

Added to California Rare Plant Rank 1B.1 of the CNPS Inventory on April 25, 2017**Rare Plant Status Review: *Erythranthe percaulis*
Proposed Addition to California Rare Plant Rank 1B.1, G1 / S1**

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Background

Erythranthe percaulis Nesom is an annual herb in the Phrymaceae known only from Plumas County, California. It was recently described by Nesom (2013) and is therefore not included in *The Jepson Manual* (Thompson 1993) or *The Jepson Manual, Second Edition* (Thompson 2012); the Phrymaceae treatment in the *Flora of North America* is not yet published. *Erythranthe percaulis* was described from a 1980 collection by Howell (*Howell & Wagnon 53705*, CAS) that was originally determined to possibly be *Mimulus geniculatus*, and later annotated to *M. guttatus* by C. Best in 1981. Upon seeing a duplicate collection at OSC bearing additional individuals, evidence was convincing enough to Nesom (2013) to formally describe it as a unique species. A much earlier collection of *E. percaulis* was recently discovered by G. Nesom (pers. comm. 2017) from 1941 (*Heller 16139*, WTU). The specific epithet "*percaulis*" (*per-*, exceedingly, -*caulis*, stemmed) was given to this species because the tiny leaves on relatively widely spaced nodes make the plants appear relatively bare and mostly stems (Nesom 2013). *Erythranthe percaulis* is similar to *E. nudata* (a California Rare Plant Rank 4.3 species: <http://www.rareplants.cnps.org/detail/1097.html>), but is differentiated in having shorter leaves (5-10 mm versus 3-25 mm), smaller fruiting calyces (5-6 mm versus 4-15 mm), and tiny corollas (4-6 mm versus 10-20mm in *E. nudata*) (Nesom 2013).

Erythranthe percaulis occurs in chaparral openings of lower montane coniferous forest along roadsides, and on serpentine cliffs at an approximate elevation of 780-855 meters (Schoenig 2016). It grows alongside *E. microphylla* and a variant of *E. moschata*, which is currently under study and in the process of being described as a novel taxon by G. Nesom (Schoenig 2016; S. Schoenig pers. comm. 2017). *Erythranthe percaulis* is known to primarily bloom in late May, but the 1941 collection indicates it blooms as early as March. Also, based on the large number of plants observed blooming in late May, it is expected to continue blooming into early June.

There is currently only one known occurrence of *Erythranthe percaulis*, from Serpentine Canyon, east of Rich Bar, within the Plumas National Forest. Attempts to find living plants at the type location in 2013 were unsuccessful (Nesom 2013), but the species was later rediscovered by S. Schoenig in 2016 from a mile long stretch on a steep slope along Highway 70 (S. Schoenig pers. comm. 2016; Schoenig 2016). The population covers most of the cliff face, but it was not feasible to determine how far above the road cut the population extends (Schoenig 2016).

There are no known threats to *Erythranthe percaulis*, but due to the only known population being located on a cliff face along Highway 70 within 1 to 20 meters of the road, it is potentially threatened by road maintenance (S. Schoenig pers. comm. 2017).

Based on the available information, CNPS and CNDDDB recommend adding *Erythranthe percaulis* to California Rare Plant Rank 1B.1 of the CNPS Inventory. Although no threats are currently known, we recommend a threat rank of .1 based on being known from only a single occurrence and its proximity to a major highway. If knowledge on the distribution, threats, and rarity status of *E. percaulis* changes in the future, we will re-evaluate its status at that time.

Recommended Actions

CNPS: Add *Erythranthe percaulis* to CRPR 1B.1

CNDDDB: Add *Erythranthe percaulis* to G1 / S1

Draft CNPS Inventory Record

Erythranthe percaulis Nesom

Serpentine Canyon monkeyflower

Phrymaceae

CRPR 1B.1

Plumas

Caribou (606C) 4012112

Chaparral, lower montane coniferous forest (openings) / serpentinite; rocky, cliffs and slopes, seeps, roadsides; elevation 780-855 meters.

Annual herb. Blooms (March) May (June).

Rediscovered in 2016 by S. Schoenig at the type locality. Potentially threatened by road maintenance. See *Phytoneuron* 2013-70:1-6 (2013) for original description, and *Phytoneuron* 2016-69:1-14 (2016) for discussion of rediscovery.

Literature Cited

Consortium of California Herbaria. 2016. Data provided by the participants of the Consortium of California Herbaria. Regents of the University of California, Berkeley. Website <http://ucjeps.berkeley.edu/consortium/> (accessed on 21 February 2017).

Nesom, G.L. 2013. A new species of *Erythranthe* sect. *Simiola* (Phrymaceae) from California serpentine. *Phytoneuron* 2013-70: 1–6

Schoenig, S. 2016. Rediscovery of *Erythranthe percaulis* (Phrymaceae) in the Feather River Canyon. *Phytoneuron* 2016-69: 1–14.

Thompson D.M. 1993. *Mimulus*. Pp. 1037 in *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley.

_____. 2012. *Mimulus*. Pp. 988 in Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.), *The Jepson manual: vascular plants of California*, second edition. University of California Press, Berkeley, CA.