

**RANGE EXTENSIONS
FOR *ERYTHRANTHE ARVENSIS* AND *E. HALLII* (PHRYMACEAE)**

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ABSTRACT

Recent study at the Rocky Mountain Herbarium (RM) has brought to light distribution records for *Erythranthe arvensis* (first record for the state of Wyoming) and *E. hallii* (new county records for Colorado). Photos of specimens and a distribution map are included.

ERYTHRANTHE ARVENSIS (Greene) Nesom Figures 1, 2.

The new record for Wyoming is closely adjacent to Bear Lake Co., Idaho, from where the species has previously been reported (*Shultz* 2753, UT; see Nesom 2012).

Wyoming. Lincoln Co.: Green River Basin, S end of Slate Creek Ridge, ca. 11.5 mi air mi NNE of Kemmerer, wet meadow draw with sagebrush sides and shrub islands, 7100-7500 ft, 5 Jul 1995, *Cramer* 7157 (RM).

ERYTHRANTHE HALLII (Greene) Nesom Figures 1, 3, 4.

New records are recorded for Archeluta Co. and Routt Co., Colorado. Previous maps for this Colorado endemic (Nesom 2012, 2013) have indicated its occurrence in Jackson Co., but I am unable to relocate documentation for that. A summary of known records is presented here; many additional collections from Boulder and Larimer counties are housed at RM (examined and annotated by me).

Colorado. Archeluta Co.: Piedra, 14 Jul 1899, *Baker* 588 (RM-2 sheets). **Boulder Co.:** Boulder, stream, 5700 ft, 20 Jun 1906, *Daniels* 25 (MO); W of Boulder, rocky mossy streamlet, ca. 5500-5600 ft, 14 Jun 1915, *Pennell* 5827 (PH); along trail from Buckingham campground to Fourth of July Mine, wet meadows, 9500 ft, 13 Aug 1979, *Teare & Taylor* 1339 (DAV); seepage over granite slabs at base of S-facing slope in *Pinus ponderosa* woodland along Boulder Creek, 5600 ft, 21 Jun 1979, *Taylor & Teare* 7396A (DAV); beside a spring near summit of Flagstaff Mt., just W of Boulder, 7000 ft, 18 May 1949, *Weber* 4653 (TEX, UC); 8 mi W of Lyons, South St. Vrain Canyon, 6300 ft, 12 Jun 1922, *Wiegand & Upton* 4257 (MO). **Clear Creek Co.:** Georgetown, damp places, 18 Jul 1892, *Patterson* 294 (MO, PH- 2 sheets, UC). **Fremont Co.:** canyon of the Arkansas River near Canon City, moist gravel of stream bed, 5400 m, 28 Jun 1950, *Ripley & Barneby* 10172 (PH). **Grand Co.:** Devil's Staircase, East Inlet, 3.5 mi E of Grand Lake, Shadow Mt. area, moss banks on cliff in temporary seep areas, ca. 9000 ft, 20 Jul 1961, *Douglas* 61-315 (UT); North Inlet 1/4 mi below Cascade Fall, 3 mi NE of Grand Lake, shaded ledge, under overhanging, S-facing cliffs, 8800 ft, 7 Aug 1961, *Douglas* 61-480, voucher for $n = 16$ (UT); Little Yellowstone Canyon, 14.5 mi N of Grand Lake, Rocky Mtn Natl Park, gravel at streamside, 9560 ft, 10 Aug 1961, *Douglas* 61-488 (UT); Sulphur Springs, 23 Jul 1906, *Osterhout* 3321 (DS). **Jefferson Co.:** Morrison, moist soil, 1970 m, 3 Jun 1921, *Clokey* 4287 (UC); Morrison, 27 Jul 1889, *Greene* s.n. (ND-Greene); about Golden City, in shady ravines, at lower altitudes only, 1871, *Hall & Harbour* 398 (MO-the type, GH digital image); Morrison, 5 Jun 1881, *Smith* s.n. (PH). **Larimer Co.:** Estes Park, moist ground, 29 Jun 1912, *Churchill* s.n. (MO); ravine E of Horsetooth Mtn, 26 May 1894, *Osterhout* 291 (RM); Horsetooth Mtn, along streamlet, base of rocks, ca. 5700-5800 ft, 17 Jun 1915, *Pennell* 5851 (PH); W of Horsetooth Mtn, wet shady ravine, ca. 5800-6000 ft, 17 Jun 1915, *Pennell* 5858 (PH); Loveland, 55 mi above dam in Big Thompson Canyon, in seep on rocky ledge, no date, *Vickery cult* 7313 (UT). **Routt Co.:** Fish Creek Falls, moist crevices, 21 Jul 1903, *Goodding* 1650 (RM). **Saguache Co.:** Sargents, moist soil along stream, woods, ca. 8700-9300 ft, 2 Aug 1915, *Pennell* 6299 (PH, RM).

