

Checklist of accepted names (left justified) and synonyms (indented) for specific and infraspecific taxa in tribe Perityleae (Compositae).

Compiled by I.H. Lichter-Marck.

EUTETRAS PALMERI A. Gray, TYPE: MEXICO, San Luis Potosi, near Angostura, 100 miles east of San Luis Potosi, 1878, *C.C. Parry & E. Palmer 520 ½* (holotype: GH[photo!]).

EUTETRAS PALMERI A. Gray, Proc. Amer. Acad. Arts 15: 40 (1880).

EUTETRAS PRINGLEI Greenm., TYPE: MEXICO, Guanajuato, about basaltic cliffs near Acambaro, 6 October 1904, *C. G. Pringle 8813* (holotype: GH, isotypes: F, MO, NY, UC!, US!).

EUTETRAS PRINGLEI Greenm., Proc. Amer. Acad. Arts 41: 266 (1905).

GALEANA PRATENSIS (Kunth) Rydb. TYPE: MEXICO, Michoacan, Patzcuaro, *A. Humboldt & A. Bonpland s.n.* (holotype: P[photo!]).

GALEANA PRATENSIS (Kunth) Rydb., N. Amer. Fl. 34(1): 42 (1914).

Unxia pratensis Kunth, Nov. Gen. Sp. [H.B.K.] 4 (18): 219, t. 401 (ed. fol.) 1818.

Chlamysperma pratense (Kunth) Less., Syn. Gen. Compos. 256 (1832).

Villanova pratense (Kunth) Benth. & Hook.f., Gen. Pl. [Bentham & Hooker f.] 2(1): 405 (1873).

Galeana hastata La Llave, Nov. Veg. Descr. [La Llave & Lexarza] 1:12 (1824). TYPE: MEXICO, Veracruz, S. Jose de Corral, *La Llave s.n.* (holotype: MA, isotype: G[photo!])

Chlamysperma arenarioides Hook. & Arn., Bot. Beech. Voy. P. 300 (1838). *Galeana arenarioides* (Hook. & Arn.) Rydb., N. Amer. Fl. 34(1): 43 (1914). TYPE: MEXICO, Nayarit, Tepic, *T. Beechy s.n.* (holotype: E[photo!], isotype: K)

Melampodium minutiflorum M.E. Jones, Cont. W. Bot. 18: 72 (1933). TYPE: MEXICO, Jalisco, Guadalajara, La Barranca, 17 November 1930, *M.E. Jones s.n.* (holotype: RSA [photo!], isotypes: LL, UC, US).

Galinsogeopsis canescens (Everly) I.H. Lichter-Marck, TYPE: MEXICO, Sinaloa, Capadero, Sierra Tacuichamona, 12 February 1940, *H.S. Gentry 5588* (holotype: DS, isotypes: ARIZ!, NY, UC!, US!).

Galinsogeopsis canescens (Everly) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle canescens Everly, Contr. Dudley Herb. 3: 393, tab. 71, figs. 7 & 8. 1947.

Galinsogeopsis ciliata (L.H. Dewey) I.H. Lichter-Marck, TYPE: USA, Arizona, rocks along Pine Creek near Pine, 26 August 1891, *D.T. MacDougal 676* (holotype: US!, isotype: US!).

Galinsogeopsis ciliata (L.H. Dewey) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Laphamia ciliata L.H. Dewey, Bot. Gaz. 20: 425. 1895.

Perityle ciliata (L.H. Dewey) Rydb., N. Amer. Fl. 34: 23. 1914.

Galinsogeopsis coronopifolia (A. Gray) I.H. Lichter-Marck, TYPE: USA, New Mexico, Grant Co., copper mines of Santa Rita del Cobre, September 1851, *C. Wright 1196* (holotype: GH, isotypes: NY, US!).

Galinsogeopsis coronopifolia (A. Gray) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle coronopifolia A. Gray, Smithsonian Contr. Knowl. 5(6): 82--83. 1853.

Laphamia coronopifolia (A. Gray) Hemsl., Biol. Cent.-Amer. Bot. 2: 210. 1881. TYPE: USA, New Mexico, Grant Co., copper mines of Santa Rita del Cobre, September 1851, C. Wright 1196 (holotype: GH, isotypes: NY, US!).

Galinsogeopsis feddema (McVaugh) I.H. Lichter-Marck, TYPE: MEXICO, Jalisco, Rancho Viejo, 10 km ENE of Huejuquilla el Alto, rock crevices, open oak-woodland, 1900 m, 31 October 1963, *Feddema* 2278 (holotype: MICH, isotype: SRSC!).

Galinsogeopsis feddema (McVaugh) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle feddema McVaugh, Contr. Univ. Michigan Herb. 9: 431, fig. 35. 1972.

Galinsogeopsis glaucescens (B.L. Turner) I.H. Lichter-Marck, TYPE: MEXICO, Zacatecas, km 8 along the road to El Teul and Florencia, "Rupicola, en acartilado de exposicion oeste", 2000 m, 17 October 1992, *J.A. Lomeli Sencion s.n.* (holotype: TEX!).

Galinsogeopsis glaucescens (B.L. Turner) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle glaucescens B.L. Turner, Phytologia 75: 176. 1993.

Galinsogeopsis harker (P. Carillo) I.H. Lichter-Marck, TYPE: MEXICO, Zacatecas, Municipio de Teul de Gonzalez Ortega, puente sobre el Rio Patitas, camino de El Conejo a Milpillas Allende, 21°21'06"N, 103°33'55"W, 1580 m, 26 December 2004, *P. Carrillo-Reyes & R. Ramirez-Delgadillo* 4462 (holotype: IBUG!, isotypes: GUADA, HUAZ, IEB, KANU, MEXU, MO, MU, NY, TEX!, UAMIZ, WIS, XAL).

Galinsogeopsis harker (P. Carillo) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle harker P. Carillo, Syst. Bot. 33: 459 (461, fig. 1). 2008.

Galinsogeopsis hofmeisteria (Rydb.) I.H. Lichter-Marck, TYPE: MEXICO, Durango, vicinity of Durango, April--November 1896, *E. Palmer* 28 (holotype: NY, isotypes: GH, US!).

Galinsogeopsis hofmeisteria (Rydb.) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle hofmeisteria Rydb., N. Amer. Fl. 34(1): 18. 1914.

Galinsogeopsis jaliscana (A. Gray) I.H. Lichter-Marck, TYPE: MEXICO, Jalisco, Rio Blanco, ca. 10 mi. NW of Guadalajara, 17--23 September 1886, *E. Palmer* 554 (holotype: GH, isotypes: NY!, US!).

