

**PYRROCOMA SOLIDAGINEA AND PYRROCOMA KENNEDYI
(ASTERACEAE: ASTEREAE),
VARIANTS OF *P. LANCEOLATA***

GUY L. NESOM

Research Associate

Academy of Natural Sciences of Drexel University

Philadelphia, Pennsylvania

guynesom@sbcglobal.net

ABSTRACT

Pyrrocoma solidaginea Greene, known from one small area in Eureka Co., Nevada, produces a densely panicle inflorescence of small heads on short peduncles and might be justifiably recognized at specific rank — further evidence is needed to strengthen the rationale for its separation from *P. lanceolata*. *Pyrrocoma kennedyi* A. Nels., from near the type locality of *P. solidaginea*, has a panicle but less dense (longer peduncles) inflorescence and larger heads — it is close in morphology to *P. lanceolata* in the same region and tentatively treated here as a synonym.

The types of *Pyrrocoma solidaginea* Greene and *Pyrrocoma kennedyi* A. Nels. were collected in close proximity from an area bordering the Elko-Eureka county line near the town of Carlin (Map 1). Hall (1928) recognized the former as a subspecies of *P. lanceolata*, the latter as a minor variation of it — since then both have been treated in synonymy of *P. lanceolata*. The two are similar in their tall stature, large basal leaves, and panicle inflorescence, but here, in agreement with Hall, the features of *P. solidaginea* more strongly justify its formal recognition as a distinct evolutionary entity.

PYRROCOMA SOLIDAGINEA Greene, Proc. Acad. Nat. Sci. Philadelphia 1895: 549. 1896. *Haplopappus lanceolatus* subsp. *solidagineus* Hall, Publ. Carnegie Inst. Wash. 389: 118. 1928. **TYPE: Nevada.** Eureka Co.: Palisade, along the Humboldt River, 24 Jul 1893, *E.L. Greene s.n.* (holotype: NDG). Figures 1 and 2.

Stems erect or ascending-erect, 30–45 cm, sparsely pubescent, quickly glabrescent and glabrate. **Leaves:** basal mostly oblanceolate, 8–18 cm long, basally attenuate to a slender petiole 1/3–1/2 the leaf length, sparsely cottony at the petiole bases, fibrous remnants of petiole bases persistent, blades 6–15 mm wide, sparsely tomentose but quickly glabrescent and becoming glabrous, thickened, margins entire to sparsely serrulate to denticulate, cauline mostly oblong-lanceolate to narrowly lanceolate, medial often subclasping-sheathing, sometimes basally ampliate, reduced little until the inflorescence then bracteate. **Heads** in a mostly distal, densely panicle inflorescence, peduncles 2–10(–15) mm long. **Involucres** 5.5–6 mm wide (pressed); phyllaries in (2–)3 series of unequal length (strongly graduate), inner 5–5.5 mm long, oblong to oblong-lanceolate, green patch in the distal 1/3–1/4, stramineous proximally with a green midline, glabrous, margins glabrous. **Ray florets** 10–14 (–18 fide protologue), corollas 6 mm long, 1–1.5 mm long, coiling slightly at the apex. **Disc corollas** 3.5–4 mm long. **Achenes** 2.5–3 mm long, strigose. Figures 1–8.

These plants are distinctive in aspect — Greene's protologue suggestion that they look like goldenrods is on the mark ("Species much resembling a *Solidago*; the small heads not rarely numbering as many as seventy-five on a single stem."). They are distinct from *P. lanceolata* in their taller stature and highly elaborated inflorescence of very small heads on short peduncles. Other distinctive features are the large, glabrous (at maturity) leaves with entire to subentire margins and (as in *P. lanceolata*) cauline leaves often with an ampliate, subclasping to clasping base.

Additional collections. Eureka Co.: Pine Valley, 25 Jul 1896, *Greene s.n.* (GH, NDG-2 sheets, UC).

PYRROCOMA KENNEDYI A. Nels., Bot. Gazette 37: 265. 1904. **TYPE: Nevada.** [Elko Co.]: Maggie Creek, 13 Aug 1902, *P.B. Kennedy* 630 (holotype: RM; isotypes: RENO, UC-fragment). Figures 9-11.

Similar to *Pyrrocoma solidaginea* but differing in various ways. **Leaves** tomentose, glabrescent, margins serrate to coarsely serrate. **Heads** in a paniculate inflorescence, peduncles (10–)20–60 mm long. **Involucres** 9–9.5 mm wide (pressed); phyllaries in 2–3 series of unequal length, inner 5.5–6 mm long. **Ray florets** 12–16. **Disc corollas** 4.5–5 mm long.