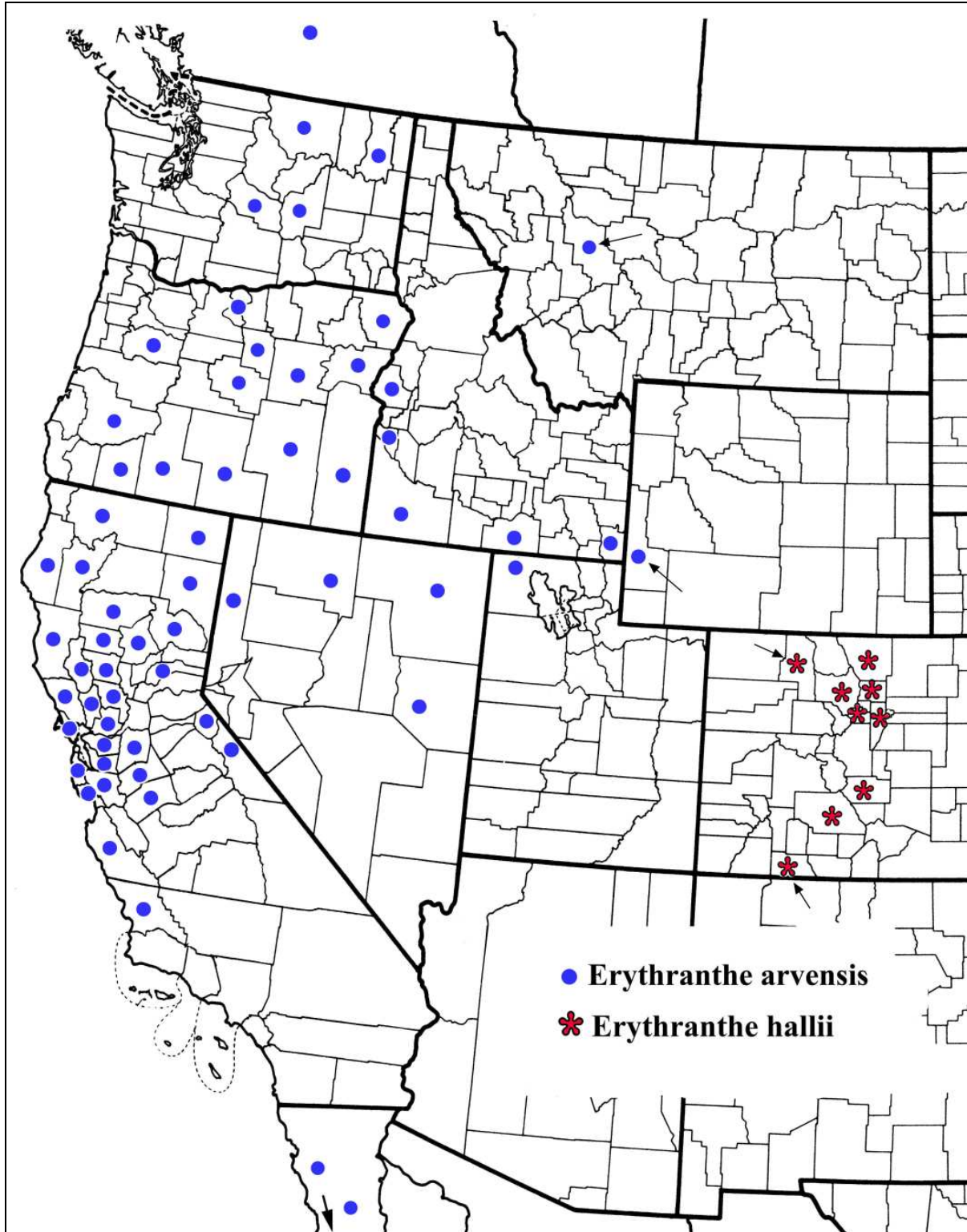


Figure 1. Distribution of *Erythranthe arvensis* and *E. hallii*. Arrows point to new records. The record for *E. arvensis* in Lewis & Clark Co., Montana (with arrow): vic. of Helena, [no date], *F.D. Kelsey s.n.* (PH) — as reported in Nesom (2013).



