

Validation of four sectional names in *Agave* L. (Agavaceae)

In our recent revision of the Baja Californian species of *Agave* L., Webb & Starr (2015) transferred to sectional rank four of the informal species groups in *Agave* Subg. *Agave* applied by Gentry (1982) and published earlier by Baker (1877) and Trelease (1912) as unranked infrageneric groups. Our new combinations were invalid because basionyms were not properly cited (ICN Art. 41.1.; McNeill & al. 2012). Here, we validate the sectional names and include photographs showing examples representative of each section.

Agave* sect. *Campaniflorae (Trelase) R.H. Webb & G.D. Starr, **comb. & stat. nov.** Lectotype (designated by Gentry 1982: 309): *Agave aurea* Brandege (Fig. 1).

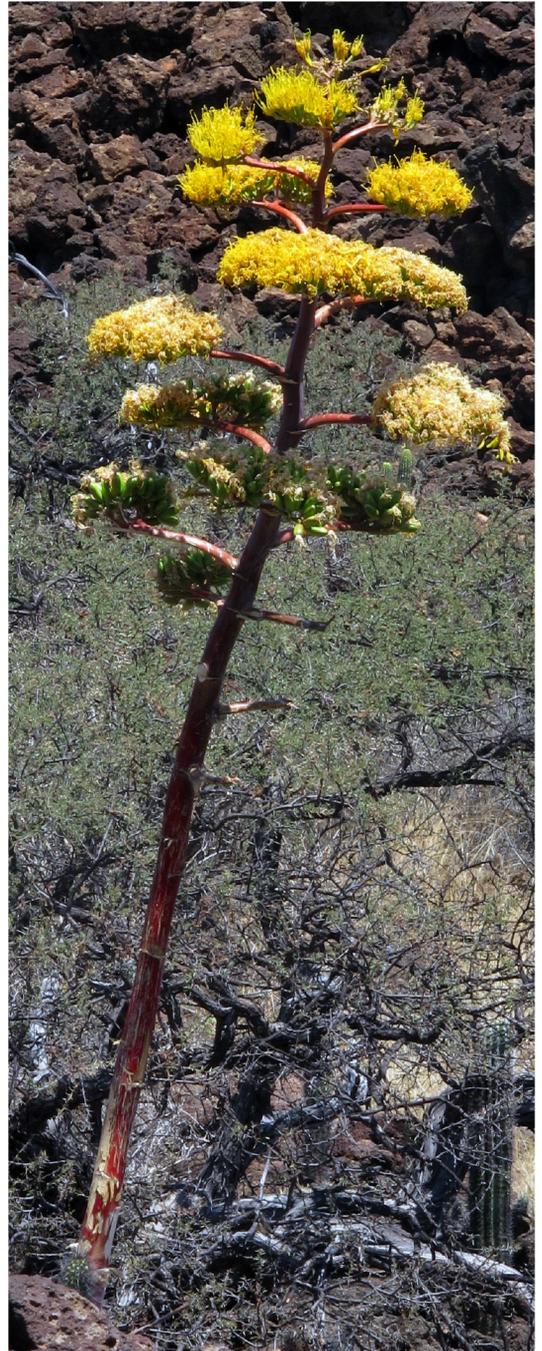
Basionym: *Agave* [infragen. unranked] *Campaniflorae* Trelease, *Rep. (Annual) Missouri Bot. Gard.* 22: 44 (1911, publ. 1912) = *Agave* sect. *Campaniflorae* (Trelase) R.H. Webb & G.D. Starr, *Haseltonia* 20: 68 (2015), *nom. inval.* (ICN Art. 41.1.).

Typification: A type was not designated by Trelease (1912); Gentry (1982) designated *Agave aurea* Brandege as “Typical species,” which represents the lectotype.

Agave* sect. *Deserticolae (Trelase) R.H. Webb & G.D. Starr, **comb. & stat. nov.** Lectotype (designated by Gentry 1982: 354): *Agave deserti* Engelman (Fig. 2).

Basionym: *Agave* [infragen. unranked] *Deserticolae* Trelease, *Rep. (Annual) Missouri Bot. Gard.* 22: 45 (1911, publ. 1912) = *Agave* sect. *Deserticolae* (Trelase) R.H. Webb & G.D. Starr, *Haseltonia* 20: 76 (2015), *nom. inval.* (ICN Art. 41.1.).

Typification: Trelease (1912) did not designate a type; Gentry (1982) designated *Agave deserti* Engelman as “Typical species,” which represents the lectotype.



1. The stout, moderately broad and open inflorescence on *Agave aurea* is characteristic for section *Campaniflorae*.

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Agave sect. *Rigidae*
(Baker) R.H. Webb &
G.D. Starr, **comb. & stat.**
nov. Type (lectotype,
here designated): *Agave*
ixtli Karwinsky ex Salm-
Dyck. Fig. 3.

Basionym: *Agave*
[infragen. unranked]
Rigidae Baker, Gard.
Chron., n.s., 8: 264
(1877) = *Agave* sect.
Rigidae (Baker) R.H.
Webb & G.D. Starr,
Haseltonia 20: 90 (2015),
nom. inval. (ICN Art.
41.1.).

Typification: Baker
(1877: 264) designat-
ed two syntypes for his
Group *Rigidae*: “*A. lur-*
ida and *ixtli* may be
regarded as the type.”
Agave lurida Aiton is
placed in Group *Agave*
(Gentry 1982: 270; as
Group *Americanae* Baker
1877 *nom. illeg.*) and
cannot be designated as
lectotype, since it would



2. A tall, thin and narrow inflorescence seen on *Agave deserti* is typical for section *Deserticolae*.

make Group *Rigidae* an illegitimate name for Group *Agave* and thus lead to a different concept for Group *Rigidae*. *Agave ixtli* Karwinsky ex Salm-Dyck is placed in synonymy under *A. angustifolia* by Gentry (1982: 559) and is here designated as lectotype, since it conserves the established circumscription of Group *Rigidae* (Gentry 1982: 551 lists *A. angustifolia* as “Typical species”).



3. The upright, rigid leaves seen on *Agave datylio* are typical of the section *Rigidae*.

Agave sect. *Umbelliflorae* (Trelease) R.H. Webb & G.D. Starr, **comb. & stat. nov.** Lectotype (designated by Gentry 1982: 635): *Agave shawii* Engelman (Fig. 4).

Basionym: *Agave* [infragen. unranked] *Umbelliflorae* Trellease, Rep. (Annual) Missouri Bot. Gard. 22: 44 (1911 publ. 1912) = *Agave* sect. *Umbelliflorae* (Trellease) R.H. Webb & G.D. Starr, *Haseltonia* 20: 91 (2015), *nom. inval.* (ICN Art. 41.1.).

Typification: Trellease (1912) did not designate a type; Gentry (1982) designated *Agave shawii* Engelman as “Typical species,” which represents the lectotype.

Acknowledgments

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4. The dense, compact, congested inflorescence of *Agave shawii* is indicative of the section *Umbelliflorae*.