

DISTINCTION OF *PYRROCOMA ACUMINATA* (ASTERACEAE: ASTEREAE), FROM SOUTHWESTERN WYOMING

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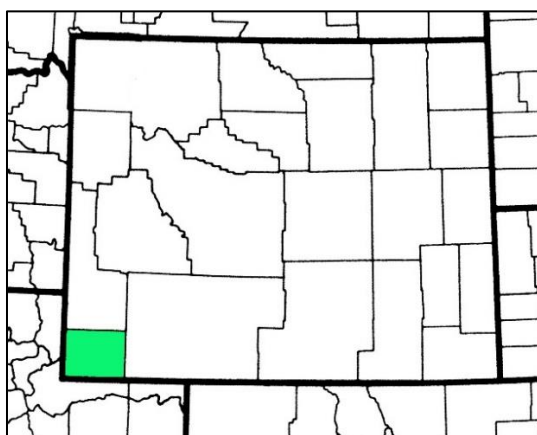
ABSTRACT

Pyrrocoma acuminata Rydb, described from Uinta Co., Wyoming, has been considered extinct or else, with little justification, a synonym of *P. uniflora*. It apparently has not been observed since the type collection in 1873, but its distinction is emphasized here. Image of the type and details and a morphological description are provided. Contrasts with *P. uniflora* and *P. lanceolata*, which also occur in Uinta County, illustrate their difference and *P. acuminata* perhaps is better placed in some other genus.

Rydberg (1900) described *Pyrrocoma acuminata* from Uinta Co., Wyoming, seeing habital similarities to *Pyrrocoma uniflora* but finding strong differentiating characters. Among the taxa of his *Haplopappus* sect. *Pyrrocoma*, Hall (1928) recognized it as a distinct species known only from the type collection. Mayes (1976), however, regarded it as a synonym as *P. uniflora*, noting that it "is believed to be no more than a form of the variety" [*P. uniflora* var. *uniflora* of Mayes], and the Flora of North America treatment (Bogler 2006) followed suit, listing it in synonymy of *P. uniflora*.

Pyrrocoma acuminata does not appear in Dorn (2001), the account of Wyoming rare plants (Fertig et al. 1995), or in the Wyoming Natural Diversity Database (WYNDD 2025). Perhaps inclusion of the name in a "List of recently extinct and possibly extinct species of higher plants in the continental United States" (Smithsonian Institution 1975), followed by the synonymy of Mayes, relegated it to non-entity and it has essentially been out of view for the last 50 years.

Its distinctiveness is confirmed here.



Map 1. Uinta Co., Wyoming. The type locality of *Pyrrocoma acuminata* is Fort Bridger.

PYRROCOMA ACUMINATA Rydb., Bull. Torrey Bot. Club 27: 626. 1900. *Haplopappus contractus* Hall, Publ. Carnegie Inst. Wash. 389: 155. 1928 (not *Haplopappus acuminatus* DC., 1836).
TYPE: Wyoming. Uinta Co.: Fort Bridger, 1873, Dr. J. Van A. Carter s.n. (holotype: NY).

Perennial from a woody taproot. **Stems** erect to ascending-erect, 12 cm, sparsely tomentose, eglandular. **Leaves:** basal apparently not persistent or not produced, cauline narrowly oblanceolate,

proximal-most 0.5–2 cm long, quickly increasing to 2.5–4 cm long, then nearly even-sized up to the peduncle, gradually attenuate at the base and without a clearly defined petiole or petiolar region, fibrous remnants of basal leaves not persistent, not clasping or subclasping, both faces tomentose, eglandular, margins entire, eciliate. **Heads** solitary, on ebracteate peduncles 2–3 cm long, without immediately subtending bracts. **Involucres** 12–15 mm wide (pressed); phyllaries broadly oblong to oblong-elliptic with an acute apex (prominently loosely acuminate, whence the epithet), in (2–)3 series of equal to subequal length, inner 7–9 mm long, glabrous, eglandular, green area in the distal 1/2 not strongly delimited, indurate-stramineous proximally. **Ray florets** ca. 12–16, fertile (apparently), corollas 10–12 mm long, 2–3 mm wide. **Disc corollas** 4–5 mm long. **Achenes** ca. 2.5 mm long (fide Hall 1928), strigose. Figures 1–5.

Clues to where in the Fort Bridger vicinity Carter might have made this collection are not evident. He also made collections from "Fort Bridger" in 1873 of *Erigeron concinnus*, *Castilleja chromosa*, *Delphinium bicolor*, and *Penstemon caespitosus*, all NY. These, apparently, were his only collections of vascular plants, but he had earlier collected mammalian fossils from the vicinity of Fort Bridger.

The only similarity of this plant to *Pyrrocoma uniflora* is the monocephaly. It is so distinctive in habit (sharply delimited woody taproot, apparent lack of basal leaves, lack of fibrous leaf remnants, cauline leaves quickly increasing in size from the proximal-most and relatively even-sized up to the peduncle) that it hardly looks like a species of typical *Pyrrocoma*, although Rydberg and Hall both accepted it in the genus. Hall (p. 155) observed that it belongs "in the uniflorus group, but it seems impossible to place it more closely in any phylogenetic arrangement." With the disavowal here of similarity to *P. uniflora*, *Pyrrocoma acuminata* seems isolated in *Pyrrocoma*, but no other obvious genus of Astereae accommodates it. Understanding of its relationship probably awaits a molecular analysis.

Typical *Pyrrocoma uniflora* and *P. lanceolata* both occur in Uinta County. Figures 6, 7, and 8 show examples of both to illustrate their difference from *P. acuminata*.

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Figure 1. *Pyrocoma acuminata*. Holotype, Carter s.n. (NY).



Figure 2. *Pyrrocoma acuminata*. Detail from the holotype. Woody taproot, abrupt root/stem transition, proximal cauline leaves.



Figure 3. *Pyrrocoma acuminata*. Detail from the holotype.



Figure 5. *Pyrrocoma acuminata*. Detail from the holotype.



Figure 6. *Pyrrocoma uniflora*. Typical plant, Uinta Co., Wyoming. Dorn 7990 (NY).



Figure 7. *Pyrocoma lanceolata*. Typical but small plant, Uinta Co., Wyoming. Atwood 13461 (NY).



Figure 8. *Pyrrocoma lanceolata*. Typical plant, Uinta Co., Wyoming. Refsdahl 8952 (BRY).