

***PYRROCOMA PEREGRINA* (ASTERACEAE: ASTEREA),
A NEW SPECIES FROM MONO AND INYO COS., CALIFORNIA**

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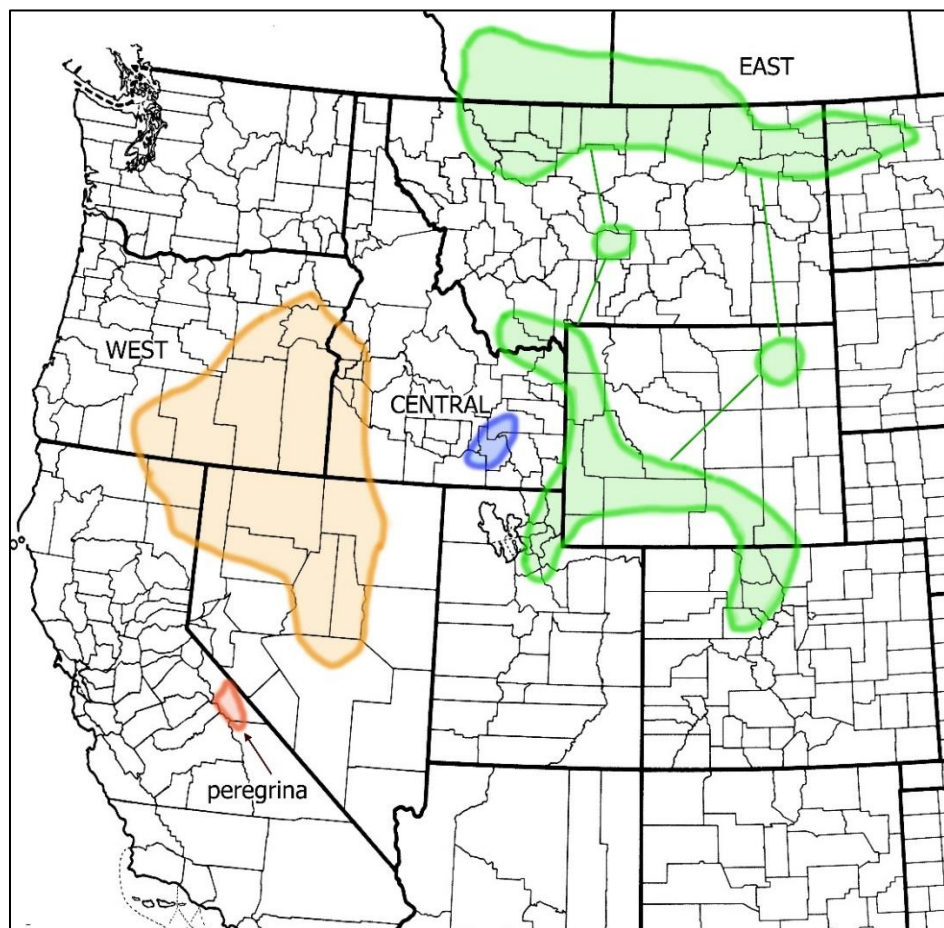
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ABSTRACT

Pyrrocoma collections from southern Mono Co. and adjacent Inyo Co., California, represent a previously undescribed species, ***Pyrrocoma peregrina* Nesom, sp. nov.** The plants resemble *P. lanceolata* and might be treated within that variable species, but their morphological and geographic distinction justifies formal recognition.

Pyrrocoma collections from southern Mono Co. and adjacent Inyo Co., California, represent a geographically and morphologically distinct entity. The plants closely resemble *P. lanceolata* (Hook.) Greene (Nesom 2025a) and it is plausible that the Mono-Inyo system was founded by dispersal from nearest occurrences of *P. lanceolata*, about 150 miles away in Nevada (Maps 1 and 2). It also is plausible that the source may have been in northeastern California, with migration southward along the Sierra, or that it is a remnant of a once more widely spread species.



Map 1. Distribution of *Pyrrocoma peregrina* and the geographic systems of *P. lanceolata*.

