

## NEW FLOWERING PLANT RECORDS FOR THE NORTH OF MEXICO

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### ABSTRACT

*Adenophyllum porophyllum* (Cav.) Hemsl. var. *porophyllum* is reported for Chihuahua, its presence there overlooked in a recent revision. *Adenophyllum wrightii* A. Gray var. *wrightii* is reported from two new locations, confirming a single century old record for Chihuahua. *Astragalus ervoides* Hook. & Arn. var. *maysillesii* Barneby is reported as a new record for Chihuahua. *Oxytropis lambertii* Pursh var. *bigelovii* A. Gray and *Corydalis micrantha* (Englem.) Gray subsp. *micrantha* are reported as a new records for Mexico. *Agastache pallidiflora* (Heller) Rydb. subsp. *pallidiflora* var. *gilensis* R. Sanders is reported as a first record for the species for Chihuahua and as a first record for the variety for Mexico.

**KEY WORDS:** New records, Mexico, Chihuahua, Sierra Madre Occidental, flowering plants

While exploring the scenic regions of the Sierra Madre Occidental of western Chihuahua, primarily for photographic purposes, we occasionally collected botanical specimens of plants that we did not know, that were of interest for ongoing research by us or others, or were in groups that are either under-collected or inherently difficult. Among those collections were a few that are of general interest for floristic work in Mexico. We present those records here.

### ASTERACEAE

*Adenophyllum porophyllum* (Cav.) Hemsl. var. *porophyllum*. Chihuahua, Mpio. de Madera, 18 air km due W of Madera on road to El Agua Amarilla, E side of Río Sirupa 0.6 km E of bridge, 29°11'00.7"N, 108°19'27.8"W; elev. 1435 m, open grassy area with many Asteraceae, rocky, with *Quercus chihuahuensis* and *Q. oblongifolia*. Heads rayless; flowers yellow orange; plants sporadic among other annual and perennial herbs, not common; 28 Sep 2007, R. Spellenberg and W. Anderson 13862 (CIIDIR, MEXU, NMC, UC).

Confirms presence in Chihuahua. John Strother kindly confirmed our identification and noted that he inadvertently omitted an earlier Chihuahua record from his citations of specimens for *Dyssodia prophylla* (Cav.) Cav. subsp. *porophylla* var. *porophylla* in his revision of *Dyssodia* (Strother 1969). He later recognized this group of *Dyssodia* in the genus *Adenophyllum* (Strother 1986).

*Adenophyllum wrightii* A. Gray var. *wrightii*. Mpio. de Madera, 15 km S of Nicolas Bravo, 1.6 km N of junction with Chih. Hwy. 10 to San Jose de Babicora, 29°11'14.6"N, 107°52'28.9"W; elev. 2230 m, in silty igneous sandy gravel in small drain that passes under highway in semi-open area in *Juniperus deppeana*, *Pinus latifolia*, *Quercus arizonica* woods, with *Bidens odorata*, *B. lemmonii* (?), *Schkuhria*, *Cosmos*, *Muhlenbergia minutissima*, and sparse *Bouteloua hirsute* and *B. gracilis*. Plants erect; rays yellow; restricted to ca. 4×5 m area; 28 Sep 2007, R. Spellenberg and W. Anderson 13847 (CIIDIR, MEXU, NMC, UC); Mpio. de Temosachi, on Chih. Hwy 10 2 km NE of junction with

Chih. Hwy 10 to Madera (ca. at La Concha) and Matachic 29°07'50.1"N, 107°54'09.6"W., 29°11'14.6"N, 107°52'28.9"W, elev. 2230 m, rocky hills with *Pinus*, *Juniperus*, *Quercus*. Plant common in gravel of roadside, in low vegetated areas along road, and standing alone, ungrazed, in heavily overgrazed pasture; plants erect; rays yellow; 28 Sep 2007, R. Spellenberg and W. Anderson 13848 (BRIT, MEXU, NMC, UC).

