphological and molecular data, including a rehabilitation of *Urtica gracilis* Ait. *Phytotaxa* 162 (2), 61–83. <http://dx.doi.org/10.11646/phytotaxa.162.2.1>.

Urtica L. Nettle

Pls ♂, ♀ or ♂♀; fls in axillary pan or spikes, on separate or mixed infl, bracts narrowly triangular to lanceolate; sepals 4; achene sessile, lenticular to deltate, ± enclosed by 2 inner sepals; hairy ann or per herbs with opp, serrate to dentate, stip lvs; stinging hairs bulbous at base, pointed and stiff at apex; nonstinging hairs not bulbous-based, flexible, ± evenly thick throughout. (L name for nettle, from *uro*, to burn).



1a Pls ann, 1–5 dm; lf bl elliptic to ovate or obovate, (1–)1.5–4 cm; stips 2–3 mm; infl mixed ♂♀; occ European intro in our area; Yukon to CA, e to ne Atl where more common; dog n., dwarf n. **1 U. urens** L.

1b Pls per, rhizomatous, 1–3 m; lf bl lanceolate to ovate or cordate, (5–)7–15 cm; stips 5–15 mm

2a Pls ♂, ♀; stinging hairs equally abundant on both surfaces of lf bl; moist lowland areas, often where disturbed; Eurasian intro in N Am and occ in our area, s BC to CA, e to Atl; ours subsp. **dioica** **2 U. dioica** L.

2b Pls mostly ♂♀; stinging hairs mostly on lower bl surface, absent or scattered on upper surface; moist forest edge and understory, riparian zones, low to mont; AK s, both sides Cas, to CA, e to Atl; also in C and S Am (*U. dioica* subsp. *g.*) **3. U. gracilis** Aiton

a1 Lower bl surface glab to puberulent with ± antrorse, nonstinging hairs along veins; sts strigose to glab; throughout our area (*U. d.* vars. *angustifolia*, *californica*, *g.*, *lyallii*, *procera*, *U. g.*) subsp. **gracilis** (Aiton) Selander

a2 Lower bl surface tomentose to strigose with spreading, nonstinging hairs along veins; sts soft pubescent, occ densely so; e Cas, WA s to CA, e to w MT, WY, CO, and AZ (*U. d.* var. *h.*, *U. h.*) subsp. **holosericea** (Nutt.) Thorne