

***PYROCOMA LANDERANTHA*, SP. NOV. (ASTERACEAE: ASTEREAE),
A MONOCEPHALOUS RELATIVE OF *P. LANCEOLATA***

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ABSTRACT

Pyrocoma landerantha Nesom, **sp. nov.**, is endemic to the Grass and Reese River valleys in Lander and Nye cos., Nevada. It is monocephalous but geography and morphology suggest that it is closely related to *P. lanceolata*.

Plants of *Pyrocoma* with an unbranched stem and single head often are typologically identified as *P. uniflora*. Monocephaly in the genus, however, appears to be a common evolutionary convergence and most monocephalous pyrocomas are not closely related to typical *P. uniflora*. The new monocephalous species from Nevada described here has different involucre morphology and is distantly removed in geography from *P. uniflora*. More plausible is a close relationship to *P. lanceolata*, which occurs in north and eastern Nevada as well as more broadly (Nesom 2025).

PYROCOMA LANDERANTHA Nesom, **sp. nov.** **TYPE:** Nevada. Lander Co.: Grass Valley, unnamed hot springs on the NW side of the valley, 8 air mi NW of the Walti Ranch, T24N, R47E, sec 15 [ca. 39.96° N, 116.63° W], along the saline seepages from the springs, 5660 ft, 26 May 1986, *Tiehm 10494* (holotype: BRY; isotypes: COLO, IDS, NSMC, NY, TEX, WTS). Figures 1-3.

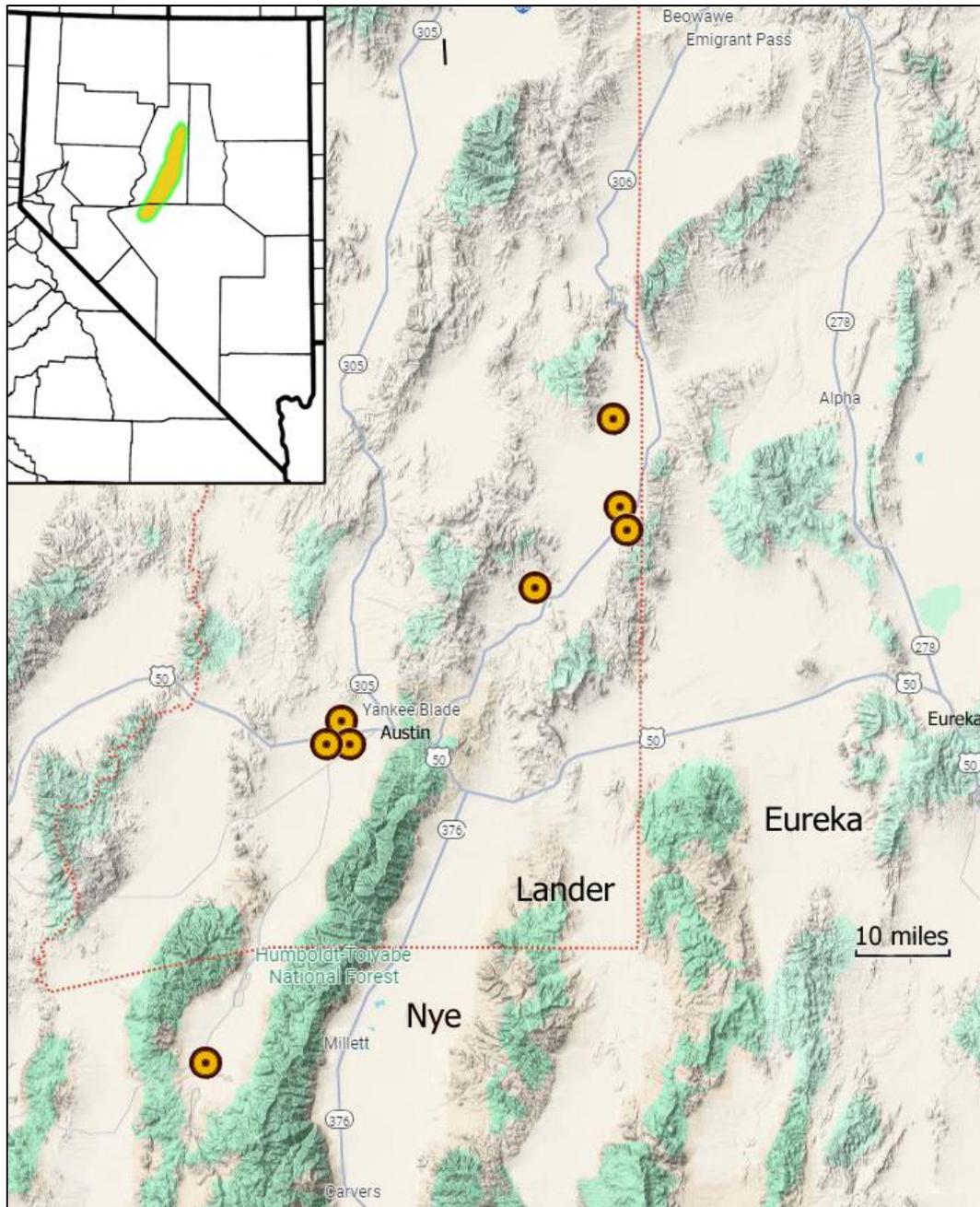
Distinct in its eglandular vestiture, leaves mostly basal, cauline leaves not clasping or subclasping, stem mostly bracteate, solitary heads with relatively large involucre (12–15 mm wide), phyllaries in 3–4 series of subequal to unequal length with the inner 6–7 mm long, and distinct geographical range in central Nevada.