In the interpretation here, *Pyrrocoma lanceolata* occurs in a series of allopatric systems (Nesom 2025) (Map 1) ---

- * the EASTERN, wide-ranging, and typical one (hexaploid chromosome counts) appears to have geographic subgroups
- * the small CENTRAL one might be considered part of the eastern, but heads are larger, like those of the WESTERN. The closely situated *P. elliptica* (Nesom 2025b) is hexaploid and should these plants prove also to be so, it would strengthen the evidence for their formal recognition.
- * the WESTERN system (diploid chromosome counts) has a relatively continuous range. If formally recognized, it has several available formal names.
- * the Mono-Inyo system probably is sister to the WESTERN one. Of the geographic segments, these plants are the most distinct and they are given a name here.

PYRROCOMA PEREGRINA Nesom, **sp. nov.** **TYPE: California.** Mono Co.: Basin NE of and below Mammoth Rock, draining eastward, 37.618556° N, 118.981667° W, dry meadow in slightly undulating terrain, soil light gray, silty, likely derived from old hot springs, 7999 ft, with *Iris missouriensis*, *Symphyotrichum spathulatum*, *Symphyotrichum campestre*, *Elymus*, *Salix* spp., abundant, achene silky, 27 Jul 2021, A. Howald 5310 (holotype: CAS; isotypes: DAV, RENO). Figures 2-6.

Distinct from the western expression of *Pyrrocoma lanceolata* in their larger involucre (12–16 mm wide (vs. (8–)10–12 mm), phyllary margins tomentose-fimbriate (vs. usually glabrous), inner phyllary margins with a broad hyaline flange proximally, and greater number of rays (24–34 vs. 10–16). Plants of *Haller FS563* from Fish Slough perhaps are a different entity (see Map 3) — they have smaller involucre (8–9 mm wide), fewer and shorter phyllaries (inner 6–7 mm long), and fewer rays (14–16).

Stems ascending-erect, 10–25 cm, purplish, sparsely persistently tomentose, eglandular. **Leaves:** basal narrowly oblanceolate, 6–11 cm long, blades 5–10 mm wide, narrowed to a petiolar region 1/3–2/5 the leaf length, sparsely persistently tomentose, eglandular, margins shallowly serrate with sharp-pointed teeth, fibrous remnants petioles persistent, cauline 5–7, narrowly lanceolate, closely ascending, clasping to subclasping, uppermost bracteate. **Heads** 2–3 on peduncles 2.5–6 cm long or 2–5 and racemoid on long internodes, without immediately subtending bracts. **Involucre** 12–16 mm wide (pressed); phyllaries in (3–)4–5 series of unequal length (strongly graduate), inner 7–9 mm long, oblong-lanceolate, green patch in distal 1/2–1/3, eglandular, persistently tomentose, outer with tomentose-fimbriate margins, margins of inner with a broad hyaline flange proximally. **Ray florets** 24–34, fertile, corollas 8–10 mm long, 1.5–2 mm wide, coiling. **Disc corollas** ca. 5 mm long. **Achenes** 3–3.5 mm long, sericeous-strigose. Figures 2-9, 10.

Flowering July-August (September). Alkaline meadows and around springs, salt flats, road edges; (4200-) 6400-8950 feet.

Additional collections. California. Inyo Co.: Forest Service Road 32E309 as it runs along "Lower Ford Flat," Rawson Creek watershed, NE of Coyote Flat, 37.2506° N, 118.4536° W, 8700 ft, dry and disturbed road margin. exposed, dry, compacted soil in middle of road, with *Artemisia tridentata*, *Ericameria nauseosa*, *Purshia tridentata*, *Rosa* sp., occasional, "good fit for descriptions [of *P. lanceolata*] except for lvs +/- ciliate/finely serrulate and phyllaries also ciliate distally" [from label], 7 Aug 2020, Purdy 580.5 (CAS, RSA). **Mono Co.:** Mammoth [probably the same locality as Howald 5310], 1913, K. Brandegee s.n. (UC); Fish Slough, a desert wetland system 4.5 mi N of Bishop at the N end of Owens Valley; N end of slough between *Populus* stand and pond, 37.4916667° N, 118.3833333° W, 4180-4400 ft, alkali meadow with *Equisetum*, *Spartina gracilis*, *Allenrolfia occidentalis*, *Juncus balticus*, occasional, 8 Aug 1986, *Haller FS 563* (UCSB); Inyo Natl Forest, along the Pizona road between Pizona homestead and Upper Pizona Spring, 37.97009° N, 118.55453° W, dry salt flat, 7020 ft, with *Hesperochiron californicus*, *Spartina gracilis*, *Senecio hydrophilus*, *Elymus cinereus*, *Eriastrum wilcoxii*, *Castilleja chromosa*,

