

Nomenclatural Conspectus of Annual Eriophyllinae (Asteraceae)

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For a treatment of the annual taxa of *Eriophyllum* and the other, annual genera of Eriophyllinae (*Lembertia*, *Monolopia*, *Pseudobahia*, and *Syntrichopappus*) in the forthcoming flora of California, the *Jepson Manual*, the following conspectus provides nomenclatural information.

Eriophyllinae Rydb., N. Amer. Fl. 34: 81. 1915, as "Eriophyllanae." TYPE: *Eriophyllum* Lagasca.

Eriophyllum Lagasca, Gen. Sp. Pl. 28. 1816. *Bahia* Lagasca sect. *Eriophyllum* (Lagasca) Benth., Gen. Pl. 2: 403. 1873. Lectotype, selected by Gray (1883: 24): *E. staechadifolium* Lagasca, Gen. Sp. Pl. 28. 1816. TYPE: U.S.A. California: Monterey County, Monterey, "Hab. in Nov. Hisp. [protologue]," 13–23 Sep. 1791 (McKelvey, 1955: 18), *T. Haenke* (holotype destroyed in 1823 (Burdet, 1976: 149); isotype, G-DC).

Trichophyllum Nutt., Gen. N. Amer. Pl. 2: 166. 1818. *Eriophyllum* sect. *Trichophyllum* (Nutt.) A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. Lectotype, selected here: *Actinella lanata* Pursh, Fl. Amer. Sept. 560. 1814. *T. lanatum* (Pursh) Nutt., Gen. N. Amer. Pl. 2: 167. 1818. *E. lanatum* (Pursh) James Forbes, Hort. Woburn. 183. 1833. *Phialis* Sprengel, Gen. Pl., ed. 9, 2: 631. 1831, listing *Trichophyllum* in synonymy, name superfluous. TYPE: U.S.A. Idaho: Idaho County, "Uplands of Kooskooskee [holotype label, i.e., Clearwater River, Camp Chopunnish, near present town of Kamiah (Cutright, 1969: 401)]," 6 June 1806, *M. Lewis* (holotype, PH; isotype, PH). —Although *Index Nominum Genericorum* (Farr et al., 1979: 1789) indicates that *Trichophyllum* was lectotypified by Rydberg (1901), it was not, nor was it subsequently, so it is lectotypified here.

Eremonanus I. M. Johnston, Contr. Gray Herb. 68: 101. 1923. TYPE: *Eriophyllum mohavense* (I. M. Johnston) Jepson.

(Additional generic synonymy is given under *Eriophyllum* sect. *Actinolepis* and *E.* sect. *Antheropeas*, below.)

Constance (1937), Carlquist (1956), and Mooring

(1986) have given accounts of the perennial taxa, which constitute *Eriophyllum* sect. *Eriophyllum*. The annual taxa may be divided into three sections: *Actinolepis*, *Antheropeas*, and *Pseudomonolopia*.

Eriophyllum sect. **Actinolepis** (DC.) A. Gray, Proc. Amer. Acad. Arts 19: 24. 1883. *Actinolepis* DC., Prodr. 5: 655. 1836. TYPE: *E. multicaule* (DC.) A. Gray.

The three species of section *Actinolepis* are similar in having a disk corolla of a cylindrical tube abruptly dilated into a broad cylindrical throat; glandular disk corolla lobe trichomes (in this character they are similar to section *Antheropeas*); deltoid, distally tapering stamen connective tips; and blunt style tips, wider at the base than the stigmatic portion of the branches.

Eriophyllum mohavense (I. M. Johnston) Jepson, Man. Fl. Pl. California 1117. 1925. *Eremonanus mohavensis* I. M. Johnston, Contr. Gray Herb. 68: 101. 1923. TYPE: U.S.A. California: San Bernardino County, "In collibus saxosis pr[o]pe Barstow [holotype label]," 1 May 1922, *M. F. Spencer* 1949 (holotype, GH; isotypes, POM, US). —The locality "Ord's Mountain . . . on the high bench near the east bank of the Mohave river nearly opposite the Santa Fe passenger station in Barstow" is given in the protologue, but "Ord Mountain is a very huge mountain a full day's trip [29 km] south-east of Barstow [W. L. Jepson to F. G. Woodcock, 9 July 1925, in Jepson Correspondence 19: 538 (JEPS)]." Woodcock, who was present during the collection of the type, wrote, "The name 'Ord's Mountain' was given to me after my return to San Diego. . . . If the statement is contradictory, it is from my lack of knowledge of the name of the mountain," adding, "the locality was back of Mrs. Iverson's Ranch about 2 miles out [west from Barstow] on the Hinkley Road [to Jepson, 3 June 1925, in Jepson Correspondence 19: 537 (JEPS)]." After much searching, Jepson found the plant on "Iverson