Galinsogeopsis jaliscana (A. Gray) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle jaliscana A. Gray, Proc. Amer. Acad. Arts 22: 431. 1887.

Galinsogeopsis lineariloba (Rydb.) I.H. Lichter-Marck, TYPE: MEXICO, Durango, San Ramon, 21 April--18 May 1906, *E. Palmer* 89 (holotype: NY, isotypes: GH, UC!, US!).

Galinsogeopsis lineariloba (Rydb.) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle lineariloba Rydb., N. Amer. Fl. 34(1): 18. 1914.

Galinsogeopsis montana (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, in mats on boulders, summit of Sierra Mohinora, 10,000--10,300 ft., 16--17 October 1959, *D.S. Correll & H.S. Gentry* 23185 (holotype: TEX, isotypes: GH, UC!, SRSC!).

Galinsogeopsis montana (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Corellia montana A.M. Powell, Brittonia 25: 116, fig. 1. 1973.

Perityle montana (A.M. Powell) B.G. Baldwin, Syst. Bot. 27: 181. 2002.

Galinsogeopsis microcephala (A. Gray) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, rocky hills near Chihuahua, 8 October 1885, *C.G. Pringle 571* (lectotype: GH!, isotype: US!).

Galinsogeopsis microcephala (A. Gray) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).
Perityle microcephala A. Gray. Proc. Amer. Acad. Arts 21: 391. 1886.

Galinsogeopsis pennellii (B.L. Turner) I.H. Lichter-Marck, TYPE: MEXICO, Durango, Cerro de Mercado, N of Cd. Durango, crevices of ferruginous rocks, 2000--2100 m, 24--25 August 1934, *F. W. Pennell 18160* (holotype: NY[photo!], isotype: TEX[photo!]).

Galinsogeopsis pennellii (B.L. Turner) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).
Perityle pennellii B.L. Turner, Phytologia 69: 298. 1990.

Galinsogeopsis pseudociliata (A.M. Powell & Yarborough) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, 26 km of winding road NW in the "Tinaja", a canyon through the foothills of the Sierra Madre Occidental, 28 July 1972, *W.E. Wilson, L. A. & M.C. Johnston* (holotype: TEX[photo!]).

Galinsogeopsis pseudociliata (A.M. Powell & Yarborough) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).
Perityle pseudociliata A.M. Powell & Yarborough, Phytologia 82: 326, fig. 1. 1998.

Galinsogeopsis scopulorum (M.E. Jones) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, Colonia Juarez, 6000 ft., 12 September 1903, *M.E. Jones s.n.* (holotype: POM, isotype: US!).

Galinsogeopsis scopulorum (M.E. Jones) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).
Laphamia scopulorum M.E. Jones, Contr. W. Bot. 12: 48. 1908.
Perityle scopulorum (M.E. Jones) A.M. Powell & B.L. Turner, Phytologia 66: 505. 1989.

GALINSOGEOPSIS SPILANTHOIDES Sch. Bip. var. SPILANTHOIDES, TYPE: MEXICO, Sinaloa, Sierra Madre, 1849, *B. Seeman 1982* (lectotype: K[photo!]). *Pericome spilanthis* (Sch. Bip.) Benth. & Hook. f. ex. Hemsl., Biol. Centr.-Amer., Bot. 2(9): 215. 1881. *Perityle spilanthis* (Sch. Bip.) Rydb., N. Amer. Fl. 34: 23. 1914.

GALINSOGEOPSIS SPILANTHOIDES Sch. Bip. var. SPILANTHOIDES, Bot. Voy. Herald [Seemann] 7--8: 307. 1856.

Perityle microglossa Benth., Bot. Voy. Sulphur [Bentham] 119. 1845. TYPE: NICARAGUA, Realejo, 1837, *R.B. Hinds* (K).

Perityle acmella Harv. & A. Gray, Mem. Amer. Acad. Arts ser. 2, 4: 77. 1849. TYPE: MEXICO, "California," *Coulter 278* (holotype: GH[photo!], isotype: NY[photo!]).

Perityle microglossa var. *effusa* A. Gray, Proc. Amer. Acad. Arts 19: 19. 1883. TYPE: USA, Arizona, Pima Co., Santa Catalina Mtns., 5 June 1882, *C.G. Pringle s.n.* (holotype: GH, isotypes: US!, NY, VT[photo!]).

Perityle effusa (A. Gray) Rose, Contr. U.S. Natl. Herb. 1(4): 104--105. 1891.

Galinsogeopsis spilanthis Sch. Bip. var. *saxosa* (Brandege) I.H. Lichter-Marck, TYPE: MEXICO, Sinaloa, vicinity of Culiacan, Cerro Colorado, 5 November 1904, *Brandege s.n.* (holotype: UC!, isotypes: GH, POM, US!).

Galinsogeopsis spilanthoides Sch. Bip. var. ***saxosa*** (Brandege) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle saxosa Brandege, *Zoe* 5: 225. 1905.

Perityle microglossa var. ***saxosa*** (Brandege) A.M. Powell, *Rhodora* 76: 273. 1974.

Perityle urticifolia Rydb., N. Amer. Fl. 34(1): 18. 1914. TYPE: MEXICO, Sinaloa, Tepic, 5 January--6 February 1892, *E. Palmer 1960* (holotype: NY[photo!], isotypes: GH, UC!, US!).

Galinsogeopsis stevensii (B.L. Turner) I.H. Lichter-Marck, TYPE: MEXICO, Sinaloa, Municipio San Ignacio, 2.6 km from Highway 15 on road to microwave tower, ca. 17 mi. E of Emcosa, 10 September 1973, *W.D. Stevens & M. Fairhurst 2040* (holotype: TEX!, isotype: MSU).

Galinsogeopsis stevensii (B.L. Turner) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle stevensii B.L. Turner, *Phytologia* 69: 298. 1990.

Galinsogeopsis turneri (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Durango, 3.4 mi. east of El Palmito, 2 April 1970, *A.M. Powell 1858* (holotype: TEX, isotype: SRSC!).

Galinsogeopsis turneri (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle turneri A.M. Powell, *Madroño* 21: 456. 1972.

Galinsogeopsis vigilans (Spellenb. & A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, Municipio Maguarichi, on igneous rocks at Maguarichi and to 3 mi. NE along road, just below oak zone, 1700 m, 27°52'30"N, 107°59'30"W, 25 April 1985, *Spellenberg, Soreng, Corral & Todsén 8104* (holotype: NMC; isotypes: ENCB, NY, MEXU, SRSC!, TEX!, UC!, Escuela Superior Agricultura "Hermanos Escobar" [Cd. Juarez]).

