

22. *Oreocarya suffruticosa* (Torrey) Greene var. *setosa* (M. E. Jones) R. B. Kelley, comb. nov. Basionym: *Krymitzka multicaulis* var. *setosa* M. E. Jones, Contr. W. Bot. 13: 4. 1910.—TYPE: U. S. A.: Utah, near Fort Cove, 27 Jun 1901, M. E. Jones s. n. (holotype: RSA).
23. *Oreocarya welshii* (K. H. Thorne & L. C. Higgins) R. B. Kelley, comb. nov. Basionym: *Cryptantha welshii* K. H. Thorne & L. C. Higgins, Great Basin Naturalist 42(2): 196. 1982.—TYPE: U. S. A.: Nevada, Nye County, ca. 2.1 miles from Sunnyside, down Hot Creek Campground Road, 5 Jun 1979, K. H. Thorne 578 (holotype: BRY; isotypes: NY, WTU).
- JOHNSTONELLA Brand, Repert. Spec. Nov. Regni Veg. 21: 249. 1925.
- Johnstonella* consists of plants with nutlets that are usually triangular or ovate (rarely lance-ovate) in shape, usually have a “knife-like,” sharply angled, and often narrowly-winged (rarely rounded) margin, the nutlets of most species are heteromorphic in size and shape. The nutlet sculpturing often consists of prominent, regularly spaced, whitish tubercles, although in some taxa the tubercles are smaller and more numerous. Two species, one with two varieties, have existing names in *Johnstonella*: *J. racemosa* (I. M. Johnston) Brand (designated the type for the genus; see Johnston 1925) and *J. inaequata* (Watson) Brand (Brand 1925). *Johnstonella racemosa* is perennial in duration, which is rare in the Cryptanthinae outside of *Oreocarya*. (A variety of this species, *J. racemosa* var. *lignosa* (I. M. Johnst.) Brand, has not been recognized as different in recent treatments.) New combinations are needed for eleven species (one with three varieties), recognized here as members of this genus (see earlier discussion).
24. *Johnstonella angelica* (I. M. Johnston) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Cryptantha angelica* I. M. Johnst., Proc. Calif. Acad. Sci. ser. 4, 12: 1143. 1924.—TYPE: MEXICO. Baja California: Angel de la Guarda Island, opposite Pond Island, 30 Jun 1921, Johnston 4221 (holotype: CAS; isotypes: CAS, GH, UC, US).
25. *Johnstonella angustifolia* (Torrey) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium angustifolium* (Torrey) Greene, Pacif. Rail. Rep. 5: 363. 1857.—TYPE: U. S. A. Arizona: Yuma Co., Fort Yuma, 1853, Thomas (holotype: NY).
26. *Johnstonella costata* (Brandege) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Cryptantha costata* Brandege, Bot. Gaz. 27: 453. 1899.—TYPE: U. S. A. California: San Diego Co., Borrego Springs, 18 Apr 1859, J. S. Brandege (holotype: UC).
27. *Johnstonella diplotricha* (Phil.) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium diplotrichum* Phil., Anales Mus. Nac., Santiago de Chile 1891: 57.—TYPE: ARGENTINA. Los Andes: between Antofagasta and Calalaste, Jan 1885, F. Philippi (holotype: MS; isotypes: GH).
28. *Johnstonella echinosepala* (J. F. Macbr.) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Cryptantha echinosepala* J. F. Macbr., Contr. Gray Herb. 56: 57. 1918.—TYPE: MEXICO. Lower California [Baja California Sur]: Magdalena Island, 1 Mar 1913, C. R. Orcutt 15 (holotype: GH).
29. *Johnstonella fastigiata* (I. M. Johnston) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Cryptantha fastigiata* I. M. Johnst., J. Arnold Arbor. 20: 388. 1939.—TYPE: MEXICO. Baja California Norte [Baja California], Las Animas Bay. 3 Mar 1921, I. M. Johnston 3505 (holotype: GH).
30. *Johnstonella grayi* (Vasey & Rose) Hasenstab & M. G. Simpson var. *cryptochaeta* (J. F. MacBr.) Hasenstab & M. G. Simpson, comb. nov., Basionym: *Cryptantha micromeres* (A. Gray) Greene var. *cryptochaeta* J. F. Macbr., Contr. Gray Herb. 1916. n. ser. 48: 46.—TYPE: MEXICO. Baja California [Sur]: San Jose del Cabo, Jun 1897, A. W. Anthony 347 (holotype: GH).
31. *Johnstonella grayi* (Vasey & Rose) Hasenstab & M. G. Simpson var. *grayi*, comb. nov. Basionym: *Krymitzka grayi* Vasey & Rose, Proc. U. S. Natl. Mus. 11: 596. 1888.—TYPE: MEXICO. Baja California [Sur]: Lagoon Head, 6–15 Mar 1889, E. Palmer 801 (holotype: NY; isotype: GH, UC).
32. *Johnstonella grayi* (Vasey & Rose) Hasenstab & M. G. Simpson var. *nesiotica* (I. M. Johnston) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Cryptantha grayi* (Vasey & Rose) J. F. Macbr. var. *nesiotica* I. M. Johnst., Proc. Calif. Acad. Sci. ser. 4, 12: 1146. 1924.—TYPE: MEXICO. Baja California Sur: San Francisco Island, 30 May 1921, I. M. Johnston 3947 (holotype: CAS; isotypes: GH, UC, US).
33. *Johnstonella holoptera* (A. Gray) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium holopterum* A. Gray, Proc. Amer. Acad. Arts 12: 81. 1877.—TYPE: U. S. A. Arizona: La Paz Co., Ehrenberg, 1876, Palmer (holotype: GH).
34. *Johnstonella micromeres* (A. Gray) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium micromeres* A. Gray, Proc. Amer. Acad. Arts 19: 90. 1883.—TYPE: U. S. A. California: Santa Cruz Co., Santa Cruz, M. E. Jones 2472 (holotype: GH).
35. *Johnstonella parviflora* (Phil.) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium parviflorum* Phil., Fl. Atacam. 39. 1860.—TYPE: CHILE. Caldera, Dec 1853, Philippi (holotype: MS).
36. *Johnstonella pusilla* (Torrey & A. Gray) Hasenstab & M. G. Simpson, comb. nov. Basionym: *Eritrichium pusillum* Torr. & A. Gray, Pacif. Rail. Rep. 2: 171. 1856.—TYPE: U. S. A. Texas: Midland Co., Llano Estacado, 30 Mar 1852, Pope (holotype: NY).

A KEY TO THE GENERA OF THE CRYPTANTHINAE

A key to the genera of the Cryptanthinae is presented here, modified (in part) from Kelley (2012) and Kelley et al. (2012). We note that the genus *Plagiobothrys* s. l. is polyphyletic in our study and will likely require segregation into separate genera in the future.

1. Nutlets spreading 2
2. Calyx lobes in fr unequal, upper 2 >> others, partly fused, arched over 1 nutlet, with 5–10 stout spines each with hooked bristles; nutlets *Harpagonella*