Hill" (*Jepson 17180a*: DS, JEPS, RSA), which may be the type locality. I located this site in 1975 at 1.8 km west of the junction with Camp Irwin Road on the north side of the Hinkley–Yermo road (50°54'38"N, 117°2'33"W on U.S. Geol. Surv. 15' Barstow quadrangle, 1956).

Eriophyllum multicaule (DC.) A. Gray, Proc. Amer. Acad. Arts 19: 24. 1883. *Actinolepis multicaulis* DC., Prodr. 5: 656. 1836. TYPE: U.S.A. California: "1833 [i.e., 22 Dec. 1830–18 Aug. 1832]," *D. Douglas* (holotype, G-DC; probable isotypes (numbered 21), BM, W; possible isotypes (unnumbered), DS, GH, NY). — For more information on locality and date of Douglas's California collections, see discussion of the type of *Monolopia major*, below.

Actinolepis multicaulis var. *papposa* A. Gray, Proc. Amer. Acad. Arts 6: 546. 1865. TYPE: U.S.A. California: Santa Barbara County, "Dry plain of Santa Maria Valley [lectotype label]," 9 Apr. 1861, *W. H. Brewer 404* (lectotype, selected here, GH; isolectotypes, UC, US). — In the protologue, Gray mentioned collections by Brewer from "three stations, all in Santa Barbara County." All three collections are mounted on one sheet in GH. However, 499 (30 Apr. 1861, "Atascadero") actually comes from San Luis Obispo County, and 352 (26–30 Mar. 1861, "Sta. Inez [i.e., Santa Ynez] Mountains"), although from Santa Barbara County, is indistinguishable from 499 because of ambiguous positioning of specimens and Gray's (?) penciled numbers. Therefore, 404, the "more woolly form gathered in Santa Maria Valley [protologue]" on the day Brewer traveled from the ranch of W. B. Foxen, ca. 40 km southeast of Santa Maria (Brewer, 1966: 77–78; Hoover et al., 1966: 422), to Nipomo, near the southern border of San Luis Obispo County and northwest of Santa Maria, is chosen as lectotype. It is likely that Brewer collected 404 on the broad plain south of the Santa Maria River and thus in Santa Barbara County. Information on dates of collection is derived from a copy of a copy (sic) of Brewer's original field notes at GH, prepared by A. V. Stuenkel in October 1897 and deposited in UC.

Eriophyllum pringlei A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. *Actinolepis pringlei* (A. Gray) E. Greene, Fl. Francisc. 441. 1897. TYPE: U.S.A. Arizona: Pima County, "Gravelly plains near Camp Lowell [lectotype label]," 12 Apr. 1881, *C. G. Pringle* (lectotype, selected here, GH; isolectotypes, F, MO, NY, PH, US, VT). — Rydberg (1915: 97) and Ferris (1960: 231) designated the type locality as the Mojave Desert of California. The four collections cited by Gray in the protologue are mounted on one sheet in GH. *E. Palmer 224*,

Apr. 1876, "Wickenburg," is from Arizona. Of the remaining collections, only *S. B. Parish & W. F. Parish 1266*, May 1882, "Common on gravelly mesas of the Mojave desert," would initially appear to be from California and thus the lectotype. However, the collection by J. G. Lemmon comprises two plants, each with a number (100, 101) attached to the plants themselves. The label accompanying the Lemmon collection (1880, "Tucson") bears yet another number (102). In GH there is a specimen of *E. multicaule* with the number 102 attached to the plant but accompanied by a label (1880, "Mohave Desert + Tucson") bearing the numbers 100 and 101. Aside from the absence of *E. multicaule* from Arizona, this would appear to be a case of switched labels. One cannot be certain how many of the syntypes cited in the protologue are from California. Therefore, the designation of type locality by Rydberg and Ferris is ambiguous, and Pringle's collection is chosen as lectotype.