Galinsogeopsis vigilans (Spellenb. & A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle vigilans Spellenb. & A.M. Powell, *Syst. Bot.* 15: 252, fig. 1. 1990.

LAPHAMIA AGLOSSA (A. Gray) Benth. & Hook. f. ex Hemsl., TYPE: U.S.A., Texas, Rio Grande below Presidio del Norte, August 1852, *C.C. Parry* s.n. (lectotype: GH[photo!], isolectotype: K, NY[photo!]).

LAPHAMIA AGLOSSA (A. Gray) Benth. & Hook. f. ex Hemsl., *Biol. Cent-Amer., Bot.* 2: 210. 1881.

Perityle aglossa A. Gray, *Smithsonian Contr. Knowl.* 5(6): 107. 1852.

Leptopharynx aglossa (A. Gray) Rydb., N. Amer. Fl. 34: 24. 1914.

Laphamia ajoensis (Todsén) I.H. Lichter-Marck, TYPE: U.S.A, Arizona, crevices in a seeping, north-facing volcanic cliff, about 3000 ft., above marker 14, Bull Pasture Trail, Organ Pipe Cactus National Monument, Ajo Mtns., Pima Co., 22 October 1972, *T.K. Todsén 2292* (holotype: NY, isotypes: NMC, SRSC!, ARIZ!, herb. Organ Pipe Cactus Natl. Mon.).

Laphamia ajoensis (Todsén) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle ajoensis Todsén, *J. Ariz. Acad. Sci.* 9(1): 35. 1974.

Laphamia ambrosiifolia (Greene ex A.M. Powell & Yarborough) I.H. Lichter-Marck, TYPE: U.S.A., Arizona, Greenlee Co., with *Prosopis*, *Euphorbia*, on face of conglomerate cliff, above

San Francisco River bank, S. Clifton, 5 June 1935, *B. Maguire, B.L. Richards Jr. & T Moeller 11787* (holotype: NY, isotypes: GH, UC!, US!).

Laphamia ambrosiifolia (Greene ex A.M. Powell & Yarborough) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle ambrosiifolia Greene ex A.M. Powell & Yarborough, *Phytologia* 76: 325--327, fig. 1994.

LAPHAMIA ANGUSTIFOLIA A. Gray, *Pl. Wright.* 1: 100--101. 1852. TYPE: U.S.A., Texas, between Texas and El Paso, 1851, *C. Wright 1194* (holotype: GH, isotypes: GH, NY, US [photo!], DS!).

LAPHAMIA ANGUSTIFOLIA A. Gray, *Pl. Wright.* 1: 100--101. 1852.

Perityle angustifolia (A. Gray) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia angustifolia var. *laciniata* Torr., *Rep. U.S. Mex. Bound.* 2(1): 82. 1859. TYPE: U.S.A., Texas, crevices of rocks along the Rio Grande, October, *Bigelow s.n.* (holotype: NY, isotypes: GH, US [photo!], DS!).

Laphamia laciniata (Torr.) Rydb., *N. Amer. Fl.* 34: 25. 1914.

Laphamia batopilensis (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Chihuahua, Municipio Batopilas, N side of Barranca de Batopilas between La Bufa and Quirare, 1590 m, 26 March 1979, *Bye et al. 9276* (holotype: COLO, isotype: SRSC!).

Laphamia batopilensis (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle batopilensis A.M. Powell, *Madroño* 30: 221--223, fig. 1983.

LAPHAMIA BISETOSA Torr. in A. Gray var. BISETOSA, TYPE: U.S.A., Texas, Brewster Co., crevices of rocks in a canyon of the Rio Grande below Presidio del Norte, October 1852, *C.C. Parry s.n.* (holotype: GH, isotype: NY[photo!]).

LAPHAMIA BISETOSA Torr. in A. Gray var. BISETOSA *Smithsonian Contr. Knowl.* 6(6): 106. 1853.

Perityle bisetosa var. *bisetosa* (Torr. in A. Gray) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia bisetosa var. *scalaris* (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Brewster Co. in crevices of lower limestone bluffs, Black Gap Game Preserve, ca. 4 mi S of headquarters, Cave Hill, E side, along Stairstep Mtn., 25 September 1965, *A.M. Powell & T. Watson 1394* (holotype: SRSC!, isotype: TEX).

Laphamia bisetosa var. *scalaris* (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle bisetosa var. *scalaris* A.M. Powell, *Sida* 3: 177--178. 1967.

Laphamia bisetosa var. *appressa* (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Brewster Co., E face of the limestone caprock of a small mountain peak on the N rim of San Francisco Creek canyon, 5 July 1966, *J. Scudday, S. Sikes & A.M. Powell 626* (holotype: SRSC!, isotypes: GH, SMU, TEX, US!).

Laphamia bisetosa var. *appressa* (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle bisetosa var. *appressa* A.M. Powell, *Sida* 3: 178--180. 1967.

Laphamia bisetosa var. ***spathulata*** (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Coahuila, limestone bluffs in large, dead-end, Boquilla Canyon, Sierra de la Encantada, ca. 92.5 mi NW of Musquiz, 22 May 1968, *A.M. Powell & D. Patterson 1588* (holotype: SRSC!, isotypes: SMU, TEX).

Laphamia bisetosa var. ***spathulata*** (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle bisetosa var. *spathulata* A.M. Powell, *Sida* 5: 85, fig. 4. 1973.

Laphamia carmenensis (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Coahuila, Maderas del Carmen, 102° 36' 30'' W, 0.5 mi. N of El Dos on trail to El Tres, 2325 m, along stream, on overhanging cliff of igneous rock (rhyolite?) in thin soil, 7 August 1974, *A. Adamcewicz & T. Wendt 525* (holotype: TEX, isotypes: MWXU, SRSU!).

Laphamia carmenensis (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle carmenensis A.M. Powell, *Sida* 6(4): 311. 1976.

LAPHAMIA CASTILLONII (I.M. Johnst.) Everly, TYPE: MEXICO, Coahuila, Cañon del Indio Felipe, Sierra Hechiceros, frequent in crevices of cliffs in deep canyon, 18 September 1940, *Johnston & Muller 1359* (holotype: GH [photo!]).

LAPHAMIA CASTILLONII (I.M. Johnst.) Everly, *Contr. Dudley. Herb.* 3: 378. 1947.

Perityle castillonii I.M. Johnst., *J. Arnold Arbor.* 22: 122. 1941.

LAPHAMIA CERNUA Greene, TYPE: U.S.A., New Mexico, Doña Ana Co., Organ Mts., 6500 ft., 4 September 1897, *E.O. Wooton 476?* (holotype: ND-G, isotype: US!).

LAPHAMIA CERNUA Greene, *Bull. Torrey Bot. Club* 25(3): 122. 1898.

