ANTENNARIA  PUSSEY TOES

G. Ledyard Stebbins & Randall J. Bayer

Per. often matted, dioecious; staminea/sterile gen. present. LVS alternate, entire, gen. ± tomentose. INFL: heads discoid or disciform, 1 or in cyme-like clusters; phyllaries many in several series, papery or membranaceous (staminea wider, more conspicuous); receptacle naked. STAMINATE FLS 2–5 mm; corollas white, yellow, or red; pappus bristle tips gen. enlarged. PISTILLATE FLS 2–10 mm; corollas barely lobed, white, yellow or red; FR 0.5–3.5 mm, ± elliptic; pappus bristles many, soft, weakly barbed. ± 40 spp.: Am. & Eurasia. (Latin: antenna) [Bayer 1990 Can J Bot 68:1389–1397 & Madroño 37:171–183]

Many races reproduce by asexual seeds, their populations entirely pistillate pls.

1. Heads gen. 1(–3) per fl st
   2. 2(–3) cm; lvs thick, green above, tips notched  
      A. suffrutescens
   2* 1.5 cm; lvs thin, gray-tomentose above, tips acute  
       A. dimorpha
   3. PI without stolons  
      A. flagellaris
   3* PI bearing long, slender, ± thiny stolons  
      A. geyeri

4. Heads 3–many per fl st
   5. Lvs caulescent, ± equal; lower involucres densely tomentose  
      A. argentea
   5* Lvs basally and cauline, reduced upward; involucres ± glabrous
     6. Lower lvs 7–20 mm; st 18–40 cm; phyllaries white or cream-colored, unequal  
        A. houellii
     6* Lower lvs 2–5 mm; st 10–25 cm; phyllaries straw-colored or pale, ± equal  
        A. lacinulata
   4* Pl with stolons, forming mats

7. Rosette lvs elliptic, green above; inf. racemose or paniculate, main axis 3–11 cm; peduncles 10–30 mm;  
   inf. finely glandular  
   A. racemosa
   7* Rosette lvs oblong-ovate to spoon-shaped; inf. cyme-like, main axis < 5 cm; glandular or not

8. Rosette lvs green or very lightly tomentose above, 1–3-veined
   9. Rosette lvs > 5 mm wide, 1–3-veined; cauline lvs 20–40 mm; inf. not glandular; NW  
      A. houellii
   9* Rosette lvs < or = 5 mm wide, 1-veined; cauline lvs 7–10 mm; inf. glandular; SBr  
      A. marginata

8* Rosette lvs gray-tomentose above, 1-veined

10. Phyllaries dark brown to black; st 3–13 cm
    11. Lowest cauline lvs > 11 mm; herbage gen. not glandular; pistillate corolla > 3 mm in fr; staminea  
        corolla gen. < 2.7 mm in fl  
        A. media
    11* Lowest cauline lvs < or = 11 mm; herbage gen. glandular; pistillate corolla < or = 3 mm in fr; staminea  
        corolla gen. < or = 2.8 mm in fl  
        A. pulchella

10* Phyllaries white to rose or pale brown; st 6–40 mm

12. Phyllaries white-tipped with a prominent blackish brown spot near base of scariosum part  
    A. cymboidea

13. Stolons slightly woody, ascending; phyllaries pale yellow to pale brown, tips blunt; staminea pls  
    present — n SNH  
    A. umbrinella

13* Stolons not woody, horizontal or ascending; phyllaries various colors, tips acute; staminea pls ± 0

