TYPIFICATIONS OF LINANTHUS PARVIFLORUS VAR. CROCEUS MILLIKEN AND LINANTHUS CROCEUS EASTW. (POLEMONIACEAE)

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ABSTRACT

Type collections of *Linanthus parviflorus* var. *croceus* Milliken and *Linanthus croceus* Eastw. have been interpreted as coming from a single gathering by Alice Eastwood. We postulate two Eastwood gatherings are involved: the first dated 9 May 1901, and the second dated 19 May 1901. So far as we know, a single specimen from the 9 May gathering exists; it is in CAS; we consider it to be the holotype of *Linanthus croceus* Eastw. So far as we know, no specimen of the 19 May gathering that was originally in CAS is in CAS now; duplicates of the 19 May gathering constitute a pool of specimens from which we designate a lectotype of *Linanthus parviflorus* var. *croceus* Milliken. **Leptosiphon croceus** (Eastw.) Strother & Kersh, **comb. nov.**, fills a void that resulted from "Leptosiphon croceus (Eastw.) J.M. Porter & L.A. Johnson" having not been validly published.

In protologue for *Linanthus parviflorus* (Benth.) Greene var. *croceus* Milliken, Univ. Calif. Publ. Bot. 2:59. 10 May 1904, Milliken wrote, "Local, limited to about ten acres near the stage road from Colma to Blenheim, San Mateo Co., Alice Eastwood, May 19, 1901. It is labeled by Miss Eastwood in the California Academy of Sciences as a var. of *Gilia androsacea*." Because Milliken cited a single specimen, that specimen must be considered the holotype of *L. parviflorus* var. *croceus* Milliken. At present, we know of only one specimen in CAS that accords with the Milliken protologue; it came to CAS from DS after 1960 (details of that specimen below).

We presume the holotype, cited as "... in the California Academy ..." by Milliken, has been lost, probably in the 1906 fire that destroyed nearly all botanical specimens that were housed in CAS at that time. Specimens that do accord with protologue of *L. parviflorus* var. *croceus* Milliken are known, namely:

DS133196 (now in CAS, barcode 226727) - California Academy of Sciences/ Herbarium Part of Type Coll./ Linanthus croceus Eastwood/ Blenheim, San Mateo Co., Cal./ Coll. Alice Eastwood, 19 May 1901.

GH00078828 - California Academy of Sciences/ Herbarium Part of Type Coll./ Linanthus croceus Eastwood/ Blenheim, San Mateo Co., Cal./ Coll. Alice Eastwood, 19 May 1901.

NY00336940 - California Academy of Sciences/ Herbarium Part of Type Coll./ Linanthus croceus Eastwood/ Blenheim, San Mateo Co., Cal./ Coll. Alice Eastwood, 19 May 1901.

POM3565 (from C.F. Baker Herbarium, now in RSA, barcode 0004836) - PLANTS OF CALIFORNIA/ Linanthus croceus Eastwood/ Blenheim, San Mateo Co./ Collected by Alice Eastwood, 19 May 1901/ Part of Type collection.

UC106861 (from Brandegee herbarium)- California Academy of Sciences/ Herbarium / Gilia androsacea/ var. crocea Eastwood n. var./ Blenheim, San Mateo Co., Cal./ Coll. Alice Eastwood, 19 May 1901.

US735823 (barcode 00110374)- FLORA OF CALIFORNIA/ Linanthus croceus Eastwood/ Blenheim/ San Mateo Co./ Alice Eastwood, 19 May [with the 1 in 19 struck through] 1901.

We note that "Blenheim" was a short-lived place name that was mapped ca. 2–3 miles north of Pillar Point on a Rand McNally & Co. map of California dated 1899. Blenheim apparently referred to a place at or near present-day Moss Beach.

We here designate **UC106861** as **lectotype** of *Linanthus parviflorus* (Benth.) Greene var. *croceus* Milliken; the name on the original label matches "var. of Gilia androsacea" in the protologue. The currently accepted name for the species with circumscription that includes UC106861 is *Leptosiphon croceus* (Eastw.) Strother & Kersh.

In protologue for *Linanthus croceus* Eastw., Bot. Gaz. 37: 442–443. 20 June 1904, Eastwood wrote, "This beautiful species was collected by the author May 9, 1901, near Pt. San Pedro, San Mateo county, California. It covered the ground for several acres, but was seen in no other place, and is probably a strictly local species." CAS393 (barcode 225240) accords with the Eastwood protologue for *L. croceus*; we consider CAS393 to be the holotype of *Linanthus croceus* Eastw. The currently accepted name for the species with circumscription that includes CAS393 is *Leptosiphon croceus* (Eastw.) Strother & Kersh.

Basionym for "Leptosiphon croceus (Eastw.) J.M. Porter & L.A. Johnson," Aliso 19: 80. 28 Jul 2000, was incorrectly cited as "Linanthus croceus Eastw., Pl. hartw., 325. 1849." We had thought that under Melbourne Code, Art. 41.6 (accessed 23 Feb 2016 [www.iapt-taxon.org/nomen/main.php]), citation of "Pl. hartw., p. 325. 1849," instead of "Bot. Gaz. 37: 442–443. 20 June 1904," as place of publication of the basionym could be treated as a bibliographic error and that "Leptosiphon croceus (Eastw.) J.M. Porter & L.A. Johnson," Aliso 19: 80. 28 Jul 2000, was a validly published name. Evidently, Art. 41.7 applies and "Leptosiphon croceus (Eastw.) J.M. Porter & L.A. Johnson" was not validly published in 2000. We publish the combination here:

Leptosiphon croceus (Eastw.) Strother & Kersh, **comb. nov.** Basionym: *Linanthus croceus* Eastw., Bot. Gaz. 37: 442–443. 20 June 1904.

We note that because collection date conflicts with protologues, CAS394 (barcode 00123068), *Alice Eastwood s.n.*, 2 May 1899, cannot be type of either *Linanthus parviflorus* (Benth.) Greene var. *croceus* Milliken, Univ. Calif. Publ. Bot. 2: 59. 10 May 1904, or *Linanthus croceus* Eastw., Bot. Gaz. 37: 442–443. 20 June 1904.

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