Confirms presence for Chihuahua: These seem to be the first collections in 120 years for this taxon in Mexico. It apparently was not encountered during a rather thorough survey of the Cuenca de la Laguna Babícora (Estrada C. et al 1997), an area which includes the location of the first record cited. Strother (1969) reported it for Chihuahua from a single Pringle collection near Cd. Guerrero in 1887 (as *Dyssodia neomexicana* (Gray) Rob. var. *neomexicana*), somewhat south of our records. We found the species to be weedy at the second site and completely avoided by cattle in a very heavily grazed pasture. These records and observations, along with several locations discovered within the same general period in New Mexico, convinced conservationists in New Mexico that the species did not require protection (<http://nmrareplants.unm.edu>).

## FABACEAE

***Astragalus ervoides* Hook. & Arn. var. *maysillesii* Barneby.** Chihuahua, Mpio. Bocoyna, along road into Valle de los Monjes, ca. 5 km SE of Creel, 27°43'43"N, 107°35'11.8" W; open gray igneous rock with patches of thin soil, with pine, elev. 2345 m. Stems decumbent-ascending, petals white, the keels tinged with dull purple, stipe, if present, 0.10-0.15 mm long, pod 2-celled, dark brown-black at maturity; 27 Aug 2004, R. Spellenberg 13480 (CFNL, NMC).

Apparent first record for Chihuahua for species. Barneby (1964) mapped the variety from approximately 300 km to the south, from southwestern Durango, where it is common. We have noted the taxon at several sites within this region in Chihuahua. The var. *ervoides*, apparently less frequently seen, is from Sinaloa and Jalisco. We thank E. Estrada with help in identification of this species to variety.

***Oxytropis lambertii* Pursh var. *bigelovii* A. Gray.** Chihuahua, Mpio. Progreso, vicinity of Yepomera, ca. 8 km S of junction of Madera – Peña Blanca road, 107°50'W, 27°02'N, elev. 1820 m. On whitish soil road bank and in field nearby; 19 Jun 1993, Spellenberg, Brouillet, and Ulaszek 11910 (BRY, CIIDIR, MEXU, MT, NMC).

Apparent first record for Mexico; the species was not recorded for the country in Barneby (1952) nor in Welsh (2001).

## LAMIACEAE

***Agastache pallidiflora* (Heller) Rydb. subsp. *pallidiflora* var. *gilensis* R. Sanders.** Chihuahua, Mpio. de Madera, 3 road km NE of small rancho called "La Tablita," 32 rd km SW of Rio Sirupa, ca. 45 air km. SSW of Madera, 28°55'45.1"N, 108°22'23.4"W; elev. 1755 m, N-facing slope in *Quercus arizonica*, *Arbutus arizonica*, pine woods, with *Cupressus* in canyon bottom. Corolla rose-pink, calyx green, tipped with pink; 28 Sep 2008, R. Spellenberg and W. Anderson 14023 (CIIDIR, NMC).

Apparent first record for species for Chihuahua, first record for variety from Mexico. Sanders (1987, fig. 87) mapped only one record of this species for Mexico, that of var. *havardii* (A. Gray) Sanders from nw Coahuila. Var. *gilensis* is otherwise known from western New Mexico and southeastern Arizona.

**PAPAVERACEAE**

*Corydalis micrantha* (Englem.) Gray subsp. *micrantha*. Chihuahua, Mpio. Guerrero, Chih. Hwy 25 1 km S of Rancho Blanco, 56 km N of Creel, 30 km S of jct with Mex. Hwy 16, 28°08'33.9"N, 107°29'24.3"W, elev. 2220 m; gravelly road bank in open woodland with *Juniperus deppeana*, *Quercus grisea*, *Pinus*, *Arctostaphylos*. Corolla dull pale yellowish, the upper lip burnished rusty orange adaxially; 5 Sep 2008, R. Spellenberg and W. Anderson 14012 (BRIT, CIIDIR, MEXU, NMC, NY).

Apparent first record for Mexico. Neither Ownbey (1947) nor Stern (1997) recorded the species outside the central and south-central United States. The specimens key to this variety easily, the flower color matching that given in Ownbey except for the presence of a rusty orange blush on the upper petal of the flowers.

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