Pappothrix cernua (Greene) Rydb., *N. Amer. Fl.* 34: 27. 1914.

Perityle cernua (Greene) Shinnars, *S. W. Naturalist* 4: 205. 1959.

LAPHAMIA CINEREA A. Gray, TYPE: U.S.A., Texas, on rocks near Escondido Creek, September, *Bigelow s.n.* (holotype: GH, isotypes: DS!, NY, US [photo!]).

LAPHAMIA CINEREA A. Gray, *Rep. U.S. Mex. Bound.* 2(1): 82. 1859.

Pappothrix cinerea (A. Gray) Rydb., *N. Amer. Fl.* 34: 27. 1914.

Perityle cinerea (A. Gray) A.M. Powell, *Sida* 3: 278, fig. 20. 1968.

Laphamia coahuilensis (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Coahuila, deep narrow canyon, ca. 2 km SE of Puertecito, W end of Sierra de la Madera, ca. lat. 27.15° N, 21 Sept 1941, *I.M. Johnston 9311* (holotype: GH[photo!], isotype: GH[photo!], LL).

Laphamia coahuilensis (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle coahuilensis A.M. Powell, *Sida* 5: 10, fig. 9. 1973.

LAPHAMIA COCHISENSIS W.E. Niles, TYPE: U.S.A., Arizona, Cochise Co., north facing cliffs of Echo Canyon, elev. ca. 2000 m, Chiricahua Nat'l Mon., 5 Oct 1964, *Niles 377* (holotype: ARIZ!).

LAPHAMIA COCHISENSIS W.E. Niles, *Mem. N.Y. Bot. Gard.* 21: 47--49. 1970.

Perityle cochisensis (W.E. Niles) A.M. Powell, *Sida* 5: 10. 1973.

LAPHAMIA CONGESTA M.E. Jones, TYPE: U.S.A., Arizona, in clefts of rocks in mesa below the Buckskin Mountains, 7000 ft, 21 September 1894, *M.E. Jones 6063* (holotype: POM, isotypes: DS [photo!], NY, POM, RM, UC!, US!).

LAPHAMIA CONGESTA M.E. Jones, Proc. Calif. Acad. Sci. ser. 2, 5: 703. 1895.

Monothrix congesta (M.E. Jones) Rydb., N. Amer. Fl. 34(1): 21. 1914.

Perityle congesta (M.E. Jones) Shinnery, S. W. Naturalist 4: 204. 1959.

Laphamia toumeyi B.L. Rob. & Greenm., Amer. J. Sci. ser. 3, 50: 176. 1895. TYPE: U.S.A., Arizona, in the Grand Canyon, 12 July 1892, *J.W. Toumey 645I* (holotype: US!, isotypes: DS [photo!], GH).

Monothrix toumeyi (B.L. Rob. & Greenm.) Rydb., N. Amer. Fl. 34(1): 21. 1914.

Perityle toumeyi (B.L. Rob. & Greenm.) J.F. Macbr., Contr. Gray Herb. 56: 39. 1918.

Laphamia cordifolia (Rydb.) I.H. Lichter-Marck, TYPE: MEXICO, Sinaloa, Vicinity of Topolobampo, 23 Mar. 1910, *J.N. Rose, P.C. Standley & P.G. Russell 13294* (holotype: NY, isotypes: GH, US [fragment!]).

Laphamia cordifolia (Rydb.) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Leptopharynx cordifolia Rydb., N. Amer. Fl. 34: 22. 1914.

Perityle cordifolia (Rydb.) S.F. Blake, Contr. U.S. Natl. Herb. 23: 1602. 1926.

LAPHAMIA DISSECTA Torr. in A. Gray, TYPE: U.S.A., Texas, Presidio Co., Presidio Del Norte, August 1852, *J.M. Bigelow s.n.* (holotype: NY, isotypes: GH, US!).

LAPHAMIA DISSECTA Torr. in A. Gray, Smithsonian Contr. Knowl. 5(6): 81. 1853.

Perityle dissecta (Torr. in A. Gray) A. Gray, Syn. Fl. N. Amer. 1(2): 320--321. 1884.

Leptopharynx dissecta (Torr. in A. Gray) Rydb., N. Amer. Fl. 34(1): 24. 1914.

Laphamia fosteri (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Culberson Co., Apache Mts., Panther Canyon, limestone boulders and bluffs, 3 July 1978, *A.M. Powell 3365* (holotype: SRSC!, isotype: TEX).

Laphamia fosteri (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle fosteri A.M. Powell, Madroño 30: 217--219, fig. 1983.

Laphamia gentryi (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Sonora, Saguariño, Rio Mayo, transition pine country, 5500 ft., 2 November 1935, *H.S. Gentry 2109* (holotype: GH, isotypes: ARIZ!, UC!, US!).

Laphamia gentryi (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle gentryi A.M. Powell, Sida 5: 10. 1973.

Perityle alamosana B.L. Turner, Phytologia 74: 265. 1993. TYPE: MEXICO, Sonora, Rancho San Pedro and upper entrance of the cañon, *P.S. Martin, C. Lindquist, S. Meyer s.n.* (holotype: TEX[photo!], isotype: ARIZ!).

LAPHAMIA GILENSIS M.E. Jones var. GILENSIS, TYPE: U.S.A., Arizona, growing among rocks at Putnam's ranch, near the Gila River, 23 May 1890, *M.E. Jones s.n.* (holotype: POM, isotypes: UC!, US!).

LAPHAMIA GILENSIS M.E. Jones var. GILENSIS, Zoe 2: 15. 1891.

Leptopharynx gilensis (M.E. Jones) Rydb., N. Amer. Fl. 34(1): 24. 1914.

Perityle gilensis (M.E. Jones) J.F. Macbr., Contr. Gray Herb. 56: 39. 1918.

Laphamia arizonica Eastw., Proc Calif. Acad. Sci. ser. 4, 20: 159. 1931. TYPE: U.S.A., Arizona, Maricopa Co., Fish Creek, Apache Trail, 18 May 1919, *A. Eastwood 8753* (holotype: RM, isotype: DS!, US [photo!]).

Laphamia dura A. Nelson, Amer. J. Bot. 23: 266. 1936. TYPE: U.S.A., Arizona, Maricopa Co., Salt River Valley, near Canyon Lake, 3 May 1925, *A. Nelson 10323* (holotype: RM, isotypes: DS!, US [photo!]).

Laphamia gilensis* var. *salensis (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Arizona, Gila Co., Salt River canyon between Globe and Show Low, 18 Aug 1869, *S. Sikes 428* (holotype: SRSC!, isotypes: SMU, TEX).

