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CLARIFICATION OF THE LECTOTYPE OF *ERIASTRUM SAPPHIRINUM* SUBSP. *AMBIGUUM* (POLEMONIACEAE)

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ABSTRACT

The lectotype of *Eriastrum sapphirinum* subsp. *ambiguum* is *Jones 10011* (CAS), based on its selection initially by Craig (1934) and subsequently by Harrison (1972).

In a recent review of *Eriastrum* (Polemoniaceae), a re-lectotypification was made (De Groot 2016) for *Gilia floccosa* var. *ambigua* M.E. Jones, the basionym for *Eriastrum sapphirinum* subsp. *ambiguum* (M.E. Jones) H. Mason. Following this selection, of the second of two syntypes, De Groot (2016) then proposed a new name, subsp. *brevibracteatum*, for the group of plants represented by the first syntype (the previously designated lectotype). This re-lectotypification is contrary to the code and therefore should be rejected and regarded as invalid. A brief review and clarification of the issues follows.

Eriastrum sapphirinum subsp. **ambiguum** (M.E. Jones) H. Mason, Madroño 8: 80-81 (1945). *Gilia floccosa* var. *ambigua* M.E. Jones, Contr. W. Bot. 13: 2. 1910. *Gilia virgata* var. *ambigua* (M.E. Jones) T.T. Craig, Bull. Torrey Bot. Club 61: 412-413. 1934. *Hugelia virgata* var. *ambigua* (M.E. Jones) Jeps., Fl. Calif. 3: 165. 1943. **LECTOTYPE** (first-step, Craig, Bull. Torrey Bot. Club 61: 412. 1934, corrected from "type"): **California**. [San Bernardino Co.]: Victor [Victorville], 17 May 1903, M.E. *Jones 10011* (POM). **LECTOTYPE** (second-step (inadvertently designated, Harrison, Sci. Bull. Brigham Young Univ., Biol. Ser. 16: 1–26. 1972, corrected from "type"): *M.E. Jones 10011* (CAS 00123896 image!; isolectotypes: GH image!, NY image!, RSA image!).

Eriastrum sapphirinum subsp. *brevibracteatum* S.J. De Groot, Aliso 34: 119, figs. 309-316. 2016. **TYPE**: **USA**. **California**. Kern Co.: Southern Sierra Nevada, Short Canyon, west of Inyokern and Hwys 14 and 395, along road following Los Angeles Aqueduct, 20 Jun 2005, *S.J. De Groot 5052* (holotype: RSA; isotype: CAS). The protologue of subsp. *brevibracteatum* cites *Jones 10011* as paratype.

In the protologue for *Gilia floccosa* var. *ambigua*, Jones (1910) cited two syntypes: *Jones 10011* from Victor [Victorville, in the Mojave Desert], and *Jones 9917* from Bear Valley [in the San Bernardino Mountains]. His description was minimal.

> "Slender, erect, widely branched. Heads small. Flowers blue, 5-6" long [" = 1/12 inch]. Anthers narrowly elliptical, exserted. Leaves entire, floccose-woolly mostly throughout. Plants about a foot high."

When Craig (1934) proposed the new combination *Gilia virgata* var. *ambigua* (M.E. Jones) T.T. Craig, he cited *Jones 10011* as type and wrote "Type!" on a handwritten annotation label affixed to POM 75010. In addition, he initialed and wrote on this collection above the collection number "Type collection of *ambigua* Jones." Craig (1934) stated that the other syntype, *Jones 9917*, was an intergrade "near var. *sapphirina*" and annotated that specimen as such. In addition, Craig annotated (similarly, but without the "Type!" designation) the other three specimens of *Jones 10011*, which at

that time were owned by POM. The lectotype and two of the isolectotypes were apparently later distributed to DS and eventually distributed to CAS, GH, and NY. All three of these specimens bear a herbarium-prepared label stating them to be isotypes. I suspect that these were affixed at CAS following the inclusion of DS there, prior to the distribution of duplicates to GH and NY.

In the decades following, the interpretation of generic and species boundaries in *Eriastrum* evolved, requiring new names to be published by several authors. In both cases, the type for Jones's epithet *ambigua* was stated to be the one from Victor, *Jones 10011*. Until recently, there has not been a single publication suggesting any collection other than *Jones 10011* as type for Jones' var. *ambigua*, in addition to referring to it as a desert taxon.

