

**PYRROCOMA ANEMOPHILA (ASTERACEAE: ASTEREAE),  
A NEW SPECIES FROM NORTHEASTERN CALIFORNIA**

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**ABSTRACT**

***Pyrrocoma anemophila*** Tiehm & Nesom, **sp. nov.**, is described from Shasta, Lassen, and Plumas counties, California, where it occupies an arc around Mount Lassen. The new species is illustrated and mapped.

Field studies by the first author and a taxonomic survey of the genus by the second have led each of us to recognize an undescribed species of *Pyrrocoma* from northeastern California. The epithet alludes to the type locality, Windy Hollow, a basin between Mount Lassen and Susanville.

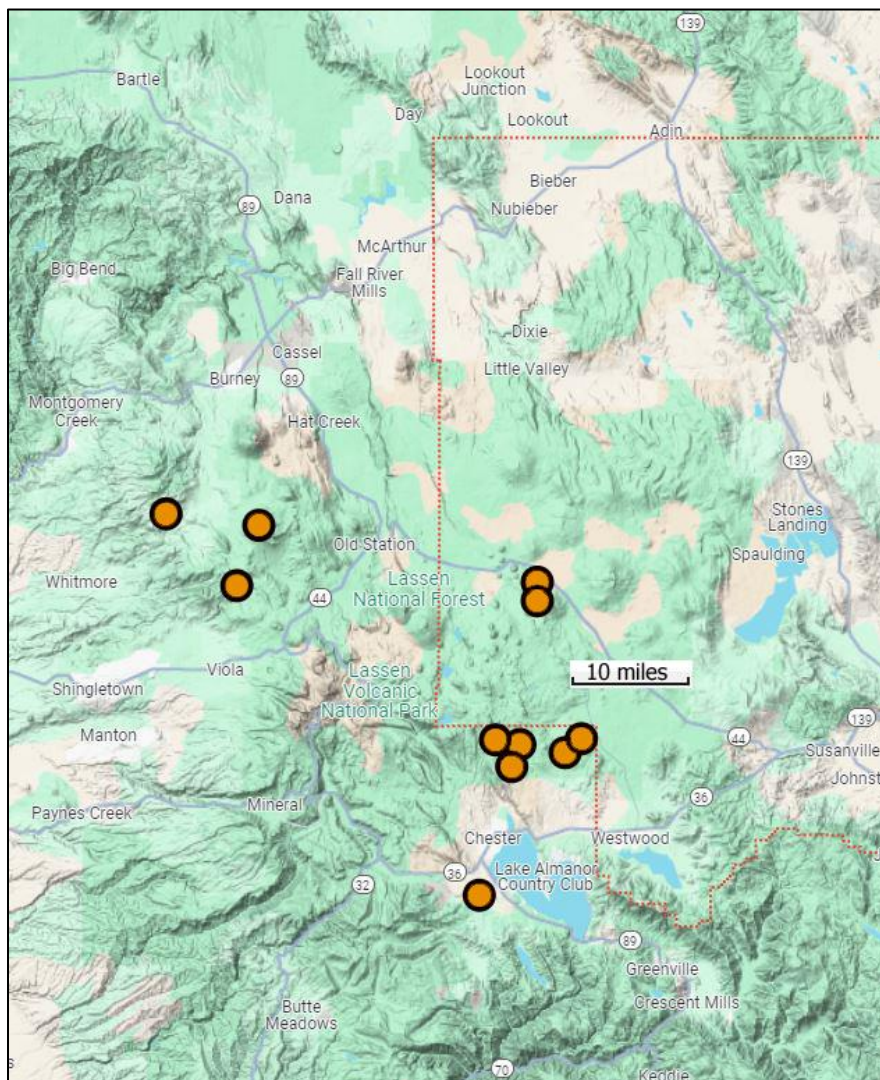
**PYRROCOMA ANEMOPHILA** Tiehm & Nesom, **sp. nov.** **TYPE: California.** Lassen Co.: Cascade Range, Windy Hollow, 18.0 road mi N of Hwy 36 to Susanville on Hwy 44 to Lassen, 0.3 air mi WSW of the hwy, 40.5468° N, 121.06448° W, NAD83, 1217 m (5617 ft), 15 Aug 2024, A. Tiehm 20,008 with Mike Hagebusch (holotype: RENO, Fig. 2; isotypes: ARIZ, ASC, ASU, B, BM, BRIT, BRY, CAS, CHAPA, CHSC, COLO, DAO, DES, F, GH, IDS, ILL, K, KANU, LSU, MA, MICH, MO, MU, NMC, NY, OBI, OSC, PE, PH, RM, RSA, SD, SRP, TEX, UC, UCR, UNLV, US, UTC, UTEP, WIS, WS, WTU, Z).