Laphamia gilensis* var. *salensis (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle gilensis var. *salensis* A.M. Powell, Sida 5(2): 104--106. 1973.

LAPHAMIA GRACILIS M.E. Jones, TYPE: U.S.A., Arizona, below Nagle's Ranch, edge of Buckskin Mtns., crevices of limestone rocks, 7000 ft, in very dry places. 15 September 1894. *M.E. Jones 6050c* (holotype: POM, isotype US!).

LAPHAMIA GRACILIS M.E. Jones, Proc. Calif. Acad. Sci. ser. 2, 5: 703--704. 1895.

Perityle gracilis (M.E. Jones) Rydb., N. Amer. Fl. 34(1): 19. 1914.

Laphamia fastigiata Brandegee, Bot. Gaz. 27: 450. 1899. TYPE: U.S.A. Nevada, Sheep Mtns., 4--5000 ft, May-Oct 1898, *C.A. Purpus 6142* (holotype: UC!, isotype: US!).

Monothrix fastigiata (Brandegee) Rydb., N. Amer. Fl. 34(1): 21. 1914.

Perityle fastigiata (Brandegee) Shinnars, S. W. Naturalist 4: 204. 1959.

LAPHAMIA GRANDIFOLIA (Brandegee) Everly, TYPE: MEXICO, Sinaloa, Cerro Colorado, vicinity of Culiacan, 5 Nov 1904, *T.S. Brandegee s.n.* (holotype: UC!, isotypes: GH, NY [photo!], US!).

LAPHAMIA GRANDIFOLIA (Brandegee) Everly, Contr. Dudley Herb. 3: 379. 1947.

Perityle grandifolia Brandegee, Zoe 5: 224--225. 1905.

Leptopharynx grandifolia (Brandegee) Rydb., N. Amer. Fl. 34: 23. 1914.

Laphamia huecoensis (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, El Paso Co., North Hueco Mts., Hueco Tanks area, Navar Ranch, ca. 31°54'N, 106°07'W, 24 September 1977, *McCarten & Van Devender 2508* (holotype: SRSC!, isotype: TEX).

Laphamia huecoensis (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle huecoensis A.M. Powell, Madroño 30: 219--221, fig. 1983.

LAPHAMIA INTRICATA Brandegee, TYPE: U.S.A., Nevada, Sheep Mountain, on rocks, May--Oct, 1898. *C.A. Purpus 6134* (lectotype: UC!, isolectotypes: DS!, US!). Pahrump Valley, May--Oct., 1898, *C.A. Purpus 6051* (paratypes: DS! [photo!], NY, UC!, US!).

LAPHAMIA INTRICATA Brandegee, Bot. Gaz. 27: 450. 1899.

Monothrix intricata (Brandegee) Rydb., N. Amer. Fl. 34(1): 20. 1914.

Laphamia megacephala subsp. *intricata* (Brandegee) D.D. Keck, Aliso 4: 101. 1958.

Perityle intricata (Brandegee) Shinnars, S. W. Naturalist 4: 204. 1959.

Perityle megalocephala var. *intricata* (Brandegee) A.M. Powell, Sida 5: 94. 1973.

LAPHAMIA INYOENSIS Ferris, TYPE: U.S.A., California, Inyo Co., Cerro Gordo peak, 8200ft. 7 July 1942. *A. Alexander & L. Kellogg 3056a* (holotype: DS!, isotypes: CAS!, GH, LL, NY, POM, RM, UC!).

LAPHAMIA INYOENSIS Ferris, *Contr. Dudley Herb.* 5(4): 104–106, f. 2. 1958.

Perityle inyoensis (Ferris) A.M. Powell, *Sida* 3(4): 278. 1968.

LAPHAMIA LEMMONII A. Gray, TYPE: U.S.A., Arizona, Pima Co., near Camp Lowell, Tucson, 1880. *Lemmon s.n.* (holotype: GH, isotype: NDG[photo!]).

LAPHAMIA LEMMONII A. Gray, *Proc. Amer. Acad. Arts* 16: 101. 1880.

Leptopharynx lemmonii (A. Gray) Rydb., *N. Amer. Fl.* 34(1): 24. 1914.

Perityle lemmonii (A. Gray) J.F. Macbr., *Contr. Gray Herb.* 56: 39. 1918.

Laphamia lemmonii var. *pedata* A. Gray, *Proc. Amer. Acad. Arts* 16: 101. 1880. TYPE: U.S.A., Arizona, Pima Co., Santa Catalina Mountains, near Camp Lowell, Tucson, *Lemmon s.n.* (holotype: GH).

LAPHAMIA LINDHEIMERI A. Gray, var. LINDHEIMERI, TYPE: U.S.A., Texas, Comal Co., perpendicular rocks on the banks of the Guadalupe River, Comanche Spring, near New Braunfels, May 1850, *Lindheimer 937* (holotype: GH, isotypes: GH, NY [as *Lindheimer 314*], UC!, US!).

LAPHAMIA LINDHEIMERI A. Gray var. LINDHEIMERI, *Smithsonian Contr. Knowl.* 3(5): 101. 1852.

Perityle lindheimeri (A. Gray) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia rotundata Rydb., *N. Amer. Fl.* 34: 25. 1914. TYPE: U.S.A., Texas, San Esteban, 3 September 1852, *Bigelow s.n.* (holotype: NY [photo!], isotypes: DS [photo!], GH, NY, UC!, US!).

Perityle rotundata (Rydb.) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia lindheimeri A. Gray var. ***halimifolia*** (A. Gray) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Val Verde Co., crevices of rocks, on the summit of hills, near the San Pedro River, July 1849, *C. Wright 301* (holotype: GH, isotypes: DS, K, GH, NY, US [photo!]).

Laphamia lindheimeri A. Gray var. ***halimifolia*** (A. Gray) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Laphamia halimifolia A. Gray, *Pl. Wright.* 1: 100. 1852.

Perityle halimifolia (A. Gray) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Perityle lindheimeri var. *halimifolia* (A. Gray) A.M. Powell, *Sida* 3: 278. 1968.

Laphamia leptoglossa (Harv. & A. Gray ex A. Gray) I.H. Lichter-Marck, TYPE: MEXICO, Sonora, vicinity of Hermosillo, 1829--1830, *Coulter 277* (holotype: GH, isotype: US!).

Laphamia leptoglossa (Harv. & A. Gray ex A. Gray) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle leptoglossa Harv. & A. Gray ex A. Gray, *Mem. Amer. Acad. Arts ser. 2*, 4(1): 77. 1849.

Leptopharynx leptoglossa (Harv. & A. Gray) Rydb., *N. Amer. Fl.* 34: 22. 1914.