When De Groot (2016: 117) designated a new lectotype, selecting the second syntype, *Jones 9917*, she made no mention of a prior lectotype designation. And although she discussed the logic for her selection and stated that *Jones 9917* "better fits Jones' original description," there is no hint that the selection was intended to supersede the earlier designation.

In the Code active at the time, Article 9.19(b) of the ICN (McNeill & al. 2012) states that the "... author who first designates ... a lectotype ... must be followed, but that choice ... *may* [italics mine] also be superseded if one can show that (b) it is in serious conflict with the protologue and another element is available that is not in conflict with the protologue ... ." This was later renumbered as Art. 9.19(c) of the ICN (Turland & al. 2018) and the following Note 7 was added.

> "Only a choice of uncited material as lectotype may be superseded under Art. 9.19(c); cited specimens and illustrations are part of the protologue and cannot therefore be in serious conflict with it."

This note was not in the prior code, which governed the relevant year for De Groot (2016), but the concept seems to have been already understood, as discussed by McNeill & al. (2016: 1189).

> "The current wording of Art. 9.14(b) [an apparent typo, which should read 9.19(b)], referring to serious conflict with the protologue and not with the description or diagnosis as had been originally suggested, was a very deliberate decision of the Nomenclature Section in Sydney (Greuter & Voss, l.c.). This has the important effect, not apparently always realized, that if a specimen or illustration is cited in the protologue it is part of that protologue and cannot logically be in any sort of conflict with the protologue, although it might possibly be in conflict with at least some aspects of the description or diagnosis. A Note to clarify this seems desirable and is now proposed."

Even if there were no ban on superseding, it would seem that "serious conflict with the protoloque" should meet a fairly high bar to be considered. In the present case, the main conflict raised was that, although both syntypes have exserted stamens reaching the tips of the corolla lobes, *Jones 9917* has stamens slightly beyond the corolla lobes. Within *Eriastrum* (and probably most of Polemoniaceae, as well) the term ‘exserted stamens’ has never been confined to extending beyond the tips of the corolla lobes. It is also useful to compare the use of the term by Jones himself. On the next page of the same publication, Jones (1910: 3) described *Phlox douglasii* var. *salina*, stating that the stamens are "not exserted." In this case the stamens are in the throat, and this is the same way these terms are normally applied today.

Recognizing the original lectotype designation by Craig allows *Eriastrum sapphirinum* subsp. *ambiguum* (M.E.Jones) H.Mason to remain the correct name for this primarily desert form of *Eriastrum sapphirinum*. It also preserves the nomenclatural stability of a name in use since 1934.

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LITERATURE CITED

Craig, T. 1934. A revision of the subgenus *Hugelia* of the genus *Gilia* (Polemoniaceae). Bull. Torrey Bot. Club 61: 385–396, 411–428.

De Groot, S.J. 2016. Tomus nominum Eriastri: The nomenclature and taxonomy of *Eriastrum* (Polemoniaceae: Loeselieae). Aliso 34: 25–152.

Harrison, H.K. 1972. Contributions to the study of the genus *Eriastrum* 2. Notes concerning the type specimens and descriptions of the species. Brigham Young Univ. Sci Bull., Biol Ser. 16: 1–26.

Jepson, W.L. 1943. *Hugelia*, in A Flora of California 3(2): 160–168.

Jones, M.E. 1910. New species and notes. Contr. W. Bot. 13: 1–16.

Mason, H.L. 1945. The genus *Eriastrum* and the influence of Bentham and Gray upon the problem of generic confusion in Polemoniaceae. Madroño 8: 65-91.

McNeil, J. et al. 2012. International Code of Nomenclature for Algae, Fungi, and Plants (Melbourne Code). Regnum Vegetabile 154. Koeltz Scientific Books, Königstein, Germany.

McNeill J., F.R. Barrie, and W. Greuter. 2016. (366–369) Two proposals on original material and two on superseding type selection. Taxon 65: 1187–1189.

Munz, P.A. and D.D. Keck. 1959. A California Flora. Univ. of California Press, Berkeley.

Turland, N.J. et al. (eds.). 2018. International Code of Nomenclature For Algae, Fungi, and Plants (Shenzhen Code), adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten.