NEW DISTRIBUTION RECORDS FOR ERYTHRANTHE (PHRYMACEAE)

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ABSTRACT


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... Study at CAS-DS, CHSC, OSC-ORE-WILLU, and PH and of loans of specimens from UBC and WTU have provided new records of geographic distribution for species of Erythranthe sect. Simiola and sect. Mimulosma, supplementing and extending those earlier published (Nesom 2012a, 2012b). ...
Erythranthe corallina (Greene) Nesom

Additional records indicate that the distribution of *Erythranthe corallina* is relatively continuous in the California Sierra from Sierra and Nevada counties south to San Bernadino and Los Angeles counties (Map 4).

Erythranthe marmorata (Greene) Nesom


The record for Fresno County appears to be somewhat disjunct from the main range and the plants are more densely villous than characteristic elsewhere, but their identification as *E. marmorata* otherwise seems secure.

Erythranthe pardalis (Penn.) Nesom

Additional collections examined. California. Amador Co.: Middle Fork, 1500 ft, [no date], *Hansen 135* (DS); Middle Fork, 1500 ft, Apr 1892, *Hansen 1288* (DS); Elsie's Creek, 2700 ft, 7 Apr 1896, *Hansen 1626* (DS). Amador/Calaveras Co.: Norte Bar, 1000 ft, Apr 1895, *Hansen 1050* (DS). Calaveras Co.: near San Andreas, 24 Apr 1941, *Eastwood & Howell 8710* (CAS); Natural Bridge on Coyote Creek, 1500 ft, 1976, *Menzies 142* (CAS). El Dorado Co.: 2 mi NW of Clarkville, SE slope of Bass Lake, under and along edge of large serpentine rocks, 5 May 1967, *Crampton 7859* (CHSC); Happy Valley Road, 1.1 mi NE (69°) of Somerset, just W of the bridge over the Cosumnes River (Camino 7.5 Q.; 38° 39' 13" N, 120° 39' 58" W), pine forest and riverside chaparral, 1785 ft, plants under 15 mm tall were abundant, growing with *Sedum spathulifolium* on a wet, mossy, rock bank, the tall plants were uncommon and grew from rock cracks along with the small specimens, 14 May 2010, *Helmkamp 16041* (BRIT, ex UCR); S side of S Fork American River, 3/4 mi NW of mouth of Weber Creek, dry sandy soil along river, moist shady boulders, 600–700 ft, 23 Apr 1978, *Stebbins 7839* (CAS). Tehama Co.: Dales Lake Ecological Reserve, W side of Manton Rd (A6) ca. 2 mi N of Dales Station on Hwy 36, ca. 14 mi NE of Red Bluff, localized population in crevices on a shaded outcrop on the S edge of the basalt ridge crossing the NE corner of the reservoir, blue oak woodland, 740 ft, 10 Apr 1995, *Oswald & Ahart 6642* (CHSC, JEPS).

The CHSC duplicate of *Erythranthe pardalis* from Tehama County (Oswald & Ahart 6642) confirms its presence in that region, where it is apparently disjunct from the main range of the species.

Erythranthe arvensis (Greene) Nesom

*Erythranthe arvensis* has a relatively wide distribution but is not as commonly collected as some other widely distributed species. It is mapped here (Map 5) along with putative close relatives. The apparently disjunct record for Montana is the first known to me for that state: Montana. Lewis & Clark Co.; vic. of Helena, [no date], F.D. Kelsey s.n. (PH).

Erythranthe hallii (Greene) Nesom


Records of *Erythranthe hallii* from Fremont and Saguache counties are apart from the otherwise relatively compact distribution in north-central Colorado (Map 5) previously reported for the species.

**Erythranthe charlestonensis** Nesom


This plant, from near the type locality of *Erythranthe charlestonensis*, is much larger than those of previously cited collections and it has glandular hairs. The distinction between *E. charlestonensis* and *E. cordata* should be reexamined. Like other Charleston Mountains plants, however, and unlike *E. cordata*, the vestiture of *Train 2221* is minutely hirtellous.