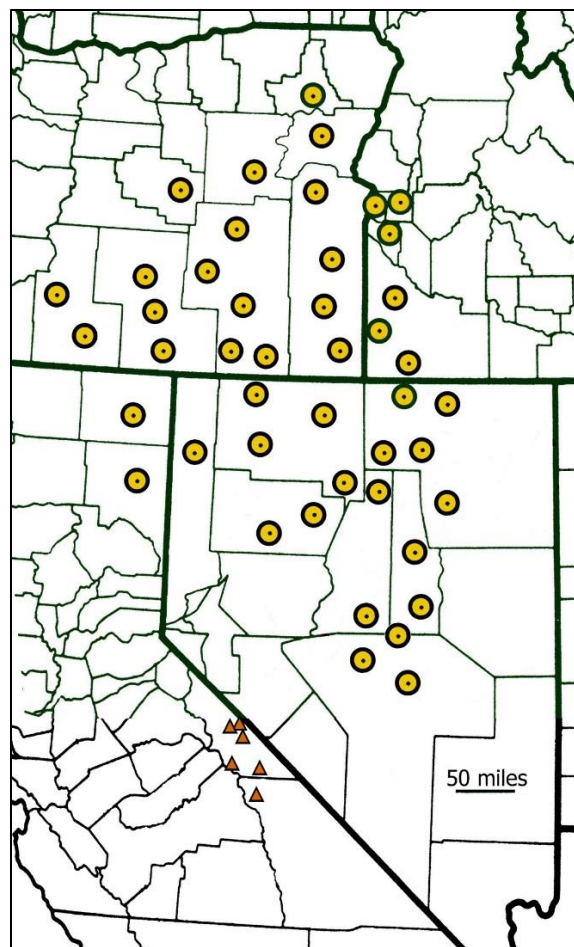
Eriogonum umbellatum var. *nevadense*, *Orobanche corymbosa*, *Ranunculus cymbalaria*, 2 Jul 2017, Winitsky 1191 (RSA); S part of River Spring Lakes Preserve, 1000 ft S of the dock at the main spring of River Springs, 37.93649° N, 118.61043° W, alkali meadow, 6435 ft, with *Senecio hydrophilus*, *Ivesia kingii* var. *kingii*, *Ranunculus cymbalaria*, *Nitrophila occidentalis*, *Cirsium scariosum* var. *congdonii*, *Sphaeromeria potentilloides* var. *nitrophila*, 15 Jul 2017, Winitsky 1242 (JEPS, RSA) and Winitsky 1247 (JEPS, RSA); second spring along road to Upper Pizona Spring, 600 ft W of Upper Pizona Spring, 37.95829° N, 118.53561° W, grassy field, near spring, 7395 ft, with *Symphoricarpus longiflorus*, *Muhlenbergia asperifolia*, *Ranunculus cymbalaria*, *Epilobium ciliatum*, *Erigeron lonchophyllus*, *Ribes cereum*, 11 Aug 2017, Winitsky 1311 (RSA); Glass Mountains, meadow along USFS Road 1S17 near Sedge Meadow (headwaters Wild Cow Canyon), 37.800278° N, 118.78472° W, 8950 ft, small "stringer" meadow bordered by *Pinus contorta* forest, 24 Aug 1998, Taylor 17003 (UC).