Eriophyllum sect. **Antheropeas** (Rydb.) D. E. Johnson, stat. nov. Basionym: *Antheropeas* Rydb., N. Amer. Fl. 34: 97. 1915. TYPE: *E. wallacei* (A. Gray) A. Gray.

Stamen connective tips are subulate in section *Antheropeas*, similar in shape to those of *Syntrichopappus* but narrower and shorter. Other eriophyllums have deltoid connective tips. Style tips of section *Antheropeas* are deltoid with distinctive apical tufts of long papillae.

Eriophyllum lanosum (A. Gray) A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. *Burrielia lanosa* A. Gray in Torrey, Pacific Railr. Rep. 4(5) [no. 4]: 107. 1857. *Actinolepis lanosa* (A. Gray) A. Gray, Proc. Amer. Acad. Arts 9: 198. 1874. *Antheropeas lanosum* (A. Gray) Rydb., N. Amer. Fl. 34: 98. 1915. TYPE: U.S.A. Arizona: "Gravelly banks near the Colorado of California [holotype label]," 17 Feb. 1854, *J. M. Bigelow* (holotype, GH; probable isotypes, K, NY). — According to Foreman (1941: 223 and map), Bigelow would have been along the Bill Williams River in Mohave or Yuma counties, somewhere between junctions with the Big Sandy and Colorado rivers, on the date of collection.

Antheropeas tenuifolium Rydb., N. Amer. Fl. 34: 99. 1915. TYPE: Mexico. Estado de Baja California: San Sebastián, 28 Apr. 1889, *T. S. Brandegee* (holotype, US; isotypes, NY, PH, UC).

Eriophyllum wallacei (A. Gray) A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. *Bahia wallacei* A. Gray in Torrey, Pacific Railr. Rep. 4(5) [no. 4]: 105. 1857. *Actinolepis wallacei* (A. Gray) A. Gray, Proc. Amer. Acad. Arts 9: 198. 1874. *Antheropeas wallacei* (A. Gray) Rydb., N. Amer. Fl. 34: 98. 1915. TYPE: U.S.A. California: Los Angeles County, "Teyunga [protologue, i.e., Tujunga]," 7 May 1854, *W. A. Wallace* (holotype, GH; isotype, NY).

Bahia rubella A. Gray in Torrey, Bot. U.S. Mex. Bound., Bot. 2(1): 95. 1859. *Actinolepis wallacei* var. *rubella* (A. Gray) A. Gray, Proc. Amer. Acad. Arts 9: 198. 1874. *Eriophyllum wallacei* var. *rubella* (A. Gray) A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. *Antheropeas rubellum* (A. Gray) Rydb., N. Amer. Fl. 34: 98. 1915. TYPE: U.S.A. California: San Diego County, "in a dry valley, near San Felipe [protologue]," June 1850, *C. C. Parry* (holotype, GH; isotype, NY).

Eriophyllum aureum T. Brandege, Bot. Gaz. (Crawfordsville) 27: 449. 1899. TYPE: U.S.A. California: Inyo County, "near Lone Pine—South of Town—Sides of a gulch base of foot hills [holotype label]," 16 Apr. 1891, *T. S. Brandege* (holotype, UC; isotypes, F, NY, US).

Antheropeas australe Rydb., N. Amer. Fl. 34: 98. 1915. *Eriophyllum wallacei* subsp. *australe* (Rydb.) Wiggins, Contr. Dudley Herb. 3: 304. 1944. TYPE: Mexico. Estado de Baja California: "Mts. [holotype label]," 3 July 1884, *C. R. Orcutt* (holotype, NY; isotypes, BM, F, PENN, UC; probable isotype, NY).

Eriophyllum wallacei var. *calvescens* S. F. Blake, J. Wash. Acad. Sci. 19: 278. 1929. TYPE: U.S.A. California: San Bernardino County, "North of and near Victorville [holotype label]," 11 May 1926, *M. E. Jones* (holotype, US; isotype, LL). —One of the paratypes of this name is the type of *E. aureum*.

Eriophyllum sect. **Pseudomonolopia** (A. Gray) D. E. Johnson, comb. nov. Basionym: *Bahia Lagasca* sect. *Pseudo-monolopia* A. Gray in S. Watson et al., Bot. California 1: 382. 1876. TYPE: *E. ambiguum* (A. Gray) A. Gray. —Article 73.9 of the *Code* (Greuter, 1988) requires elision of the hyphen in this sectional name.

