

A NEW LECTOTYPE FOR *APIASTRUM ANGUSTIFOLIUM* VAR. *TENELLUM* NUTT. (APIACEAE)

G. FRED HRUSA

Herbarium, Plant Pest Diagnostics Center
California Dept. of Food & Agriculture
3294 Meadowview Rd.
Sacramento, California

ABSTRACT

Apiastrum angustifolium var. *tenellum* Nutt. is lectotypified by a specimen from BM, collected by Nuttall in San Diego, California. Two prior lectotypifications are deemed ineffective as not being based on original material.

Article 9 of the International Code of Nomenclature, (ICN) is explicit in its guidelines for the designation of lectotypes. As stated in Art. 9.2: “A lectotype is a specimen or illustration designated from the original material as the nomenclatural type, ... if no holotype was indicated at the time of publication, or if the holotype is missing ...”. Art. 9.3 expands those guidelines as follows: “Original material comprises the following elements: (a) those specimens and illustrations (both unpublished and published either prior to or together with the protologue) upon which it can be shown that the description or diagnosis validating the name was based”

Thomas Nuttall contributed many names and descriptions to Torrey & Gray’s Flora of North America 1-2: 1838-1842. *Apiastrum angustifolium* Nutt. (Fl. N. Amer. 1(4) 644. 1840) was proposed therein from a collection cited from “St. Diego” [San Diego, California]. Immediately following that proposal, and on the same page, Nuttall described the variety *tenellum* Nutt. He cited no additional specimens. Nuttall was in San Diego for part of Apr. and May 1836.

Nesom, in Phytoneuron 87: 3. 2012 designated a lectotype specimen for the var. *tenellum* as follows: “*Apiastrum angustifolium* var. *tenellum* Nutt. ex Torr. & A. Gray, Fl. N. Amer. 1(4): 644. 1840. **TYPE:MEXICO. Baja California.** Cerro [Cedros] Island, Mar 1889, *E. Palmer s.n.* (probable holotype: PH 743994 digital image!).” That this specimen is not part of Nuttall’s original material, and thus in conflict with Art. 9.2, is clear from its collection date of Mar. 1889; almost 50 years later than the species description published in 1840. This was later recognized by Nesom, and a new lectotype designated in Phytoneuron 89: 3. 2012: “*Apiastrum angustifolium* var. *tenellum* Nutt. in Torr. & Gray, Fl. N. Amer. 1(4): 644. 1840. **TYPE: USA. California.**[Los Angeles Co.]: Catalina [Santa Catalina Island], no other collection data (probable holotype: PH bar code 00025006 digital image!, mounted in lower left of sheet with 3 other collections”).

The following discussion will show that this specimen is again not original material.

Nuttall visited California in spring 1836. As cited by McKelvey (1956), he was able to collect specimens at Monterey (March), Santa Barbara (April), San Pedro (2 days in April) and San Diego (April to early May). He returned to New England with his collections, later that year. It has been a source of confusion elsewhere that an article published in the Proceedings of the Philadelphia Academy of Natural Sciences (Nuttall 1848a), and later, with minor changes in the Journal of the Philadelphia Academy of Natural Sciences (Nuttall 1848b), entitled “Plants collected by Mr. William Gambel in the Rocky Mountains and Upper California” also contained a number of names based on Nuttall’s own collections. Thus the identity of the original materials has occasionally been confused as to whether they were collected by Nuttall or Gambel. Gambel was first in California in 1841-1842.

He visited some of the same coastal localities as did Nuttall and his specimens were presented to Nuttall upon his return to New England in 1843. It is not known how Gambel communicated his collection localities to Nuttall, but all of the specimens of Gambel's seen by this author are labeled with one of Nuttall's standard specimen tickets, in Nuttall's hand with a collection location, name, but without date or collector's name. Whenever Nuttall's or Gambel's names are on the ticket or the specimen sheet itself, they appear to have been added at a later time and by a different person.

California specimens labeled by Nuttall to have come from Monterey, Santa Barbara, or San Pedro are difficult or impossible to determine as to whether they were collected by Nuttall or Gambel; however, specimens with the following locations can be so determined. (1) "St. Diego": these are all Nuttall collections as Gambel did not visit San Diego. (2) "St. Simeon": Gambel visited San Simeon in San Luis Obispo County, Nuttall did not. (3) "Catalina": Gambel is cited by McKelvey (page 737, 1956) as the first botanist to collect on Santa Catalina Island off the southern California coast, visiting there in February 1842. There is no evidence that Nuttall visited the island when he was in southern California in 1836; none of his names based on California collections published before the William Gambel article mention Catalina, and the lack of Catalina Island endemics among his collections is further evidence he never collected on the island.

Thus the second lectotype proposed by Nesom was not collected until February 1842, nearly two years after the publication of *Apiastrum angustifolium* var. *tenellum* Nutt. in T. & G., Fl. N. Am. 1: 1840, and so cannot be original material.

However, there is a specimen at the British Museum that is labeled in Nuttall's hand "Apiastrum tenellum, St. Diego, U. Cal." The specimen matches well the protologue description. It has also been annotated anonymously as "Type Specimen" of *Apiastrum angustifolium* var. *tenellum* Nutt. That this is original material is supported by the collection locality being a site visited by Nuttall in 1836 from where he collected and named many plant species; the name written on a standard Nuttall ticket in his own hand; and with Nuttall's standard asterisk denoting a new taxon.