**Erythranthe guttata** (Fischer ex DC.) Nesom and *E. grandis* (Greene) Nesom

Additional collections from Oregon fill in the distribution earlier outlined for *Erythranthe guttata* (Nesom 2012a). Two counties are added for the range of *Erythranthe grandis*. (Douglas and Clatsop counties, Oregon). Along the Oregon coast (Curry, Coos, Douglas, Lincoln, and Lane counties and probably north to Clatsop Co.), *E. grandis* tends to produce orbicular leaf blades and stems often are prostrate and rooting at the nodes.

**Erythranthe microphylla** (Benth.) Nesom


**Erythranthe nasuta** (Greene) Nesom

Additional collections essentially fill in the distribution earlier outlined (Nesom 2012a). The record for *Erythranthe nasuta* in Utah is the first from that state known to the author. Map 7.


**Erythranthe visibilis** Nesom

*Erythranthe visibilis* from northeastern Michoacan, Mexico, includes the recently described *Mimulus minimus* E. Pérez-Calix & Zamudio (2011), which was preceded in name by a South American species (von Bohlen 1995). The species as *E. visibilis* was described from two collections made in 1910 and 1912, with only imprecise locality, but the description by Pérez-Calix and Zamudio is based on four recent collections by Sergio Zamudio and group from mountains about 1–2 km south of the small town of San Miguel de las Cuevas (about 22 air miles east-northeast of the center of Morelia). The plants occur on wet slopes and stream banks in woods of *Pinus-Quercus-Cupressus*, at altitudes of 2350–2400 meters. Pérez-Calix and Zamudio noted that these narrowly endemic populations are in an area of intense human influence and are vulnerable to extinction.
The description of *Mimulus minimus* from Michoacan also provides a more complete picture of the morphology and variability of the species. The stems are described as sometimes erect, the corolla tube is illustrated as well-exserted beyond the calyx margin, and the corolla throat with a few purple dots; the stamens are described as didynamous. But the tiny plants, including flowers and fruit, and annual duration, the tendency for reduced lateral calyx lobes, the villous-glandular vestiture, and the almost identical geography indicate that and *Erythranthe visibilis* and *M. minimus* are the same species.


**SECT. MIMULOSMA**

**Erythranthe patula** (Penn.) Nesom

A record for *Erythranthe patula* from western Montana is the first known to me from that state. **Montana. Missoula Co.:** Hay Spur, F. Fox Ranch, 3200 ft, 19 Jun 1924, *Kirkwood 1762* (DS).

**Erythranthe geniculata** (Greene) Nesom

Records at CHSC extend the range of *Erythranthe geniculata* northward into Butte, Sutter, and Yuba counties, an area apparently disjunct from the broader, more southern range of the species.

Representative collections examined. **California. Butte Co.:** Table Mt., N of Oroville, foothill woodland, in cracks of lava rocks, 400 m, 2 May 1978, *Ahart s.n.* (CHSC); numerous other collections of *E. geniculata* from Butte Co. are at CHSC. **Sutter Co.:** S side of the Southern Butte, Sutter Buttes, between cracks in rock, foothill woodland, 1200 ft, 21 May 1984, *Ahart 4623* (CHSC). **Yuba Co.:** ca. 1/2 mi W of Marysville Rd, ca. 1/2 mi N of Parking Area 3, Daugherty Hills Wildlife Area, ca. 5 air mi NE of Loma Rica, foothill woodland, 1296 ft, 11 Mar 2005, *Ahart 11608* (CHSC).

**Erythranthe latidens** (A. Gray) Nesom, *E. breviflora* (Piper) Nesom, and *E. inflatula* (Suksd.) Nesom


**Erythranthe moschata** (Dougl. ex Lindl.) Nesom, *E. inodora* (Greene) Nesom, and *E. moniliformis* (Greene) Nesom.

Records for the state of Oregon from OSC-ORE-WILLU are added to earlier account (Nesom 2012b) and mapped here.
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LITERATURE CITED


Map 1. Erythranthe caespitosa. Southernmost record is from Lane Co., Oregon.
Map 2. *Erythranthe tilingii*. Open symbols in Idaho and Utah are records from literature.
Map 3. *Erythranthe decora* and *E. scouleri.*
Map 4. *Erythranthe corallina.*
Map 5. *Erythranthe arvensis* and putative close relatives.
Map 7. *Erythranthe grandis*. 
Map 8. *Erythranthe microphylla*.
Nesom: New distribution records for *Erythranthe*

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