Laphamia lloydii (B.L. Rob. & Fernald) I.H. Lichter-Marck, TYPE: MEXICO, Sonora, Badehuaci, 2 December 1890, *C.E. Lloyd 400* (holotype: GH, isotypes: NY, UC!) US(3!).

Laphamia lloydii (B.L. Rob. & Fernald) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle lloydii B.L. Rob. & Fernald, *Proc. Amer. Acad. Arts* 30: 118. 1894.

Leptopharynx lloydii (B.L. Rob. & Fernald) Rydb., *N. Amer. Fl.* 34: 22. 1914.

Laphamia lobata (Rydb.) I.H. Lichter-Marck, TYPE: MEXICO, Baja California, Comondú, 19 February 1889, *T.S. Brandegees* s.n. (holotype: GH, isotype: UC!).

Laphamia lobata (Rydb.) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Leptopharynx lobata Rydb., *N. Amer. Fl.* 34: 23. 1914.

Perityle lobata (Rydb.) I.M. Johnst., *Proc. Calif. Acad. Sci. ser.* 4, 12: 1205. 1924.

LAPHAMIA MEGALOCEPHALA S. Watson var. MEGALOCEPHALA, TYPE: U.S.A., Nevada, 1872, *Wheeler* s.n. (holotype: US!, isotype: GH).

LAPHAMIA MEGALOCEPHALA S. Watson var. MEGALOCEPHALA, *Amer. Naturalist* 7: 301. 1873.

Monothrix megaloccephala (S. Watson) Rydb., *N. Amer. Fl.* 34(1): 20. 1914.

Perityle megaloccephala (S. Watson) J.F. Macbr., *Contr. Gray Herb.* 56: 39. 1918.

Laphamia megaloccephala var. ***oligophylla*** (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., California, Inyo Co., Lost Burro Gap, Cottonwood Mtns., Death Valley Nat'l Monument., 17 September 1957, *R.S. Ferris & W.R. Ernst 13162* (holotype: DS, isotypes: DS!, RM, RSA, TEX, US!).

Laphamia megaloccephala var. ***oligophylla*** (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle megaloccephala var. *oligophylla* A.M. Powell. *Sida* 5: 91. 1973.

LAPHAMIA PALMERI A. Gray, TYPE: U.S.A., Arizona, at Beavertdam, in crevice of rock canyons, 1877, *E. Palmer 199* (holotype: GH, isotypes: ND, NY, US!).

LAPHAMIA PALMERI A. Gray, *Proc. Amer. Acad. Arts* 13: 372--373. 1878.

Monothrix palmeri (A. Gray) Rydb., *N. Amer. Fl.* 34(1): 21. 1914.

Laphamia palmeri var. *tenella* M.E. Jones, *Proc. Calif. Acad. Sci. ser.* 2, 5: 703. 1895.

TYPE: U.S.A., Utah, Springdale, in crevices of sandstone rocks, 4000 ft, 16 May 1894,

M.E. Jones 5249aa (holotype: POM, isotype: US!).

Perityle tenella (M.E. Jones) J.F. Macbr., *Contr. Gray Herb. n.s.* 56: 39. 1918.

LAPHAMIA PARRYI (A. Gray) Benth. & Hook. f. ex Hemsl., TYPE: U.S.A., Texas, Canyon of the Rio Grande, August 1852, *C.C. Parry 521* (holotype: GH, isotype: ND, NY, US).

LAPHAMIA PARRYI (A. Gray) Benth. & Hook. f. ex Hemsl., *Biol. Cent-Amer., Bot.* 2: 210. 1881.

Perityle parryi A. Gray, *Smithsonian Contr. Knowl.* 2: 106. 1853.

Leptopharynx trisecta Rydb. *N. Amer. Fl.* 34: 23. 1914. TYPE: MEXICO, Chihuahua, dry cliffs, rocky hills near Chihuahua, 20 March 1885, *C.G. Pringle 183* (holotype: NY, isotypes: DS!, GH, UC!, US!).

LAPHAMIA QUINQUEFLORA Steyererm., TYPE: U.S.A., New Mexico, Culberson Co., niches in exposed limestone cliffs, lower McKittrick Canyon, Guadalupe Mts., alt. 1900 m., 20 July 1931, *Moore & Steyermark 3547* (holotype: GH, isotypes: CAS!, DS!, UC!, US!).

LAPHAMIA QUINQUEFLORA Steyererm., *Ann. Missouri Bot. Gard.* 19: 392--393. 1932.

Pappothrix quinqueflora (Steyererm.) Everly, *Contr. Dudley Herb.* 3: 379. 1947.

Perityle quinqueflora (Steyererm.) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia reinana (B.L. Turner) I.H. Lichter-Marck, TYPE: MEXICO, Sonora, Municipio De Ures, Cañada de Mazatan, oak woodland on granite, 1383 m, *T.R. Van Devender, Reina, Sanchez E., Ferguson, Anderson & Johnson 2004-476* (holotype: TEX, isotype ARIZ!).

Laphamia reinana (B.L. Turner) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle reinana B.L. Turner, *Phytologia* 88(1): 94--96 (2006).

LAPHAMIA RUPESTRIS A. Gray var. RUPESTRIS, TYPE: U.S.A., Texas, Jeff Davis Co., crevices of rocks, on mountains, in the pass of the Limpia, August 1849, *C. Wright 300* (holotype: GH, isotypes: DS [photo!], GH, NY, US!).

LAPHAMIA RUPESTRIS A. Gray var. RUPESTRIS, *Smithsonian Contr. Knowl.* 3(5): 100. 1852.

Pappothrix rupestris (A. Gray) Rydb., *Fl. N. Amer.* 34: 26. 1914.

Perityle rupestris (A. Gray) Shinnery var. *rupestris*, *S. W. Naturalist* 4: 205. 1959.

Laphamia rupestris A. Gray var. ***albiflora*** (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Brewster Co., in crevices of igneous bluffs, ca. 3 mi. W of Alpine in Tronto Pass, 3 June 1965, *A.M. Powell & S. Sikes 1320* (holotype: SRSC!, isotypes: GH, SMU, TEX, US!).

Laphamia rupestris A. Gray var. ***albiflora*** (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle rupestris (A. Gray) Shinnery var. *albiflora* A.M. Powell, *Sida* 3: 180. 1967.

Laphamia sanchezii I.H. Lichter-Marck, TYPE: MEXICO, Sonora, Guaymas, October 1887, *E. Palmer 308* (holotype: GH, isotypes: NY, UC!, US(3)!).