Distinct in its combination of prostrate- to decumbent-ascending stems, eglandular vestiture, minutely toothed leaf margins, lack of fibrous remnants of petiole bases, inflorescence mostly loosely racemose, involucre with narrow, strongly graduate, mostly glabrous phyllaries, and strigose achenes.

**Plants** perennials from a fusiform taproot. **Stems** several, 1st stems prostrate to decumbent, later ones ascending at maturity, 12–25 cm, nearly glabrous to sparsely hairy, eglandular or with a few glands below the heads. **Leaves:** basal forming rosettes, 7–12 cm long, mostly narrowly oblanceolate, without a well-defined petiole, without fibrous remnants of petiole bases, blades 10–30 mm wide, midvein below strong, yellowish, midvein above reduced, lateral veins inconspicuous, tertiary veins closely reticulate on both surfaces, thickened, glabrous, eglandular, margins wavy, serrulate to minutely crenulate with short lateral projections up to 0.3 mm long, apparently grading into entire; cauline sessile to short-petiolate, reduced up the stem, not clasping, nearly glabrous, with some hairs on the lower margins of the cauline leaves, occasionally loosely and sparsely hairy. **Heads** 1 or 2–6(–12) per stem and loosely racemose with peduncles 1–3 cm long, less commonly subsopicate. **Involucre** 15–20 mm wide (pressed); phyllaries 20–26, in 3(–4) subequal to unequal series, narrowly oblong, inner 9–11 mm long, green area in distal 1/2, scarious-margined, eglandular, strong dorsal nerve puberulent toward the tip, margins glabrous, apex acute to mucronate. **Ray florets** 8–15, fertile, corollas 8–11 mm long, with 3 minute lobes at the apex. **Disc florets** up to 43 in number, corollas 4.5–5.5 mm long. **Cypselae** 2.5–

4.5 mm long, flattened, 4–10-nerved, hirsute-strigose with hairs to about 0.5 mm long, less hairy with age; pappus bristles ca. 27–40, 4–7 mm long. Figures 2-12.

Flowering August through September. Dry, sometimes burned, soil in yellow pine forest, dried bed of vernal pools and playas in lodgepole pine or mixed conifers, vernal wet rocky flats in red fir, subalpine slopes; 4600-6400 (-8000) feet.



Map 1. Distribution of *Pyrocoma anemophila*. Shasta, Lassen, and Plumas cos., California. The Lassen County boundary is outlined in red.

**Additional collections. California.** Lassen Co.: Windy Hollow on the W side of Hwy 44, ca. 1 mi NW of its intersection with A21 (to Westwood), 40.544° N, 121.0539° W, sagebrush scrub in yellow pine forest, dry bed of a playa, 5700 ft, abundant, 14 Sep 1998, *Oswald* 9625 (CHSC, JEPS); Windy Hollow — 40.5427° N, 121.05435° W, 1 Oct 2023, *Hagebusch* 224 (ASU, BRIT, BRY, CAS, CHSC, COLO, GH, ILL, LSU, MO, NY, OSC, RENO, RSA, SRP, TEX, UNLV, US, UTC); 40.5428°N, 121.0546°W, 26 Jul 2024, *Hagebusch* 242 (CAS, MO, NY, RENO, RSA, UNLV); 40.5433°N, 121.0545°W, 10 Aug 2024, *Hagebusch* 335 (NY, RENO, UNLV); 40.5440°N, 121.0551°W, 18 Aug 2024, *Hagebusch* 380 (RENO); 40.5427°N, 121.054726°W, 1 Sep 2024, *Hagebusch* 384 (RENO). Plumas Co.: 0.18 mi S of Caribou Wilderness Boundary, 1.34 air mi W of Echo Lake, 8.4 air mi NE of Chester, NE side of Hay Meadow,

