

**PYRROCOMA PAYETTENSIS (ASTERACEAE: ASTEREAE),
A NEW SPECIES FROM WESTERN IDAHO**

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ABSTRACT

A collection from along the Payette River west of Emmett in Gem County, Idaho, is described here as *Pyrrocoma payettensis* Nesom, **sp. nov.** It is strikingly distinct from other Idaho and Oregon species, its relationship within the genus speculative.

A new species of *Pyrrocoma* is described here from the lower Payette Valley in Gem Co., Idaho, downriver (Payette River) from Emmett. It is known only from a single specimen but the morphology is distinctive and the collection was made in an area where irrigated agriculture has become prevalent. Hopefully this publication will stimulate an attempt to relocate plants of the species. Conservation priority for the Payette River area is to the northeast, between Payette Lake and Cabarton Bridge (Payette Land Trust 2025).

PYRROCOMA PAYETTENSIS Nesom, **sp. nov.** **TYPE:** **Idaho.** Gem Co.: 12 mi W of Emmett, with *Sarcobatus* in alkali flats, [floodplain of Payette River, ca. 2250 ft], 7 Aug 1937, *J.H. Christ 8547* (holotype: NY).

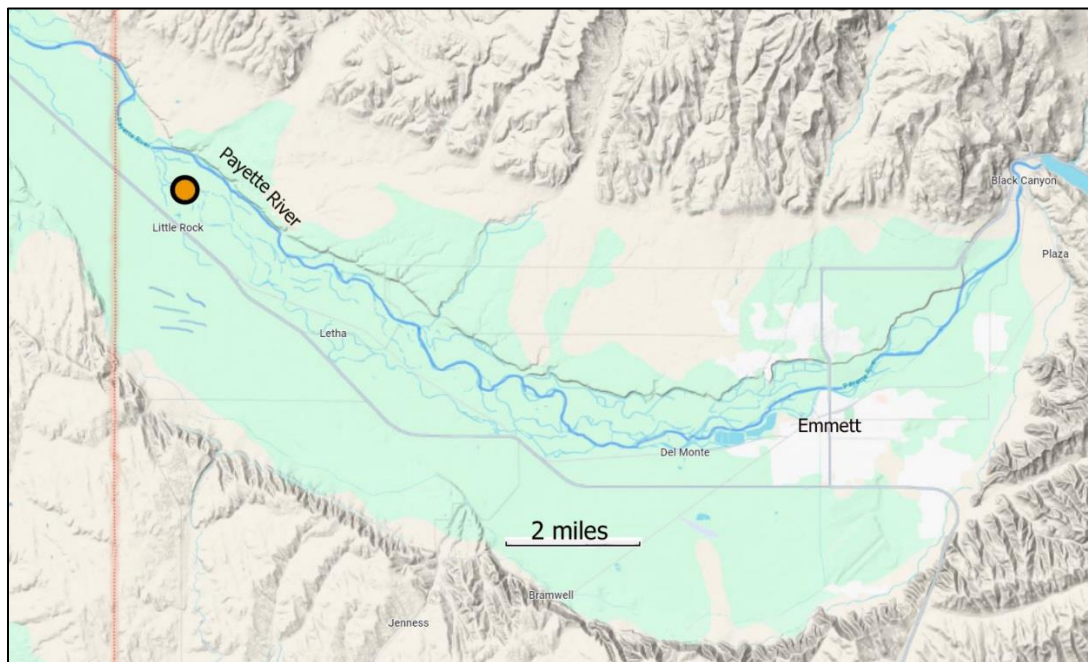
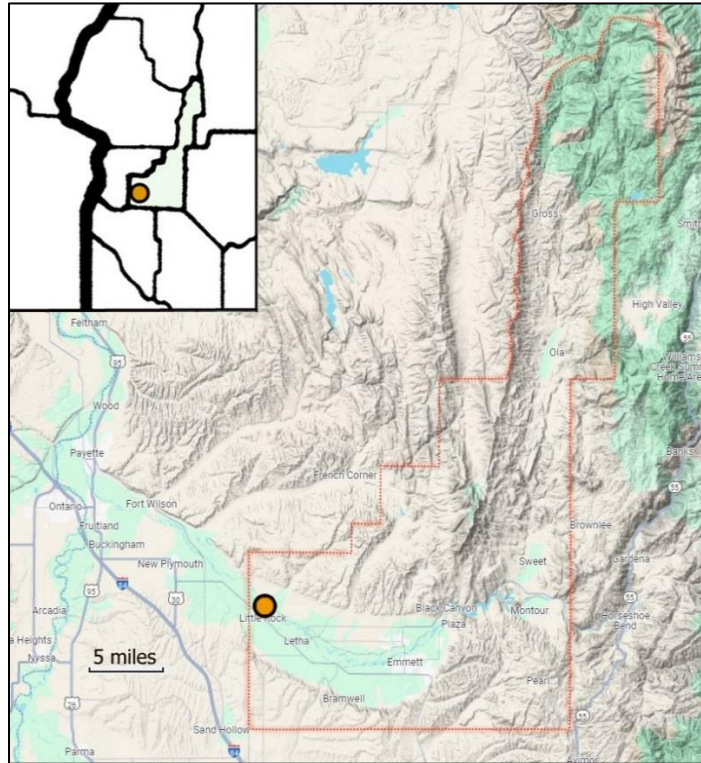
Similar to *Pyrrocoma glomerata* (Nutt.) Torr. & Gray in its spike of small heads subtended by clasping, leaf-like bracts and its small involucre with strongly graduate phyllaries but distinct in its lack of glands (vs. glandular), serrate (vs. entire) and smaller basal leaves, heads borne singly (vs. glomerate), persistently tomentose (vs. glabrous) involucre, and hairy (vs. glabrous) achenes.

