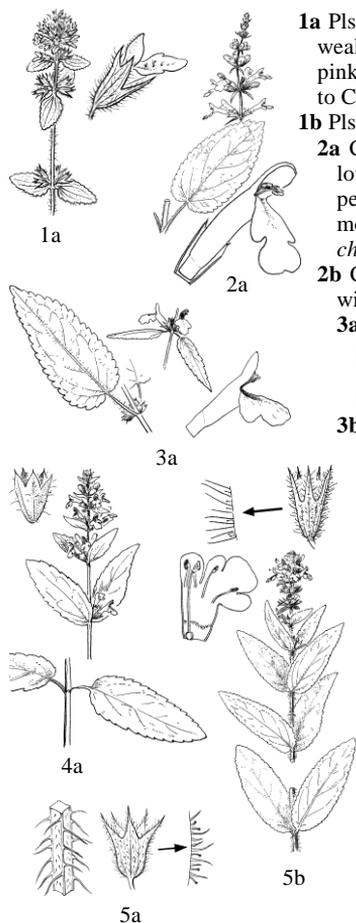


Key revised to add *Stachys palustris*, a Eurasian species sparingly established in northern ID and southwest BC.
Revised March 18, 2021

Stachys L. Hedge-nettle; Woundwort; Betony

Fls verticillate in the axils of the reduced upper lvs or bracts, gen forming terminal, often interrupted spikes; calyx 5–10-nerved, the 5 teeth gen spinulose-tipped, subequal or weakly bilabiate; corolla bilabiate, with entire or emarginate, subgaleate upper lip and spreading, 3-lobed lower lip, not much, if at all, exserted; stamens 4, pollen sacs strongly divergent, often confluent in dehiscence; ann or per herbs with toothed or entire lvs. (Transliteration of Gr word for ear of grain, referring to the infl).

Stachys byzantina K. Koch, a stout per with sts and lvs densely white-lanate (surfaces obscured) and pink-purple fls in dense spicate infls, is an uncommon, Eurasian garden escape in sw BC, w WA, and w MT.



1a Pls ann, 1–3(–4) dm; lvs 1–3 cm, ovate to oblong, obtuse, crenate; calyx 5–7 mm, weakly bilabiate, the lateral teeth ca = tube; corolla 6–10 mm, scarcely > calyx, pale pink or pale purple; disturbed sites; uncommon, weedy European intro; w Cas, sw BC to CA, and e US; field w. **1 S. arvensis (L.) L.**

1b Pls rhizomatous per, 2–15 dm; moist or wet places

2a Corolla tube (12–)14–25 mm, lower lip 8–14 mm; corolla deep red-purple, the lower lip lightly marked with white blotches; calyx 8–12 mm; pls 7–15 dm; lvs all petiolate, the middle cauline ones with petioles gen 1.5–4.5 cm, bls 6–15 x 3–8 cm; moist places; from e slope Cas to coast, BC to s OR; Cooley's h., great b. (*S. chamissonis* var. *co.*, *S. ciliata* misapplied) **2 S. cooleyae A. Heller**

2b Corolla tube 6–10 mm, lower lip 5–8 mm; corolla pale pink to pink-purple, gen with white or dark blotches; calyx 5–9 mm; pls 2–8 dm; lvs sessile to petiolate

3a Lvs all evidently petiolate below infl, the middle and upper cauline ones with petioles gen 1.5–4.5 cm, bls ovate; corolla gen pink or pink-purple; calyx 5–9 mm; swamps and moist woodl; w Cas, gen near the coast, s BC to CA; great b., Mex b. (*S. emersonii*, *S. ciliata*) **3 S. mexicana Benth.**

3b Middle and upper cauline lvs sessile, or some of them on short petioles not > 1 cm (lower lf petioles occ 1–4 cm); corolla pale pink-purple; both sides Cas

4a Lvs becoming evidently petiolate toward st base, some of the lower on petioles > 1(–4) cm, bls ovate to oblong-lanceolate; calyx 5–6 mm, with relatively short, wide lobes; corolla 9–14 mm, the tube often evidently > calyx; streambanks and moist places; Clark Co, WA, s on both sides of Cas, to CA; rigid b. or h.; ours var. **rigida** **4 S. rigida Nutt. ex Benth.**

4b Lvs all sessile or nearly so, the petiole, if any, gen well < 1 cm, bls oblong-ovate to elliptic; calyx (6–)7–9 mm, the lobes a little < to > tube; corolla 11–16 mm, the tube only slightly (if at all) > calyx.

5a Calyx hairs all ± uniform in length, mostly stipitate-glandular; calyx lobes deltate, with a long, slender tip; stems with long, pustulate-based hairs on the angles; corolla purple; marshes, shorelines, damp fields; uncommon, weedy Eurasian intro; sw BC, n ID, e N Am; marsh h. **5 S. palustris L.**

5b Calyx with a mix of short, stipitate-glandular hairs and much longer eglandular hairs; calyx lobes lanceolate, evenly tapered to the tip; stems with long, slender hairs on the angles, these not pustulate-based; corolla usually pink to whitish; shorelines and moist places; AK s, mostly e Cas in our area, e across much of N Am to Atl; hairy h.; ours var. **pilosa (S. palustris var. pi.)**

6 S. pilosa Nutt.