Stems erect to ascending-erect or decumbent-ascending-erect, 10–25 cm, glabrous or glabrate to densely villous-pubescent. **Leaves:** basal lanceolate to oblong-lanceolate or oblong-oblong-lanceolate, 3–12 cm long, basally attenuate but usually without a well-defined petiolar region, margins sparsely to densely serrate to serrulate, venation slightly but distinctly raised-reticulate, surfaces densely to sparsely tomentose to villous-cottony to glabrate, eglandular, persistent white tomentum at the petiole bases, fibrous remnants of petiole bases persistent, cauline quickly reduced in size above the basal and usually bracteate on the whole stem or at least on the distal half, not clasping or subclasping. **Heads** 1, without immediately subtending bracts. **Involucre** 12–15 mm wide (pressed); phyllaries oblong-lanceolate to narrowly oblong with a long-triangular to lanceolate-acuminate apex, in 3–4 series of subequal to unequal length, inner 6–7 mm long, green patch elongate, mostly in the distal 1/2–2/3, eglandular margins with a narrow whitish rim. **Ray florets** 20–26, fertile, corollas 9–10 mm long, 1.5–2 mm wide, coiling. **Disc corollas** 5 mm long. **Achenes** sericeous-strigose. Figures 1-11.

Flowering June–July (August). Alkaline meadows and lowland, alluvial fans and floodplains; 5500–6800 feet. Map 4.

Additional collections. Nevada. Lander Co.: Gund Ranch, saline alkaline lowlands, 14 Jun 1979, *Durio s.n.* (RENO); Reese River Valley, near where the Lincoln Hwy [now Hwy 50] crosses Reese River, 39.439954 N, 117.222789 W, drying alkaline meadow, with *Ivesia kingii*, *Tanacetum potentilloides*, 27 Jun 1978, *Goodrich 11607* (NY, RENO); Reese River Valley, Hwy 722 (old Hwy 50), 14.2 km (8.8 mi) SW of jct with Hwy 50, 17 km (10.5 mi) airline distance SW of Austin, 39.4244 N, 117.2405 W, moist alkaline meadow, 27 Jun 1980, *Holmgren 9429* (BRY, NY); Reese River Valley, Italian ranch [Dry Creek Ranch],