Hall (1928) characterized *Pyrrocoma kennedyi* as "An especially luxuriant and tomentose form" of *P. lanceolata*, with leaf margins resembling it in dentation." He noted, however, that the degree of vestiture is variable in *P. lanceolata*. "Eight collections have now been assembled from the Maggie Creek basin and the area immediately to the north. All exhibit the *kennedyi* features, indicating that this form is at least a well-marked ecotype and perhaps a geographic subspecies." Examples of these are cited here (and see illustrations).

Elko Co.: Maggie Creek, 28.4 mi. from Carlin, banks in meadow, *Artemisia cana* here in bud, ray flrs 20-18-19-16-15-21-19-18-20-11, 23 Aug 1925, *Hall* 12184 (DS-Fig. 13); Independence Mts, State Rte 226, Taylor Canyon, at the mouth of Water Pipe Canyon, 3.9 mi SE of the Tuscarora turnoff, 41.243616° N, 116.054883° W, open gravelly meadow, 6234 ft, locally common, 15 Jul 2002, *Holmgren* 14760 (ASC, BRY-Fig. 16, NY-Fig. 17, RENO-Fig. 15, UTC). Eureka Co.: Near mouth of Maggie Creek Cañon, 11.4 mi. from Carlin, meadow soil with grasses (*Elymus condensatus*, etc), *Carduus*, *Aster occidentalis*, *Senecio hydrophilus*, 23 Aug 1925, *Hall* 12182 (DS-Fig. 11).

Variants with an expanded inflorescence occur in other places in northeastern Nevada (e.g., Fig. 19), and although there may be a stronger tendency for a larger number of heads in the Maggie Creek basin, a rationale for formal taxonomic recognition as distinct from *P. lanceolata* of these plants is weak.

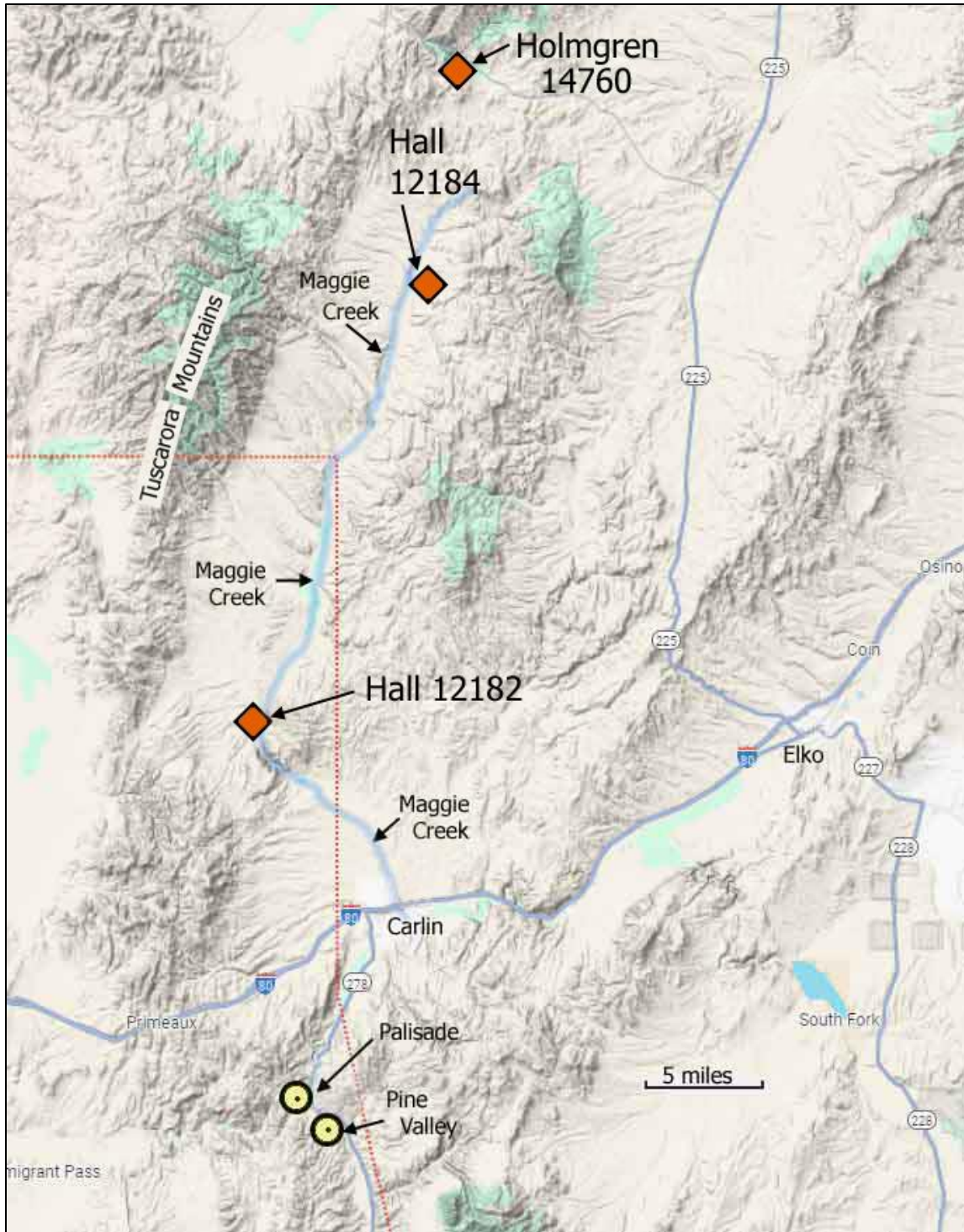
Hall further observed (p. 118) that "It is remarkable that the large size of the heads [in *Pyrrocoma kennedyi*] is maintained notwithstanding their large number, differing in this respect from [*P. solidaginea*], in which high numbers are correlated with a reduction in size"