In geographic distribution and morphological aspect, section *Pseudomonolopia* most closely resembles the perennials of section *Eriophyllum*. Unlike those of the other annual sections of *Eriophyllum*, distal portions of limbs of disk corollas are glabrous (except *E. ambiguum* var. *paleaceum*, the lobes of which have unusual papillae). In this character section *Pseudomonolopia* is more similar to *E. lanatum*

and its related perennials than it is to other perennials such as *E. confertiflorum* and *E. staecheadi-folium*.

Eriophyllum ambiguum (A. Gray) A. Gray var. **ambiguum**, Proc. Amer. Acad. Arts 19: 26. 1883. *Lasthenia ambigua* A. Gray, Proc. Amer. Acad. Arts 6: 547. 1865. *Bahia ambigua* (A. Gray) A. Gray in S. Watson et al., Bot. California 1: 382. 1876. TYPE: U.S.A. California: Kern County, "near Fort Tejon [protologue], Fort Tejon [holotype label]," 1864, *G. H. Horn* (holotype, GH; isotypes, UC, US). —The collector's name is written in Gray's hand as "Dr. Van Horn" on the holotype label, but "Dr. G. H. Horn" is printed on the US label, and the latter is the orthography used by Brewer (1880).

Bahia parviflora A. Gray in S. Watson et al., Bot. California 1: 382. 1876. *Eriophyllum parviflorum* (A. Gray) Rydb., N. Amer. Fl. 34: 86. 1915. TYPE: U.S.A. California: Kern County, "Fort Tejon, and vicinity [holotype label]," 1857–1858, *L. J. Xantus (de Vesey)* 48 (holotype, GH; isotypes, NY, US).

Eriophyllum ambiguum var. **paleaceum** (T. Brandege) Ferris, Contr. Dudley Herb. 5: 100. 1958. *E. paleaceum* T. Brandege, Bot. Gaz. (Crawfordsville) 27: 450. 1899. TYPE: U.S.A. California: Kern County, Kernville, 14 May 1892, *T. S. Brandege* (lectotype, selected by Rydberg (1915: 87), UC).

Eriophyllum parishii H. M. Hall ex Constance, Madroño 2: 114. 1934, as synonym, name invalid.

Eriophyllum congdonii T. Brandege, Bot. Gaz. (Crawfordsville) 27: 449. 1899, as "*congdoni*." *E. nubigenum* var. *congdoni* (T. Brandege) Constance, Univ. Calif. Publ. Bot. 18: 115. 1937. TYPE: U.S.A. California: Mariposa County, "Mountains near Hennessy's [protologue]," 1–5 May 1894, *J. B. Lembert* (holotype, UC; isotype, NY). —Hennessy's residence was at the confluence of Indian Creek and Merced River (Gudde, 1969), a point ca. 1.6 km west of the topographical feature El Portal (U.S. Geol. Surv. 15' El Portal quadrangle, 1947).

Eriophyllum nubigenum A. Gray, Proc. Amer. Acad. Arts 19: 25. 1883. *Actinolepis nubigena* (A. Gray) E. Greene, Fl. Francisc. 442. 1897. TYPE: U.S.A. California: Mariposa County, "Cloud's Rest (Yosemite) 9000 ft. [holotype label]," July 1883, *K. Curran* (holotype,

GH; isotypes, RSA, VT; possible isotype, DS). —Although in the protologue Gray published the name as “Greene in litt.,” in a letter to Greene dated 25 July 1883 (transcription in JEPS) Gray revealed that Greene had forwarded the specimen under a different proposed binomial, “*Actinolepis alpina*,” so the published name should be attributed to Gray. The isotypes are much more ample specimens than the holotype, which comprises a few capitula only. The RSA isotype is “ex Gray Herbarium.”

Lembertia E. Greene, Fl. Francisc. 441. 1897. TYPE: *L. congdonii* (A. Gray) E. Greene.

Lembertia congdonii (A. Gray) E. Greene, Fl. Francisc. 441. 1897, as “*congdoni*.” *Eatonella congdoni* A. Gray, Proc. Amer. Acad. Arts 19: 20. 1883. TYPE: U.S.A. California: Tulare County, Deer Creek, Mar. 1881, *J. W. Congdon* 439 (lectotype, selected by Rydberg (1914: 28), GH).

Monolopia DC., Prodr. 6: 74. 1838. Lectotype, selected by Gray (1876: 383): *M. major* DC.