ACKNOWLEDGEMENTS

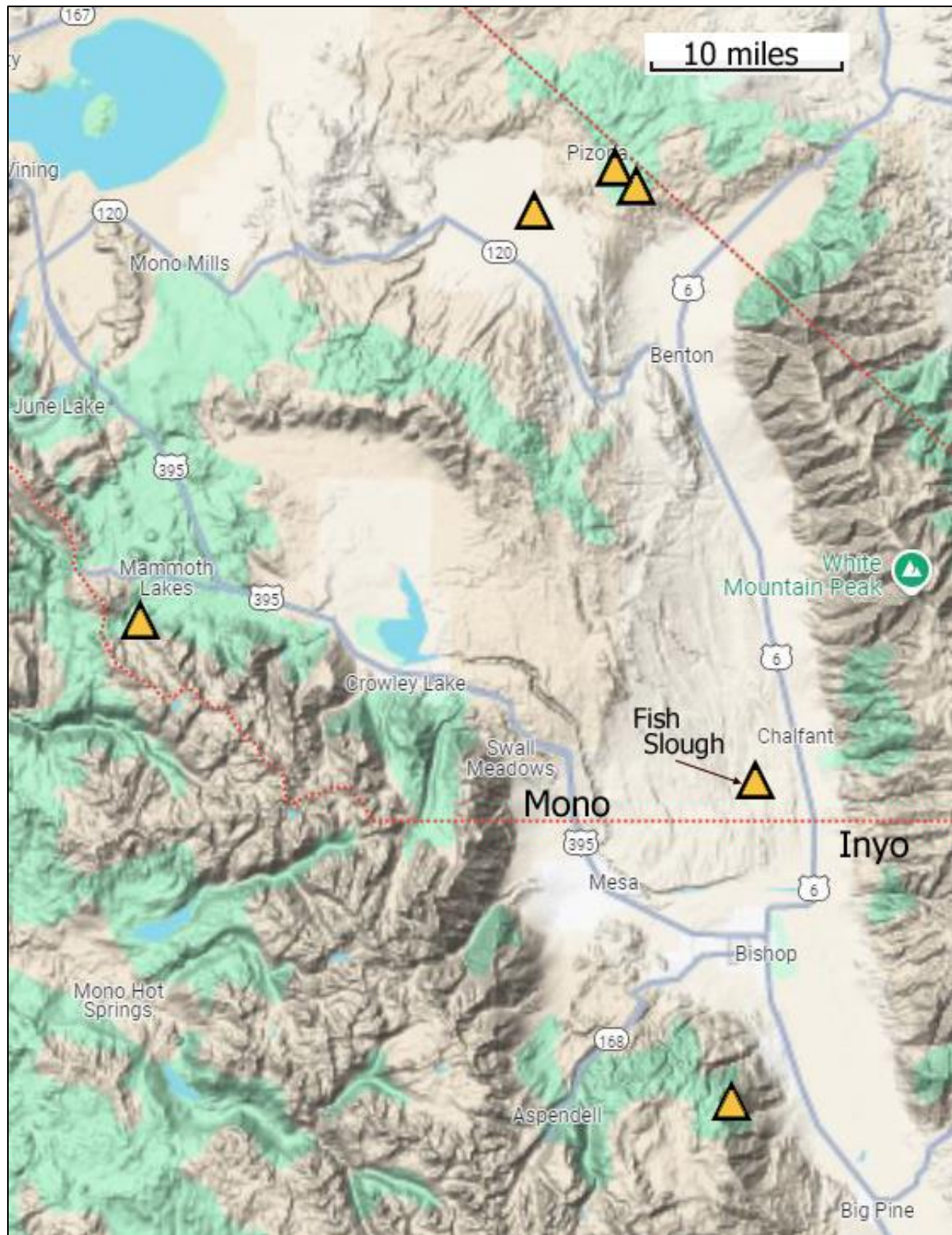
Thanks to Ann Howald for comments on the Mammoth Rock locality and habitat and to Jerry Tiehm for observations on achene morphology of the RENO isotype.