N.C. [Nevada Central] Railroad, 6000 ft, 21 Jul 1913, *Kennedy 4425* (RENO); Reese River Valley, UNR Gund Ranch Experiment Station, T23N, R48E, sec 8, 5500 ft, 26 Jun 1978, *Lott 240* (NY, RENO); Grass Valley Ranch, spring near Grass Valley Road [Hwy 306], ca. 3/4 mi S of a ranch entry gate, T21N, R46E, sec 15 [ca. 39.70 N, 116.78 W], meadow with *Iris*, *Sisyrinchium*, *Triglochin*, *Dodocatheon*, 5940 ft, 11 Jun 1991, *Pinzl 9453* (NSMC, NY, TEX); Gund Ranch, Univ. of Nevada property, T23N, R48E Sec 9, rare on alluvial fans near mouth of Potato Canyon [along Hwy 306], 5800 ft, 7 Jun 1977, *Roundy s.n.* (NY-2 sheets; RENO); Reese River on Hwy 50, 5750 ft, 2 Jun 1973, *Williams 73-D-7* (NY, RENO). Nye Co.: Indian Valley, 10 mi S of Reese River Ranger Station [38.997706 N, 117.4687084 W], 6800 ft, 7 Jul 1945, *Maguire 25678* (MO, NY, OSC, PH).



Map 4. Distribution of *Pyrocoma landerantha* (Lander and Nye counties), endemic to the Grass and Reese River valleys. The Lander County boundary is outlined in red.

Leaf morphology of *Pyrocoma landerantha* is similar to that of *P. lanceolata*. Unbranched stems are consistent in *P. landerantha*, but branched stems (e.g., *Pinzl 9453*, Fig. 4; *Holmgren 9429*, Figs. 9-10) suggest the possibility of introgression from *P. lanceolata*, or, as with other species (e.g., *P. subviscosa*, *P. tenuicaulis*), branched and unbranched stems may be within the range of variation of a single species.

Variation in vestiture (glabrate to tomentose) of *Pyrocoma landerantha* appears to be populational, or at least not influenced by other species. Tomentose vestiture also occurs in *P. lanceolata*. In *P. landerantha* tomentose vestiture appears to be relatively consistent in northern populations (i.e., in the Gund Ranch area of Grass Valley, e.g., Figs. 5-7), glabrate ones in the Reese River valley (e.g., Figs. 8-11). The type collection (e.g., Figs. 1-3), from Grass Valley, north of Gund Ranch, shows population variation.

ACKNOWLEDGEMENTS

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LITERATURE CITED

Nesom, G.L. 2025. Taxonomy of *Pyrocoma lanceolata* (Asteraceae: Astereae). *Phytoneuron* 2025-31: 1–32.



Figure 1. *Pyrocoma landerantha*. Lander Co., Grass Valley, Tiehm 10494 (BRY), holotype.



Figure 2. *Pyrocoma landerantha*. Lander Co., Grass Valley, Tiehm 10494 (COLO), isotype.



Figure 3. *Pyrocoma landerantha*. Lander Co., Grass Valley, Tiehm 10494 (NY), isotype.