Spiridanthus Fenzl in Endl., Gen. Pl., Suppl. 2: 105. 1842. —*Spiridanthus* is founded on specimens grown in Vienna from achenes originally thought to come from Africa (protologue: “*Africae tropicae*”), but this provenance is erroneous (see Benth, 1873: 400). No combination in *Spiridanthus* was published, but specimens (W) annotated with this name are *Monolopia major*.

Monolopia gracilens A. Gray, Proc. Amer. Acad. Arts 19: 20. 1883. *M. major* var. *gracilens* (A. Gray) J. F. Macbr., Contr. Gray Herb. 56: 49. 1918. TYPE: U.S.A. California: Santa Clara County, “New Almaden [lectotype label],” Apr.–20 July 1865, *J. Torrey* 237 (lectotype, selected by Crum (1940: 256), GH). —According to Robbins (1968: 618), Torrey sold his house in April 1865 and then left New York for California, where he was until 20 July, when he arrived in Empire City, Nevada.

Monolopia lanceolata Nutt., Proc. Acad. Nat. Sci. Philadelphia 4: 21. 1848. *M. major* var. *lanceolata* (Nutt.) A. Gray in S. Watson et al., Bot. California 1: 384. 1876. TYPE: U.S.A. California: Los Angeles County, “Pueblo de los Angeles [protologue],” Apr. 1842, *W. Gambel* (holotype not found, BM? (see Stafleu & Cowan, 1981: 781)). —The protologue allows little doubt that the name is correctly applied.

Monolopia major DC., Prodr. 6: 74. 1838. TYPE: U.S.A. California: “1833 [i.e., 22 Dec. 1830–18 Aug. 1832],” *D. Douglas* (holotype, G-DC; probable isotypes, BM, CGE; possible isotypes, GH, K, NY, W). —Although the holotype label bears the date 1833, Douglas “did nothing in the way of Botany” during his stay in San Francisco, 4–29 Nov. 1833 (McKelvey, 1955: 415). He must have made his collection during either of the two springs during his previous visit to California, probably along the mission road between Monterey and Santa Barbara (McKelvey, 1955: 396, 400–405, map facing p. 401). Douglas’s collections were distributed by the Horticultural Society of London, by whom, apparently, they were given serial numbers. Whether or not all specimens labeled with the same serial number are from the same gathering is uncertain. Probable isotypes are numbered 25; possible isotypes are unnumbered.

Hologymne douglasii F. Fischer & C. Meyer, Index Sem. Hort. Bot. Imp. Petrop. 8: 22, 64. 1842. TYPE: “Ex horto bot. Petropolitano [holotype label],” (holotype, LE). —Achenes from which the plants in LE were grown were probably collected by D. Douglas in California, between Monterey and Santa Barbara (see note above, under *Monolopia major*).

Monolopia stricta Crum, Madroño 5: 258. 1940. TYPE: U.S.A. California: Kern County, “Two miles west of Lost Hills [holotype label],” 2 May 1935, *H. L. Mason* 9314 (holotype, UC; isotypes, CAS, DS, GH, LL, MO, NO, NY, ORE, PH, POM, RM, US).

Pseudobahia (A. Gray) Rydb., N. Amer. Fl. 34: 83. 1915. *Monolopia* sect. *Pseudo-bahia* A. Gray in S. Watson et al., Bot. California 1: 383. 1876. Lectotype, selected by Rydberg (1915: 83): *P. bahiifolia* (Benth.) Rydb. —This generic name is correct without a hyphen according to Articles 60.1 and 73.9 of the *Code* (Greuter, 1988).

Pseudobahia bahiifolia (Benth.) Rydb., N. Amer. Fl. 34: 83. 1915, as “*bahiaefolia*.” *Monolopia bahiaefolia* Benth., Pl. Hartweg. 317. 1849. *Lasthenia bahiaefolia* (Benth.) A. Gray, Proc. Amer. Acad. Arts 6: 547. 1865. *Eriophyllum bahiaefolium* (Benth.) E. Greene, Fl. Francisc. 446. 1897. TYPE: U.S.A. California: “on pastures of the Upper Sacramento Valley [holotype label], 1848 [i.e., 1–12 Apr. 1847],” *T. Hartweg* 208 (holotype, K; iso-

types, BM, CGE, GH, K, NY, W; possible isotype, CGE). —Although the holotype and some isotype labels give the date of collection as 1848, Hartweg collected 208 in 1847 in the vicinity of Cordua's farm (McVaugh, 1970). The property of T. Cordua, "at the junction of the Chuba [i.e., Yuba] with the Feather river [Hartweg, 1848: 219]," is the site of Marysville (Gudde, 1975: 82). Bentham renumbered Hartweg's original 208 as 1788; the latter number is the only one on some isotype labels.