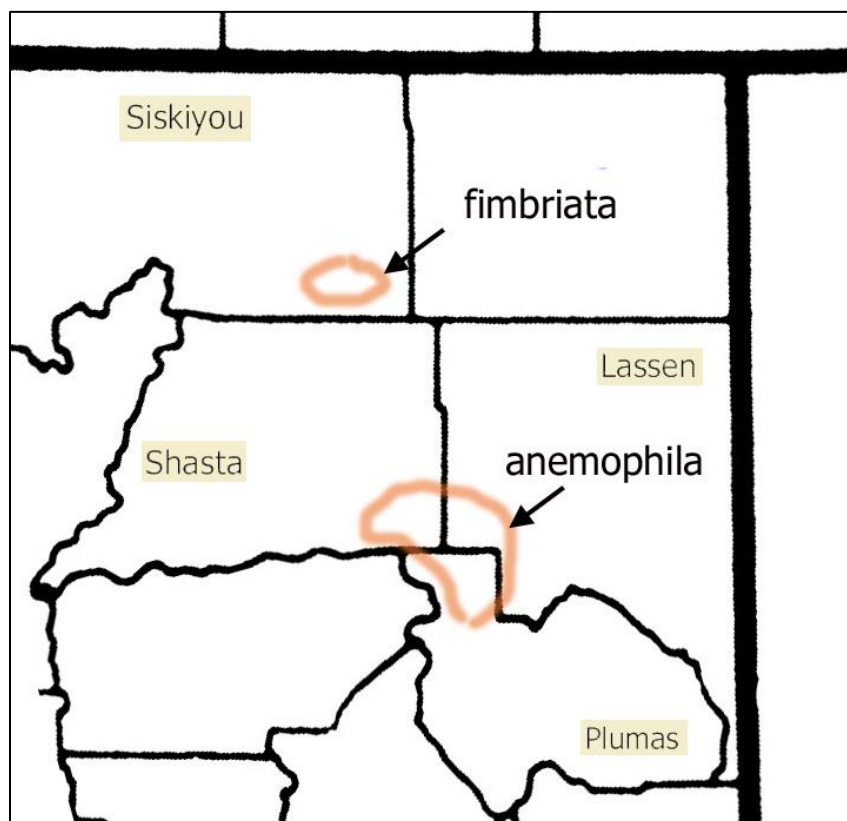


40.433385° N, 121.188207° W, yellow pine forest, dry bare soil, 6390 ft, common, normal size plants, 16 Aug 2023, *Ahart* 23230 (CHSC); 1.7 air mi W of intersection of Hwy 89 and Lake Almanor West Drive, 2.8 air mi S of intersection of Hwys 36 and 89, 3.7 air mi S of Chester Airport Helipad, S part of Mud Lake, 40.236° N, 121.255° W, yellow pine forest, dry burned bare soil, 4610 ft, 6 Sep 2023, *Ahart* 23256 (23256); Robbers Creek, 40.445722° N, 121.07225° W, 25 Aug 1996, *Clifton* 35273 (RENO—this sheet is filed as *Cuscuta occidentalis* Millsp., which is hosted by a mounted plant in full flower of *P. anemophila*); NW of Westwood on road 30N07 ca. 0.2 mi W of A21, ca. 2.5 air mi NE of the summit of Swain Mtn, 40.445° N, 121.0728° W, vernal flooded pool in a large meadowy opening in lodgepole pine forest, on the dry bed of the pool, 5700 ft, abundant, 5 Aug 1997, *Oswald* 8810 (CHSC); N of Lake Almanor near the SE corner of the Caribou Wilderness, Hay Meadow, 40.432778° N, 121.189722° W, mountain meadow in red fir forest, on a now dry but vernal wet, rocky flat, 6400 ft, common, 5 Aug 1997, *Oswald* 8811 (CHSC); near Swain Meadow, W of Co. Road A-1, 40.447° N, 121.072° W, vernal pool surrounded by lodgepole pine, 5800 ft, 5 Aug 1997, *Schoolcraft* 2628 (CAS, ELH). Shasta Co.: 8.2 air mi NE of Viola, 6.64 air mi NW of intersection of Hwys 44 and 89, 1.86 air mi NE of North Battle Creek Reservoir, basin of "Big Lake" (there is no lake), on the S side of US Forest Service Rte 32N24, 40.628° N, 121.631° W, vernal pool, ca. 250 yards S of a spring fed pond, mixed coniferous forest, dry soil, 5860 ft, common, normal size plants, 9 Aug 2022, *Ahart* 22906 (CHSC, JEPS); Lassen Natl Forest, Thousand Lakes Wilderness, Magee Peak and vicinity, 40.689° N, 121.62° W, subalpine slopes, 8000-8500 ft, 24 Aug 1975, *Taylor* 5447 (CHSC, DAV, DWT); 22 air km S of Burney, Dan Hunt Meadow (Jacks Backbone), 40.703° N, 121.748° W, large seasonally inundated playa, with *Pinus contorta*, *Abies concolor*, *Eryngium aristulatum*, 4850 ft, 9 Aug 2006, *Taylor* 19599 (CHSC, DAV, JEPS, RENO).