Stems ascending-erect, 25–35 cm, glabrous or sparsely puberulent distally. **Leaves:** basal oblanceolate, 6–12 cm long, attenuate to a petiolar region 1/8–1/5 the leaf length, blades 6–10 mm wide, glabrous, eglandular, without raised venation, margins serrulate to denticulate with 6–10 pairs of shallow teeth, cauline lanceolate, gradually diminished in size, continuing into the inflorescence, clasping-sheathing, not basally ampliate, margins entire with a few teeth. **Heads** 5–8, sessile, each subtended by a leaf-like bract, borne singly in a spike 5–20 cm long, on internodes 0.5–4.5 cm long, decreasing in length distally. **Involucre** 8–10 mm wide (pressed); phyllaries oblong to oblong-lanceolate with a deltate-rounded-apiculate apex, lightly but persistently tomentose at least proximally, in 3–4 series of unequal length (strongly imbricate), inner 6–7 mm long, green area in the distal 1/3–1/4, margins whitish-indurate, entire. **Ray florets** 12–14, sterile?, corollas 6–7 mm long, 0.5–0.8 mm wide, erect. **Disc corollas** ca. 5 mm long. **Achenes** ca. 4 mm long, strigose.

The new species is from collections made by Christ on August 6–7, from "12 miles west of Emmett" — the most complete set of these is at NY, with numbers from 8518 to 8578. Habitats noted on labels are these: "alkaline soils with *Sarcobatus*," "alkaline flats," "alkaline sloughs," "alkali seepage," "road edge through alkaline area," and "drainage ditch banks." Species represented are from *Ammania*, *Atriplex*, *Bassia*, *Berula*, *Bulboschoenus*, *Carex*, *Cyperus*, *Eleocharis*, *Euthamia*, *Glyceria*, *Leersia*, *Marsilea*, *Persicaria*, *Polygonum*, *Sagittaria*, *Schoenoplectus*, and *Sueda* as well as from other genera less indicative of a wet habitat.

In the diagnosis *Pyrrocoma payettensis* is compared to *P. glomerata* (Nesom 2025b) but it seems unlikely that the two are closely related. *Pyrrocoma liatrifomis* and *P. scaberula* also are species of western Idaho and adjacent Oregon and Washington, but these two have considerably larger

heads and, like *P. glomerata*, they have glandular stems, leaves, and involucre and lack persistent fibers of the basal leaves. *Pyrrocoma payettensis* is morphologically and ecologically out of place among the species of the *P. carthamoides* complex (Ertter & Nesom, in prep.). In its spicate inflorescence, eglandular vestiture, persistent remnants of old petiole bases, and strigose achenes, it is similar to species of the *P. racemosa* sensu stricto group (Nesom 2025a), but these have a near-Pacific geographic range, the closest populations to Gem County more than 300 miles westward. The evolutionary relationship of *P. payettensis* within the genus is speculative without further evidence.



Maps 1 and 2. Distribution of *Pyrrocoma payettensis*. Gem Co., Idaho, outlined in red.



Figure 1. *Pyrrocoma payettensis*, holotype, with enlarged details.



Figure 2. *Pyrrocoma payettensis*. Detail from the holotype, showing persistent fibrous remnants of the basal leaves.

LITERATURE CITED

- Nesom, G.L. 2025a. Taxonomy of the *Pyrrocoma racemosa* group (Asteraceae: Astereae). *Phytoneuron* 2025-05: 1–64.
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