It would appear that rejection of the lectotype proposed by Nesom in *Phytoneuron* 89: 3. 2012, is justified. The following new lectotypification is offered (Fig. 1):

Apiastrum angustifolium var. *tenellum* Nutt. in Torr. & A. Gray, Fl. N. Amer. 1(4): 644. 1840. **LECTOTYPE: USA. California.**[San Diego Co.]: "St. Diego, U. Cal." Apr.-May 1836, *T. Nuttall s.n.* (BM 001042898 digital image!, Fig. 1).

LITERATURE CITED

- McKelvey, S. 1956. Botanical Exploration of the Trans-Mississippi West 1790-1850. Arnold Arb. Harvard Univ., Jamaica Plain, Massachusetts.
- Nesom, G.L. 2012. The author and type of *Apiastrum angustifolium* (Apiaceae). *Phytoneuron* 2012-89. 1-4.
- Nuttall, T. 1848a. Descriptions of plants collected by Mr. William Gambel in the Rocky Mountains and Upper California. *Proc. Acad. Sci. Philad.* n.s. 4: 7-28.
- Nuttall, T. 1848b. Descriptions of plants collected by William Gambel M.D. in the Rocky Mountains and Upper California. *J. Acad. Nat. Sci. Philad.* n.s. 1: 149-189.
- Torrey, J. and A. Gray. 1840. *Flora of North America*. Wiley and Putnam, New York.
- JSTOR Plant Science. 2016. JSTOR Plant Science/Global Plants. <<http://plants.jstor.org>> Accessed February 2016.

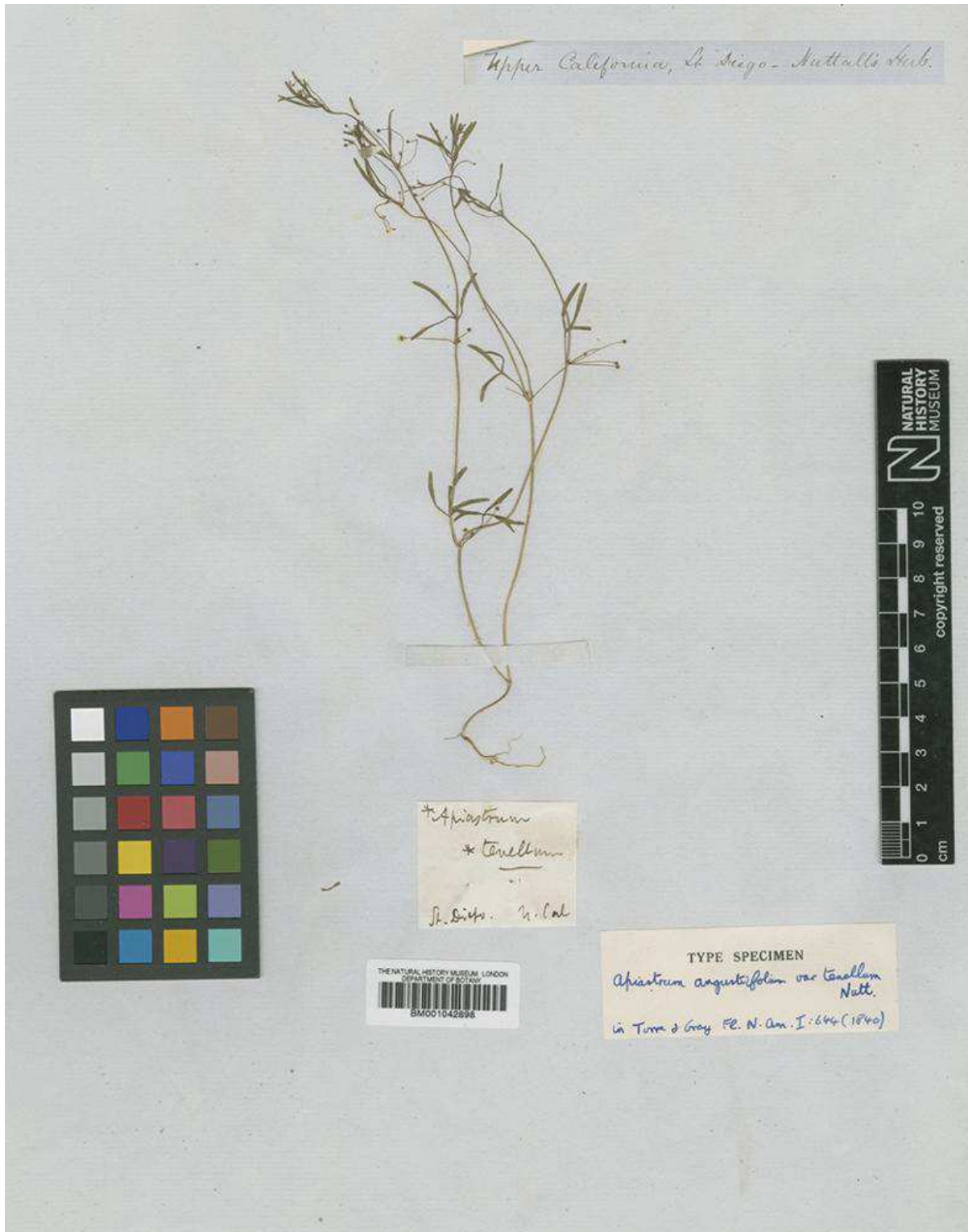


Figure 1. Lectotype of *Apiastrum angustifolium* var. *tenellum* Nutt., Fl. N. Amer. 1(4): 644. 1840. BM 001042898 (JSTOR digital image).