ACKNOWLEDGEMENTS

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LITERATURE CITED

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



Map 1. Distribution of *Pyrrocoma solidaginea* (circles) and *P. kennedyi*/aff. *kennedyi* (triangles). The boundary of Eureka County is outlined in red; Elko County is north and east. Greene collected the type of *P. solidaginea* at "Palisade" and morphologically equivalent plants at "Pine Valley." Wet habitats in the Palisade/Pine Valley area presently are fenced and heavily grazed. The type of *P. kennedyi* was collected at "Maggie Creek," perhaps near its confluence with the Humboldt River in Carlin or, more likely, farther north along the road from Carlin paralleling the creek, where it broadens into marshy areas, bounded on the west by the Tuscarora Mountains. Similar marshy/riparian habitat exists along the Humboldt River just south of Carlin, on the west side of Hwy 278.



Figure 1. *Pyrrocoma solidaginea*. Palisade, Eureka County. Holotype (NDG).



Figure 2. *Pyrrocoma solidaginea*. Detail from holotype (Fig. 1).



Figure 3. *Pyrocoma solidaginea*. Pine Valley, Eureka Co. Greene s.n. (NDG 00566).



Figure 4. *Pyrrocoma solidaginea*. Detail from Figure 2.



Figure 5. *Pyrocoma solidaginea*. Pine Valley, Eureka Co. Greene s.n. (NDG 0057).



Figure 6. *Pyrrocoma solidaginea*. Detail from Figure 3.



Figure 7. *Pyrrocoma solidaginea*. Detail from Figure 3.

Nesom: *Pyrrocoma solidaginea*Figure 8. *Pyrrocoma solidaginea*. Pine Valley, Eureka Co. Greene s.n. (UC).



Figure 9. *Pyrrocoma* aff. *lanceolata*. Holotype of *Pyrrocoma kennedyi* (RM).



Figure 10. *Pyrrocoma* aff. *lanceolata*. Isotype of *Pyrrocoma kennedyi* (RENO).