Laphamia sanchezii I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle palmeri S. Watson, *Proc. Amer. Acad.* 24: 57. 1889, non *Laphamia palmeri* A. Gray, *Proc. Amer. Acad. Arts* 13: 372--373. 1878.

Leptopharynx palmeri (S. Watson) Rydb., *N. Amer. Fl.* 34: 23. 1914.

LAPHAMIA SAXICOLA Eastw., TYPE: U.S.A., Arizona, Maricopa Co., near the Roosevelt Dam on the road to Fish Creek, Apache Trail, 22 May 1929, *A. Eastwood 17401* (holotype: CAS!, isotypes: CAS!, DS!, GH, POM, US!).

LAPHAMIA SAXICOLA Eastw., *Proc. Calif. Acad. Sci.* ser. 4, 20: 159--160. 1931.

Perityle saxicola (Eastw.) Shinnery, *S. W. Naturalist* 4: 205. 1959.

Laphamia specuicola (S.L. Welsh & Neese) I.H. Lichter-Marck, TYPE: U.S.A., Utah, T25S, R21E, S24, 2 mi. due NNE of Moab, Grandstaff Canyon, 1220 m, Navajo sandstone, hanging garden community. 6 October 1977, *S.L. Welsh 16365* (holotype: BRY, isotypes: NY).

Laphamia specuicola (S.L. Welsh & Neese) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Perityle specuicola S.L. Welsh & Neese, *Great Basin Naturalist* 43: 373. 1983.

LAPHAMIA STANSBURYI A. Gray, TYPE: U.S.A., Utah, Tooele Co., crevices of limestone rocks, Stansbury's Island, 26 June 1850, *Stansbury s.n.* (holotype: NY, isotypes: DS!, GH, NY[photo!]).

LAPHAMIA STANSBURYI A. Gray, Smithsonian Contr. Knowl. 3(art. 5): 101. 1852 [as "stansburii"].

Monothrix stansburyi (A. Gray) Rydb. N. Amer. Fl. 34(1): 21. 1914.

Perityle stansburyi (A. Gray) J.F. Macbr., Contr. Gray Herb. 56: 39. 1918.

Monothrix stansburyana Torr., In Stan. Utah Exped. 389, t. 390. 1852, nom.illeg.

LAPHAMIA STAUROPHYLLA Barneby, TYPE: U.S.A., New Mexico, Otero Co., limestone bluffs in La Luz Canyon below High Rolls, western slope of Sacramento Mts., 2 September 1956, *R.C. Barneby 12889* (holotype: CAS!, isotypes: GH, K, NY, RSA!, UNM, US!).

LAPHAMIA STAUROPHYLLA Barneby, Leafl. W. Bot. 8: 168, fig. 1957.

Perityle staurophylla (Barneby) Shinnery, S. W. Naturalist 4: 205. 1959.

Laphamia vandevenderi (B.L. Turner) I.H. Lichter-Marck, TYPE: MEXICO, Sonora, Palm Canyon, 17 mi SE of Magdalena on road to Cucurpe, "Sierra Baviso," 6 September 1976, *N.F. McCarten 2315* (holotype: ARIZ!, isotype: ARIZ!).

Laphamia vandevenderi (B.L. Turner) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle vandevenderi B.L. Turner, Phytologia 66: 504. 1989.

Laphamia vaseyi (J.M. Coult.) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Brewster Co., Chisos Mts. 1889, *G.C. Nealley 245?* (holotype: US!).

Laphamia vaseyi (J.M. Coult.) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle vaseyi J.M. Coult., Contr. U.S. Natl. Herb. 1: 42. 1890.

LAPHAMIA VILLOSA S.F. Blake, TYPE: U.S.A., California, Inyo Co., Middle Fork Hanaupah Canyon, Panamint Mtns., 2090 m, 22 September 1931. *F.V. Coville & A.F. Gilman 108* (holotype: US!, isotype: US!).

LAPHAMIA VILLOSA S.F. Blake, Proc. Soc. Biol. Washington 45: 142. 1932.

Perityle villosa (S.F. Blake) Shinnery, S. W. Naturalist 4: 205. 1959.

Laphamia vitreomontana (Warnock) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Brewster Co., limestone bluffs, W slopes of Old Blue, Glass Mtns., ca. 4500 ft., 22 September 1963, *B.H. Warnock & A.M. Powell 19111* (holotype: SRSC!, isotype: TEX).

Laphamia vitreomontana (Warnock) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle vitreomontana Warnock, S. W. Naturalist 12(4): 475--476. 1967.

Laphamia warnockii (A.M. Powell) I.H. Lichter-Marck, TYPE: U.S.A., Texas, Val Verde Co., NW part of county, in crevices and small pockets of solid Cretaceous limestone exposures, ca. 40--50 mi. NE of Dryden, ca. 1 mi E of Pecos River, 11 October 1964, *A.M. Powell 1311* (holotype: SRSC!, isotype: GH, SMU, TEX).

Laphamia warnockii (A.M. Powell) I.H. Lichter-Marck, Sys. Bot. 47(3) (2022).

Perityle warnockii A.M. Powell, Sida 3: 177. 1966.

NESOTHAMNUS INCANUS (A. Gray) Rydb., TYPE: MEXICO, Baja California, Guadalupe Island, *E. Palmer s.n.* (holotype: GH, isotypes: NY!, US!).

NESOTHAMNUS INCANUS (A. Gray) Rydb., *N. Amer. Fl.* 34(1): 21. 1914.

Perityle incana A. Gray, *Proc. Amer. Acad. Arts* 11: 78. 1876.

PERICOME CAUDATA A. Gray, TYPE: U.S.A., New Mexico, Among rocks, mountainsides, at the copper mines, Santa Rita del Cobre, October 1851, *C. Wright 1195* (holotype: GH[photo!], isotypes: GH, US).

PERICOME CAUDATA A. Gray, *Smithsonian Contr. Knowl.* 5(6): 82. 1853.

Pericome glandulosa Goodman, *Rhodora* 39: 209 (t. 459, fig. 1). 1937. TYPE: U.S.A., Oklahoma, Cimarron Co., 3 miles E of Kenton, 27 August 1934, *G.J. Goodman 2291* (holotype: GH[photo!], isotype: US!).

Pericome caudata var. *glandulosa* (Goodman) H.D. Harr, *Man. Pl. Colorado* 589, 641. 1954.

PERICOME MACROCEPHALA B.L. Rob., TYPE: MEXICO, Durango, near San Ramon, 21 April – 18 May 1906, *E. Palmer 69* (holotype: GH, isotypes: UC!, US!).

PERICOME MACROCEPHALA B.L. Rob., *Proc. Amer. Acad. Arts* 43: 42. 1907.