14. Longest lvs of fl rosettes < 20 mm; phyllaries sometimes brown  
    A. rosea

14* Longest lvs of fl rosettes > 20 mm; phyllaries gen. not brown  
    A. confinis
A. argentaeformis (p. 199) STS 18–40 cm, from branches
adventices; stolon 0. LVS: basal 20–50 mm, oblanceolate to elliptic,
1–3-veined, ± gray-tomentose, cauline 15–45 mm, lanceolate.
INFLO: heads 10–75, involucres 4–5 mm, ± glabrous; phyllaries
wide, acute, white. STAMINATE FLs: corollas 2.5–3.5 mm.
PISTILLATE FLs: corollas 3–4 mm. FR: 1.5–1.5 mm; glandular.
pappus 3–4 mm. 2n=28. Dry coniferous forest: 2,000–2,500 m. KR, NCOHR, CARR, MP, OR. #TRT.
A. corymbosa E. Nelson (p. 199) STS 6–15 cm, slender; stolonless branches. LVS: basal 18–22 mm, spoon-shaped, ± veinless, thin, ± gray-tomentose; cauline 6–13 mm. INFLO: heads 3–7; involucres 4–5 mm, densely hairy phyllaries wide, tips blunt (staminiate) or acute (pistillate), white, distinctly spotted blackish brown near base. STAMINATE FLs: corollas 2.5–3.2 mm.
PISTILLATE FLs: corollas 2.5–3.5 mm, FR 0.5–1 mm, slightly papillate; pappus 3.5–4.5 mm. 2n=28. Moisit meadows, stream-sides: 1,800–3,200 m. SNH; to sw Can, MT, WY, Colorado. #TRT.
A. dimorpha (Nutt.) Torrey & A. Gray (p. 199) STS < 4 cm, cephalote from much-branched caulescent; stolon 0. LVS basal, 8–11 mm, linear to narrowly spoon-shaped, ± veinless, ± gray-tomentose. INFLO: head 1; involucres 6.5 mm (staminate) or 10.1 mm (pistillate), base hairy; phyllaries narrow, acut-ecuneate, dingy brown. STAMINATE FLs: corollas 3–5 mm; pappus bristle tips slender. PISTILLATE FLs: corollas 8–10 mm. FR 2.3–5.3 mm, hairy, pap- pus 10–12 mm. 2n=28. Dry places, 800–2,400 m. KR, NCOHR, SNR, TR, OR; to sw Can, MT, WY, NE.
A. flagellaris (A. Gray) A. Gray STOLONIFEROUS PUSILLI-
TODES STS 1.2 cm, from slender caulescent; stolon 3–10 cm, slender, fertile esc tip. LVS basal, 16–18 mm, linear-oblong-elliptic, ± veinless, ± gray-tomentose. INFLO: head 1; involucres 6.7 mm (staminate) or 7.9 mm (pistillate), base hairy; phyllaries wide, tips acute, brown to black. STAMINATE FLs: corollas 3.4–4.3 mm; pappus bristle tips slender. PISTILLATE FLs: corollas 5.7–6.5 mm. FR 2.3–3.5 mm, papillate; pappus 6–8 mm. 2n=28. UN-
COMMERIAL. Seasonally moist sagebrush scrub: 1750 m. MP; to WA, ID, WY, NV.
A. geyeri A. Gray (p. 199) STS 3–14 cm; base woody, branching; stolon 0.6–1.5 cm, linear, linear-lanceolate, 1–veined, ± gray-tomentose. INFLO: heads 3–5; involucres 6–8 mm, densely tomentose below; phyllaries wide, upper part red to pink, light brown, or white, tips blunt (staminate) or acute (pistillate). STAM-
NATE FLs: corollas 3.4–4.5 mm; pappus bristle tips slender. PISTI-
LLATE FLs: corollas 5.5–6.5 mm. FR 2.2–2.5 mm, hairy, papillate; pappus 6.7 mm. 2n=28. Dry, open woods, slenderbark: 900–2400 m. KR, NCOHR, n SNR, MP; to WA, NV. #DRBNJUN1(117, 15–17);DCT.
A. howellii E. Greene sp. howellii Pls pistillate. STS 15–30 cm; stolon 1–4 cm. LVS: basal 25–30 mm, oblong-cordate to spoon-
shaped, 1–3-veined, green above, tomentose below; cauline 20–40 mm, linear. INFLO: heads 5–12; involucres 6.7–7.5 mm, base hairy; phyllaries narrow, tips acute, upper part light brown to white. FS: corollas 5–6 mm. FR 1.2–1.5 mm, papillate; pappus 6–8 mm. 2n=26.4. Open pine woods, rocky slopes: 1,800–2,000 m. KR; to w Can, MT, SD. #A. howellii E. Greene var. A. howellii; A. acollata A. Greene sp. A. howellii E. Greene sp. A. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Greene sp. howellii E. Green
2.5-3.5 mm. PISTILLATE FLS. corollas 2.5-3.5 mm. FR 0.5-1.2 mm, glabrous; pappus 3-5 mm. 2x=28,56. Uncommon. Dry sagebrush scrub, open yellow-pine forest; 1800-2000 m. n SNH (Plumas Co.); to swe Can, MT, Color. NV.