Pseudobahia heermannii (E. M. Durand) Rydb., N. Amer. Fl. 34: 83. 1915. *Monolopia heermannii* E. M. Durand, J. Acad. Nat. Sci. Philadelphia, ser. 2, 3: 93. 1855. *M. bahiaefolia* var. *pinnatifida* A. Gray in S. Watson et al., Bot. California 1: 383. 1876. *Eriophyllum heermannii* (E. M. Durand) E. Greene, Fl. Francisc. 445. 1897. TYPE: U.S.A. California: Calaveras County, "at Calaveras [protologue]," ca. 1853, A. L. Heermann (lectotype, selected by Rydberg (1915: 83), PH; isolecotype, GH). —According to Brewer (1880), Heermann "collected in the central valley of the state in 1853 . . . and perhaps later."

Pseudobahia peirsonii Munz, Aliso 2: 84, 78 (pl. 12, fig. F), 82 (pl. 13, fig. D). 1949. TYPE: U.S.A. California: Tulare County, "grassy flat, Ducor [holotype label]," 20 Mar. 1925, P. A. Munz 9038 (holotype, POM; isotype, LL).

Syntrichopappus A. Gray in Torrey, Pacific Railr. Rep. 4(5) [no. 4]: 106. 1857. TYPE: *S. fremontii* A. Gray.

Microbahia Cockerell, Muhlenbergia 3: 9. 1907. TYPE: *Syntrichopappus lemmonii* (A. Gray) A. Gray.

Syntrichopappus fremontii A. Gray in Torrey, Pacific Railr. Rep. 4(5) [no. 4]: 106, pl. 15. 1857. TYPE: U.S.A.: "probably in the spring of 1854, and somewhere between the Rocky Mountains and the Sierra Nevada [protologue]," J. C. Frémont (holotype, GH; isotype, NY). —According to the protologue, Frémont brought back only a single plant. A fragment annotated by Gray is the holotype, and the much more ample isotype is the model for the plate.

Syntrichopappus lemmonii (A. Gray) A. Gray, Proc. Amer. Acad. Arts 19: 20. 1883, as "*lemmoni*." *Actinolepis lemmoni* A. Gray, Proc.

Amer. Acad. Arts 16: 101. 1880. *Microbahia lemmonii* (A. Gray) Cockerell, Muhlenbergia 3: 9. 1907. TYPE: U.S.A. California: "Mohave Desert, S.E. California, on the borders of Arizona [protologue], 1880 [i.e., 1878?]," J. G. Lemmon 103 (holotype, GH; possible isotypes, BM, F, MO). —The locality given in the protologue is more than 100 km east of the closest, more precisely located collection site. The holotype label gives the more vague locality, "Mohave Desert," and the source of Gray's supplemental data has not been found. The possible isotypes lack the date of collection, their labels indicating only "N. Sp. in 1880." The date on the label in GH is in Gray's hand, but four additional specimens in CM, F (2), and UC bear the date April 1878 in Lemmon's hand. Of the latter, the one in UC is accompanied by a note in Lemmon's hand, "Mohave desert, near San Bernardino. Ap[r]. '78," which is in the vicinity of other documented collections. There is also a fragment of a letter from Gray to Lemmon with the UC specimen, referring to 103, perhaps applying to this same gathering. If the date of collection given in the protologue is wrong, as seems likely, the CM, F, and UC collections may also be isotypes.

Excluded Names

Monolopia californica (DC. ex Lindley) F. Fischer & C. Meyer, Index Sem. Hort. Bot. Imp. Petrop. 9: 32, 80. 1843. = *Lasthenia californica* DC. ex Lindley (see Johnson & Ornduff, 1978).

Monolopia glabrata (Lindley) F. Fischer & C. Meyer, Index Sem. Hort. Bot. Imp. Petrop. 9: 32, 80. 1843. = *Lasthenia glabrata* Lindley (see Johnson & Ornduff, 1978).

Monolopia minor DC., Prodr. 6: 74. 1838. *Eriophyllum minus* (DC.) Rydb., N. Amer. Fl. 34: 86. 1915. = *Lasthenia minor* (DC.) Ornd. (see Ornduff, 1966).