Figure 1. Habitat of *Pyrocoma anemophila* at the type locality, Windy Hollow, Lassen County. Plants of the species are abundant in the foreground — thousands of individuals occur on the playa bottom.. Photo by Mike Hagebusch.

The only other Californian species with a similarly low habit, eglandular vestiture, lack of fibrous remnants of the basal leaf petioles, and spicate to racemoid inflorescence is *Pyrrocoma fimbriata* (Nesom 2025) of southeastern Siskiyou County (Map 2) — morphology and geographical proximity suggest that *P. fimbriata* and *P. anomophila* may be evolutionary sisters. *Pyrrocoma fimbriata* differs in its shorter and narrower basal leaves with entire margins, spicate heads (vs. loosely racemoid), involucre 10–12 mm wide (vs. 15–20 mm), inner phyllaries 7–8 mm long (vs. 9–11 mm), and phyllary margins fimbriate (vs. glabrous).



Map 2. Distribution of *Pyrrocoma anomophila* and *P. fimbriata*.

#### ACKNOWLEDGEMENTS

The first author is grateful to Mike Hagebusch, volunteer in the RENO herbarium, for bringing *Pyrrocoma anomophila* to his attention. Mike's enthusiasm and inquisitive nature has led him to discover many interesting plants.

#### LITERATURE CITED

Nesom, G.L. 2025. *Pyrrocoma* (Asteraceae: Astereae) from Siskiyou Co., California. *Phytoneuron* 2025-24: 1–29.





Figure 2. *Pyrocoma anemophila*. Lassen Co., Tiehm 20008 (RENO). Holotype.





Figure 3. *Pyrocoma anemophila* at the type locality, Windy Hollow, Lassen County. Photo by Mike Hagebusch





Figure 4. *Pyrocoma anemophila*. Lassen Co., Hagenbusch 224 (RENO).



Figure 5. *Pyrrocoma anemophila*. Lassen Co., Hagenbusch 384 (RENO).





Figure 6. *Pyrrocoma anemophila*. Plumas Co., Ahart 23256 (CHSC).



Figure 7. *Pyrocoma anomophila*. Plumas Co., Schoolcraft 2628 (CAS).





Figure 8. *Pyrocoma anemophila*. Shasta Co., Ahart 22906 (CHSC).



Figure 9. *Pyrrocoma anemophila*. Detail from Ahart 22906, Figure 2.





Figure 10. *Pyrocoma anemophila*. Shasta Co., Taylor 19599 (RENO).

Figure 11. *Pyrocoma anemophila*. Shasta Co., Ahart 22906 (JEPS).





Figure 12. *Pyrocoma anemophila*. Plumas Co., Oswald *et al.* 8810 (CHSC).