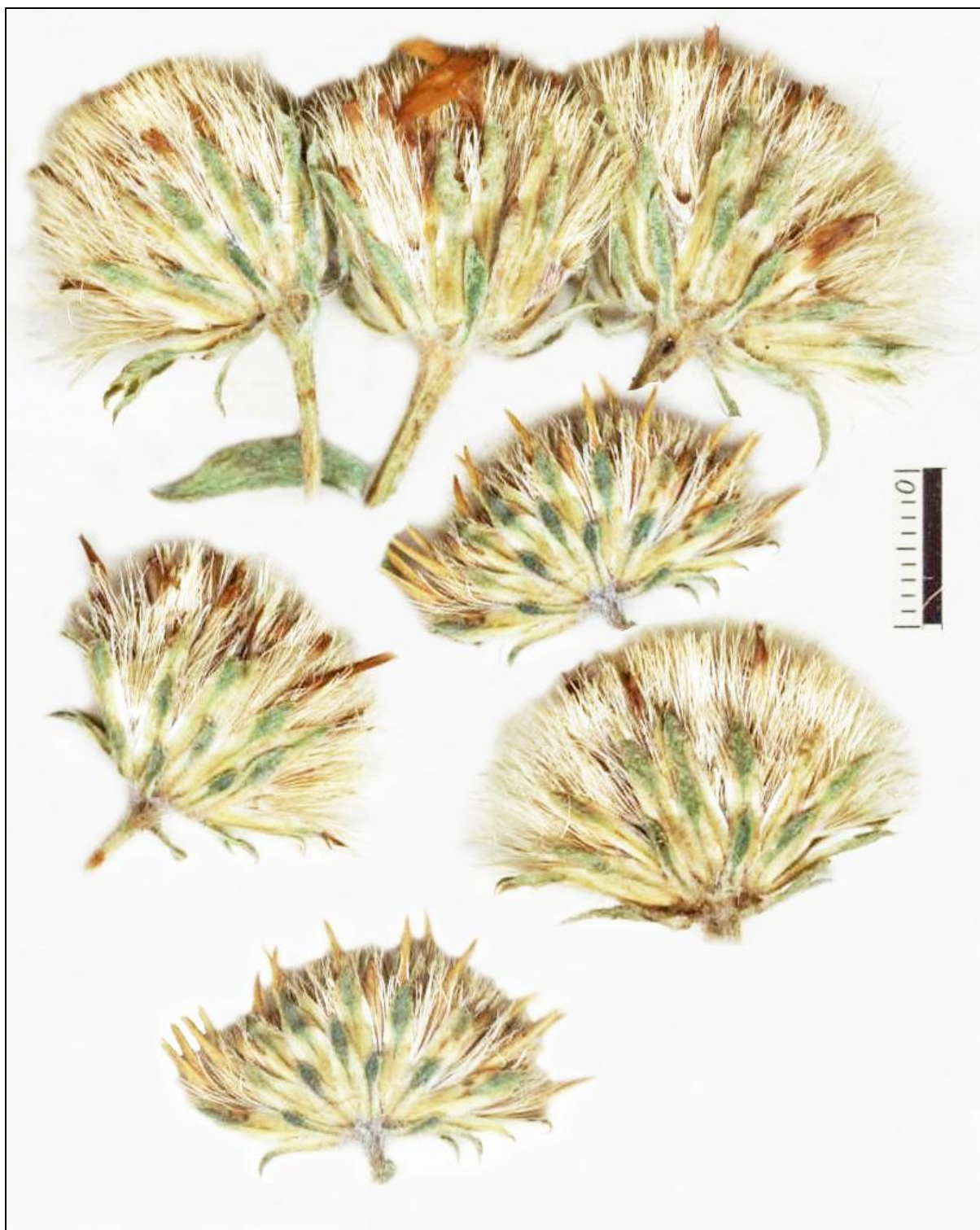


Figure 11. *Pyrrocoma* aff. *lanceolata*. Heads from the type collection of *P. kennedyi* (Figs. 5 and 6).



Figure 12. *Pyrocoma* aff. *lanceolata*. Elko Co., Maggie Creek Cañon, Hall 12182 (DS).



Figure 13. *Pyrrocoma* aff. *lanceolata*. Elko Co., Maggie Creek Cañon, Hall 12184 (DS).



Figure 14. *Pyrrocoma* aff. *lanceolata*. Tuscorora flats, just north of the Maggie Creek basin, Elko Co., Kennedy (RM). Cited in the protologue of *P. kennedyi* as a paratype.



Figure 15. *Pyrocoma* aff. *lanceolata*. Elko Co., Holmgren 14760 (RENO). Inflorescence subcorymbose but otherwise characteristic of the species. Figures 12 and 13 show population variation.



Figure 16. *Pyrrocoma* aff. *lanceolata*. Elko Co., Holmgren 14760 (BRY).



Figure 17. *Pyrrocoma* aff. *lanceolata*. Elko Co., Holmgren 14760 (NY).



Figure 18. *Pyrrocoma lanceolata*. Elko Co., Prunty Ranch Meadows, Train 588 (NY).



Figure 19. *Pyrrocoma lanceolata*. Elko Co., 3 mi W of Elko, Maguire & Holmgren 22030 (NY).



Figure 20. *Pyrrocoma lanceolata*. Elko Co., Secret Valley, Pinzl 8711 (NY).



Figure 21. *Pyrrocoma lanceolata*. Southern Eureka Co., Goodner & Henning 822 (RENO).
Inflorescence morphology approaching that of *P. kennedyi*.