PERITYLE AUREA Rose, TYPE: MEXICO, Baja California, Santa Rosalia, 24 February – 3 March 1889, *E. Palmer 185a* (holotype: US!, isotypes: CAS!, GH, NY).

PERITYLE AUREA Rose, *Contr. U.S. Natl. Herb.* 1: 84. 1890.

PERITYLE BRANDEGEEANA Rose, TYPE: MEXICO, Baja California, Lagoon Head, 6-15 March 1889, *E. Palmer 800* (holotype: US!, isotypes: ARIZ!, CAS!, GH, NY, US!).

PERITYLE BRANDEGEEANA Rose, *Bot. Gaz.* 15: 114, pl. 13. 1890.

Amauria brandegeana (Rose) Rydb., *N. Amer. Fl.* 34(1): 30. 1914.

Perityle carterae (A.M. Powell) I.H. Lichter-Marck, TYPE: MEXICO, Baja California Sur, Sierra de la Giganta, Cerro Mechudo, 600 m alt., ca lat. 25° 55'N, long. 110° 45"W, 21 Feb 1970, *A. Carter 5439* (holotype: UC!).

Perityle carterae (A.M. Powell) I.H. Lichter-Marck, *Sys. Bot.* 47(3) (2022).

Amauria carterae A.M. Powell, *Madroño* 21: 457. 1972.

PERITYLE CALIFORNICA Benth., TYPE: MEXICO, Baja California Sur, Magdalena Bay, 1837, *R.B. Hinds s.n.* (holotype: K[photo!]).

PERITYLE CALIFORNICA Benth., *Bot. Voy. Sulphur [Bentham]* 23, t. 15. 1844.

Perityle plumigera Harv. & Gary ex. A. Gray, *Mem. Amer. Acad. Arts* ser 2, 4(1): 77. 1849. TYPE: MEXICO, Sonora, California, *Coulter 279* (holotype: GH!, isotypes: UC!, US!).

Perityle deltoidea S. Wats., *Proc. Amer. Acad.*, 24: 57. 1889. TYPE: MEXICO, Baja California, Los Angeles Bay, 1887, *E. Palmer 568* (holotype: GH, isotypes: NY, UC!, US!).

PERITYLE CUNEATA Brandegee var. CUNEATA, TYPE: MEXICO, Baja California Sur, Sierra de la Laguna, near Todos Santos, 21 January 1890, *T.S. Brandegee s.n.* (holotype: UC!, isotypes: US!).

PERITYLE CUNEATA Brandegee var. CUNEATA, *Zoe* 1: 54. 1890.

PERITYLE CUNEATA var. MARGINATA (Rydb.) I.M. Johnston, TYPE: MEXICO, Baja California Sur, San Jose del Cabo, 25 March 1911, *J.N. Rose 16349* (holotype: NY, isotypes: GH, US!).

PERITYLE CUNEATA var. MARGINATA (Rydb.) I.M. Johnston, *Proc. Calif. Acad. Sci. ser. 4*, 12: 1204. 1924.

PERITYLE CRASSIFOLIA Brandegee var. CRASSIFOLIA, TYPE: MEXICO, Baja California Sur, San Jose del Cabo, 6 October 1891, *T.S. Brandegee s.n.* (holotype: GH, isotypes: UC!, US!).

PERITYLE CRASSIFOLIA Brandegee var. CRASSIFOLIA, *Proc. Calif. Acad. Sci. ser. 2, 3*: 147. 1891.

PERITYLE CRASSIFOLIA var. ROBUSTA (Rydb.) Everly, TYPE: MEXICO, Baja California Sur, Cerralvo island, 19 April 1911, *J.N. Rose 16880* (holotype: NY, isotypes: UC!, US!).

PERITYLE CRASSIFOLIA var. ROBUSTA (Rydb.) Everly, *Contr. Dudley Herb.* 3: 382. 1947.

Perityle robusta Rydb. *N. Amer. Fl.* 34(1): 16. 1914.

Perityle incompta Brandegee, *Univ. Calif. Publ. Bot.* 6: 503. 1919. TYPE: MEXICO, Baja California Sur, Los Dolores, *W.E. Bryant s.n.* (holotype: UC!, isotype: US!).

Perityle macromeres S.F. Blake, *Proc. Biol. Soc. Washington* 37: 59. 1924. TYPE: MEXICO, Baja California Sur, La Paz, *E.W. Nelson & E.A. Goldman 7483* (holotype: US!).

PERITYLE EMORYI Torr., TYPE: U.S.A., California, mountains east of San Diego, 29 November 1846, *W.H. Emory s.n.* (holotype: NY[photo!])

PERITYLE EMORYI Torr., *Notes Milit. Recon.* [Emory] 142. 1848.

Perityle nuda Torr. ex A. Gray, *Pacific Railr. Rep.* 4(5, no. 4) [Whipple]. 100 (1857).

Perityle emoryi var. *nuda* (Torr. ex A. Gray) A. Gray, *Bot. California* [W.H. Brewer] 1:397. 1876.

Perityle californica var. *nuda* (Torr. ex A. Gray) A. Gray, *Syn. Fl. N. Amer.* 1(2): 321. 1884. TYPE: U.S.A., California, Williams Fork, 7 February 1853--1854, *J.N. Bigelow s.n.* (holotype: NY[photo!], isotype: GH).

Closia cotula J. Remy, *Fl. Chil.* [Gay] 4(1): 120. 1849. TYPE: CHILE, Copaiipo, *C. Gay s.n.* (holotype: P, isotype: NY[photo!]).

Closia anthemoides Phil., *Fl. Atacam.* 31. 1860. TYPE: CHILE, *A.R. Philippi s.n.* (holotype: B, isotypes: F[photo!], SGO).

Closia elata Phil., *Fl. Atacam.* 31. 1860. *Closia cotula* var. *elata* (Phil.) Reiche, *Anales Univ. Chile* 112: 159. 1903. *Perityle emoryi* var. *elata* (Phil.) I.M. Johnst. *Contr. Gray Herb.* 85: 128 (1929). TYPE: CHILE, no date, *A.R. Philippi s.n.* (holotype: B, isotypes: F[photo!], SGO).

Perityle fitchii var. *palmeri* A. Gray, Syn. Fl. N. Amer. 1(2): 321. 1884. *Perityle grayi* Rose, Bot. Gaz. 15: 114. 1890. TYPE: MEXICO, Baja California, Guadalupe Island, *E. Palmer 44* (holotype: GH[photo!], isotypes: US, NY).
Perityle rothrockii Rose, Bot. Gaz. 15: 114. 1890. TYPE: U.S.A., Nevada, *G.M. Wheeler s.n.* (holotype: US[photo!]).
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