LECTOTYPIFICATION OF OPUNTIA BASILARIS VAR. WOODBURYI (CACTACEAE)

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ABSTRACT

The material used for the recent lectotypification of *Opuntia basilaris* var. *woodburyi* consisted of a mixed collection and was thus invalid for use as a lectotype. We explain and correct the lectotypification of that taxon.

Opuntia basilaris Engelm. & J.M. Bigelow var. woodburyi W.H. Earle was described from Washington Co., Utah, by Earle (1980) as a new variety of the widespread species O. basilaris. However, in his publication Earle failed to designate an appropriate repository for the type specimen and stated that the holotype was both at ASU and DES. The type material also was composed of a mixed collection — seeds and a cladode from 3 Oct 1978 prepared by Earle s.n. and an immature fruit and four longitudinally dissected flowers collected on 26 May 1979 by Woodbury s.n.

Parfitt (1997) later described the new octoploid species *Opuntia pinkavae* B.D. Parfitt, and in his discussion of the taxon he noted that *O. basilaris* var. *woodburyi*, also an octoploid, was a nomenclatural synonym of the new species, although it had not been validly published as a result of Earle (1980) not clearly designating a repository.

Reveal (Pinkava 2012) realizing the error lectotypified material of *O. basilaris* var. *woodburyi*, but he failed to account for the mixed collection that had been used as the type, which also renders the taxon invalidly published as per Art. 8.2 of the code. Thus, *O. basilaris* var. *woodburyi* still needs to be properly lectotypified based on the vegetative material and mature seeds that were collected in 1978, the year of collection mentioned in the protologue. The mature seeds must have been collected in October of 1978, as fruit of the species do not ripen until July, according to Parfitt (1997); the flowers and immature fruit were collected in May of 1979 and should be excluded from the type.

Another specimen sometimes referred to as type material was collected by *L.A. Woodbury* 2018 (BYU) from the same location on 16 May, 1978. However, neither this specimen nor BYU were cited in the protologue and thus cannot serve as the type for *O. basilaris* var. *woodburyi*. Duplicates of *Woodbury* 2018 also have not been found at either ASU or DES, the two repositories noted in the protologue.

Opuntia basilaris Engelm. & J.M. Bigelow var. **woodburyi** W.H. Earle, Saguaroland Bull. 34: 15. 1980. **Lectotype** (designated here): **UTAH**. Washington Co.: 16 mi S/SW of Hurricane on Fort Pierce Wash, elev. 3680 [ft], 3 Oct 1978, *W.H. Earle s.n.* (stem segment and mature seeds in packet, 108725, barcode ASU0019063, ASU!; isolectotype: stem segment and mature seeds in packet, 18161, barcode DES00078164, DES!; see Fig. 1).



Fig. 1. Isolectotype of *O. basilaris* var. *woodburyi*. The longitudinally cut flowers and immature fruit present on the sheet are excluded from the isolectotype.

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LITERATURE CITED

- Earle, W.H. 1980. A new Opuntia identified in southwestern Utah. Saguaroland Bull. 34: 15.
- Parfitt, B.D. 1997. Opuntia pinkavae (Cactaceae), a new species from Arizona and Utah. Rhodora 99: 223–228.
- Pinkava, D.J. 2012. Opuntia. Pp. 646-659, in Holmgren et al. (eds). Intermountain Flora: Vascular Plants of the Intermountain West, USA., Vol. II. Part A. Subclasses Magnoliidae-Caryophyllidae.