LITERATURE CITED

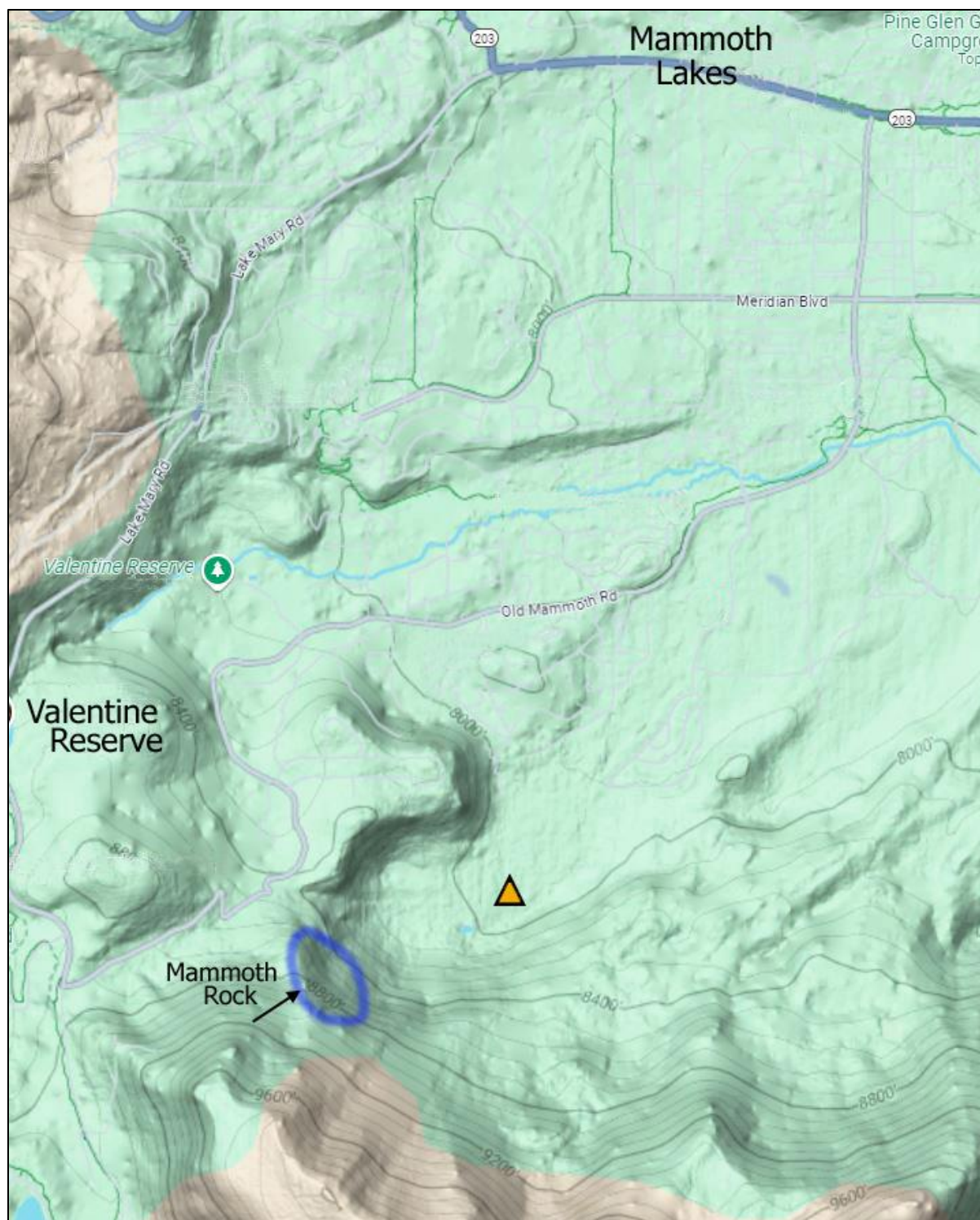
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Map 2. Distribution of *Pyrrocoma peregrina* (Mono and Inyo cos., California) and the western expression of *P. lanceolata*.



Map 3. Distribution of *Pyrrocoma peregrina*. The boundary of Mono County is outlined in red.



Map 4. *Pyrrocoma peregrina* type locality, just south of Mammoth Lakes. At this locality, "the meadow habitat is ... akin to the alkali meadows in [nearby] Long Valley. ... There is at least one active spring in the meadow, a warm spring, ... and within the meadow are patches of very white soil and associated travertine, remnants of former hot spring activity" (Ann Howald, July 2025). The travertine probably is derived from immediately adjacent Mammoth Rock, an outcropping of white limestone and marble in the otherwise volcanic landscape.



Figure 1. *Pyrrocoma peregrina* type locality, from along trail that goes along the south side of the basin, looking northeast. Photo from Google Maps, street view from along the trail.



Figure 2. *Pyrocoma peregrina*. Howald 5310 (CAS), holotype.



Figure 4. *Pyrocoma peregrina*. Detail from Howald 5310 (CAS), Figure 1.



Figure 5. *Pyrrocoma peregrina*. Howald 5310 (RENO), isotype. Arrows point to flowering nodes.



Figure 6. *Pyrrocoma peregrina*. Detail from Howald 5310 (CAS), Figure 4.

Figure 7. *Pyrrocoma peregrina*. Purdy 580.5 (RSA).

Figure 8. *Pyrrocoma peregrina*. Taylor 17003 (UC).

Figure 9. *Pyrrocoma peregrina*. Winitzky 1311 (RSA).



Figure 10. *Pyrrocoma* aff. *peregrina*. Haller FS563 (RSA). Involucres are smaller and rays fewer than in the typical expression.