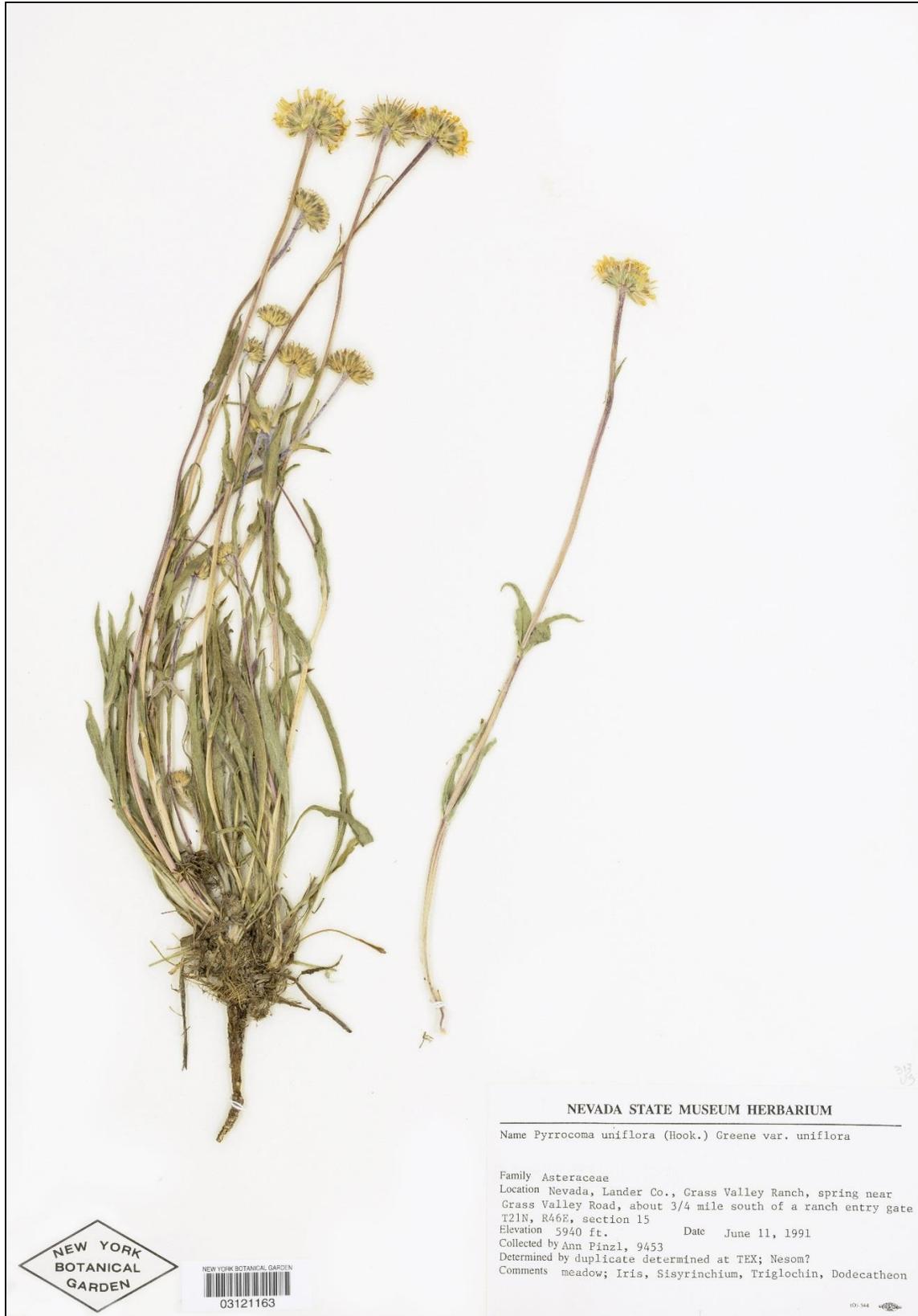


Figure 4. *Pyrocoma landerantha*. Lander Co., Grass Valley, Pinzl 9453 (NY). Branched stems suggest introgression from *P. lanceolata*.



Figure 5. *Pyrocoma landerantha*. Lander Co., Gund Ranch, Roundy s.n. (NY).



Figure 6. *Pyrocoma landerantha*. Lander Co., Gund Ranch, Roundy s.n. (RENO).



Figure 7. *Pyrocoma landerantha*. Lander Co., Gund Ranch, *Durio s.n.* (RENO).



Figure 8. *Pyrocoma landerantha*. Lander Co., Reese River, Williams 73-D-7 (NY).



Figure 9. *Pyrocoma landerantha*. Lander Co., Reese River, Holmgren 9429 (NY). Branched stems suggest introgression from *P. lanceolata*. See Fig. 9 for population variant.



Figure 10. *Pyrocoma landerantha*. Lander Co., Reese River, Holmgren 9429 (BRY). Branched stems suggest introgression from *P. lanceolata*. See Fig. 8 for population variant.



Figure 11. *Pyrocoma landerantha*. Nye Co., Reese River, Maguire & Holmgren 25678 (NY).