Figure 2. *Erythranthe arvensis* from Lincoln Co., Wyoming (Cramer 7157, RM), in typical morphology for the species. Inset shows enlargement of inflorescence with characteristic cleistogamous corolla.

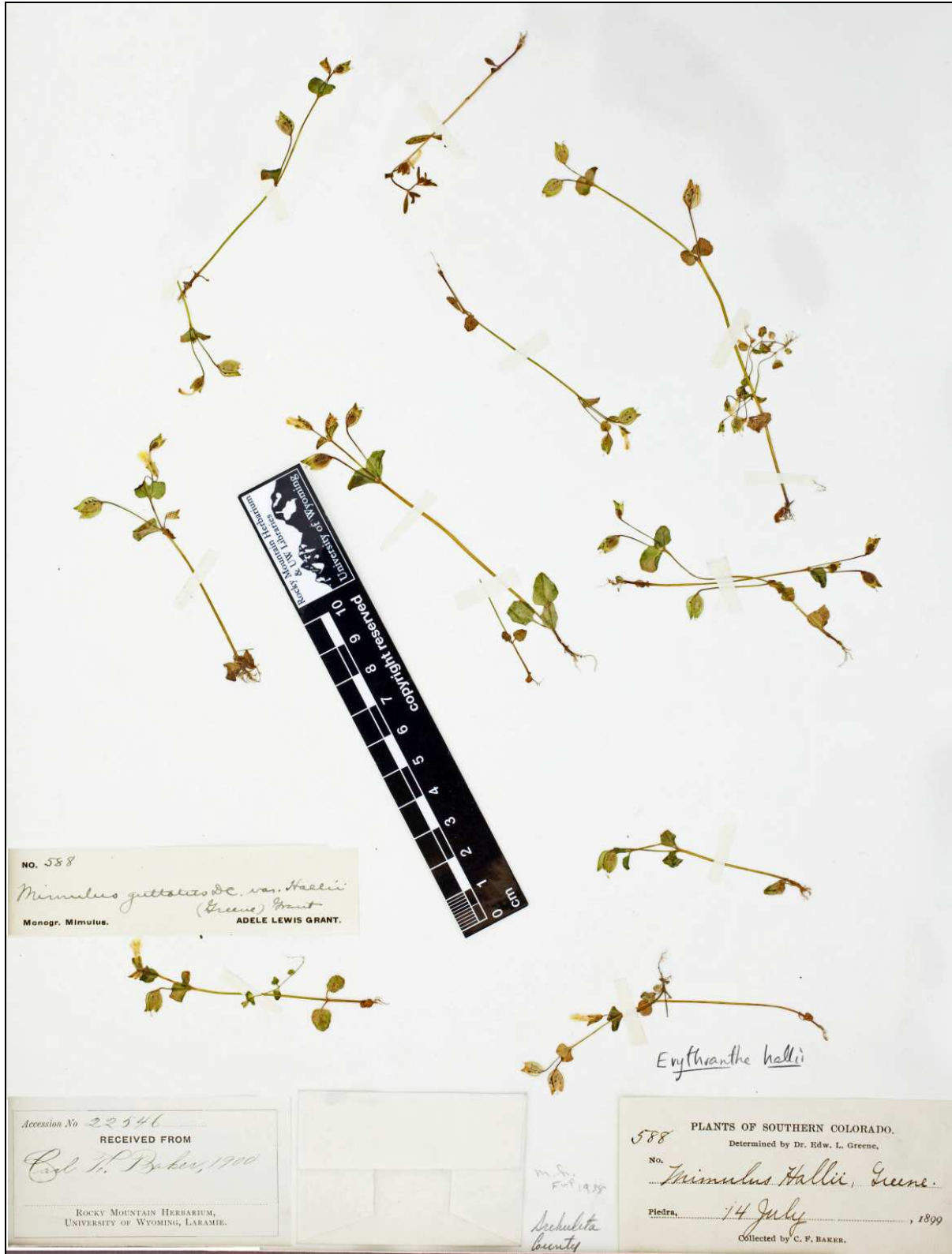


Figure 3. *Erythranthe hallii* from Archeluta Co., Colorado (Baker 588, RM).



Figure 4. Representative collection of *Erythranthe hallii*, Larimer Co., Colorado (Osterhout 291, RM). Note the characteristic cleistogamous corollas (see inset).

ACKNOWLEDGEMENTS

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LITERATURE CITED

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