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Literature Cited

- Bentham, G. 1873. Compositae. Pp. 163–533 in G. Bentham & J. D. Hooker. 1873. *Genera Plantarum*, vol. 2. Lovell Reeve, London.
- Brewer, W. H. 1880. List of persons who have made botanical collections in California. Pp. 553–559 in S. Watson, *Botany (Geological Survey of California)*, vol. 2. Univ. Press, Cambridge, Massachusetts.
- . 1966. Up and Down California in 1860–1864, ed. 3. Univ. of California Press, Berkeley.
- Burdet, H. M. 1976. *Cartulae ad botanicorum graphicem*. VIII. *Candollea* 31: 127–158.
- Carlquist, S. 1956. On the generic limits of *Eriophyllum* (Compositae) and related genera. *Madroño* 13: 226–239.
- Constance, L. 1937. A systematic study of the genus *Eriophyllum* Lag. *Univ. Calif. Publ. Bot.* 18: 69–135.
- Crum, E. 1940. A revision of the genus *Monolopia*. *Madroño* 5: 250–270.
- Cutright, P. R. 1969. *Lewis and Clark: Pioneering Naturalists*. Univ. of Illinois Press, Urbana.
- Farr, E. R., J. A. Leussink & F. A. Stafleu (editors). 1979. *Index Nominum Genericorum (Plantarum)*, vol. 3. *Regnum Veg.* 102.
- Ferris, R. S. 1960. Compositae. Pp. 98–613 in L. Abrams & R. S. Ferris, *Illustrated Flora of the Pacific States*, vol. 4. Stanford Univ. Press, Stanford.
- Foreman, G. 1941. *A Pathfinder in the Southwest*. Univ. of Oklahoma Press, Norman.
- Gray, A. 1876. Compositae. Pp. 288–443 in W. H. Brewer, S. Watson & A. Gray, *Botany (Geological Survey of California)*, vol. 1. Univ. Press, Cambridge, Massachusetts.
- . 1883. Contributions to North American botany. *Proc. Amer. Acad. Arts* 19: 1–96.
- Greuter, W. (editor). 1988. *International Code of Botanical Nomenclature. Regnum Veg.* 118.
- Gudde, E. G. 1969. *California Place Names*, ed. 3. Univ. of California Press, Berkeley.
- . 1975. *California Gold Camps*. Univ. of California Press, Berkeley.
- Hartweg, T. 1848. Journal of a mission to California in search of plants. Part IV. *J. Hort. Soc. London* 3: 217–228.
- Hoover, M. B., H. E. Rensch & E. G. Rensch. 1966. *Historic Spots in California*, ed. 3. Stanford Univ. Press, Stanford.
- Johnson, D. E. 1978. Systematics of Eriophyllinae (Compositae). Ph.D. dissertation, Univ. of California, Berkeley.
- & R. Ornduff. 1978. *Lasthenia californica* (Compositae), another name for a common goldfield. *Madroño* 25: 227.
- McKelvey, S. D. 1955. *Botanical Exploration of the Trans-Mississippi West*. Arnold Arboretum, Jamaica Plain.
- McVaugh, R. 1970. Introduction to Bentham's *Plantae Hartwegianae*. J. Cramer, Lehre.
- Mooring, J. S. 1986. Chromosome counts in *Eriophyllum* (Compositae: Helenieae). *Madroño* 33: 186–188.
- Ornduff, R. 1966. A biosystematic survey of the goldfield genus *Lasthenia*. *Univ. Calif. Publ. Bot.* 40: 1–92.
- Robbins, C. C. 1968. John Torrey (1796–1873) his life and times. *Bull. Torrey Bot. Club* 95: 515–645.
- Rydberg, P. A. 1901. *Picradeniopsis*. P. 1008 in N. L. Britton, *Manual of the Flora of the Northern States and Canada*. Henry Holt, New York.
- . 1914. Helenieae. *N. Amer. Fl.* 34: 1–80.
- . 1915. Helenieae. *N. Amer. Fl.* 34: 81–146.
- Stafleu, F. A. & R. S. Cowan. 1981. *Taxonomic Literature*, ed. 2, vol. 3. *Regnum Veg.* 105.



Johnson, D E. 1991. "Nomenclatural conspectus of annual Eriophyllinae (Asteraceae)." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 1, 119–124.

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