



***Agave dealbata* E.Morren ex K.Koch (Asparagaceae), the correct name for *Agave dasylirioides* Jacobi & C.D.Bouché (Nomenclature of *Agave* L. I)**

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The genus *Agave* Linné (1753: 323; Asparagaceae-Agavoideae) has played an important role for the indigenous civilizations of North America (“man-*Agave* symbiosis”) and is of considerable economical and horticultural importance (Gentry 1982). Many new *Agave* species were introduced between about 1860 and 1890 particularly from Mexico. Frequently, new taxa have a complicated nomenclatural history with often multiple introductions or descriptions by different, partly competing authors and in publications often difficult to access (e.g., Govaerts & Thiede 2013). This has led to a considerable number of incorrect author citations and/or places of publication in taxonomic treatments as well as databases such as IPNI (2013). In the framework of a second, updated edition of a taxonomic synopsis of *Agave* (Thiede, in prep.), at least some uncertain and controversial nomenclatural issues will need to be addressed, starting here with *A. dealbata*.

Agave dealbata is commonly ascribed to Lemaire ex Jacobi in *Hamburger Garten- Blumenzeitung* 21: 346, Aug. 1865 (Jacobi 1865: 346). Recent treatments (e.g., Gentry 1982, Thiede 2001, IPNI 2013, Govaerts *et al.* 2013) place *A. dealbata* in the synonymy of *A. dasylirioides* Jacobi & C.D.Bouché which was published by Jacobi (1865: 344) in the same paper two pages before *A. dealbata*. Jacobi (1865: 346) ascribed *A. dealbata* to Lemaire ex Jacobi (“*A. dealbata*. Lem.”, latin diagnosis endorsed with “Nob.”) and mentioned that he found the plant first in summer 1863 at Gand (Belgium) exhibited by the Belgian nurseryman L. de Smet. However, the name *A. dealbata* was first mentioned by E.Morren (1859: 204) for a specimen exhibited by de Smet, and no mentioning in printed matter by Lemaire (e.g., in *Ill. Hort.*) was found.

Through my research, it came to my attention that a valid description of *A. dealbata* was provided three years before Jacobi by K.Koch in *Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten* 5(No. 24): 192, 14. Jun. 1862 (Koch 1862a), based on a living specimen which Koch saw in the greenhouse of the Belgian Senator Cannart d’Hamale at Mechelen (Belgium): “eine *Agave* ... wunderschönen blaugrünen Farbe ... hatte den Namen *A. dealbata* und besass ein eigenthümliches Ansehen. Im Wuchse glich sie mehr einem *Dasylyrion*, so dicht und gedrängt standen die flachen und ziemlich steifen Blätter von 16 Zoll Länge und 6 bis 8 Linien Breite“. Four month later in the same year, Koch (1862b: 341) published additional data on his *A. dealbata*, and three years later, he provided a more detailed description (Koch 1865: 110), adding that the leaf color ranges from blue to grey or dull green and that Jacobi published a specimen with dark green leaves which flowered at BG Berlin as *A. dasylirioides*. Six years later, Koch (1871) noted that the same specimen may switch its name between *A. dealbata* and *A. dasylirioides*, that even the plant at Berlin on which Jacobi based his description of *A. dasylirioides* was later named *A. dealbata*, and that *A. dealbata* was not first named by Lemaire as stated by Jacobi but by himself in *Wochenschr. ...* 5: 192, 1862, as cited above. Consequently, *A. dealbata* antedates *A. dasylirioides*, and the synonymy is as follows:

***Agave dealbata* E.Morren ex K.Koch**, *Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten* 5(No. 24): 192, 14. Jun. 1862 ≡ *Agave dealbata* E.Morren, *Belgique Hort.* 9: 204, 1859, *nomen*. - Type: cultivated plant seen by Koch in the greenhouse of the Belgian Senator Cannart d’Hamale at Mechelen, Belgium (not known to be preserved). - **Neotype (designated here)**: Mexico, Tuffaceous cliffs by Tepoztlan, Morelos, alt. 5500-6500 feet. December 1, 1967. *H.S.Gentry* [& *Tejeda*] 22498 (DES 30824!). Isonotypes: ASU!, MEXU, US (according to Gentry 1982: 249); digital images accessed via SEINet 2013.

= *Agave dealbata* Lemaire ex Jacobi, *Hamburger Garten- Blumenzeitung* 21: 346, Aug. 1865. *nom. illeg.* (ICN Art. 53.1) ≡ *Agave dasylirioides* var. *dealbata* (Lemaire ex Jacobi) A.Terracciano, *Prim. Contr. Monogr. Agave*: 15, 1885. **syn. nov.** -

preserved in March 1863. In order to validly designate a type specimen, the most complete specimen (sheet #1) is designated here as neotype.

Typification of *Agave intrepida*. In his protologue, Greenman (1899) cites *C.G.Pringle 6868* as type collection, but no holotype. Consequently, all specimens of that collection comprise original material (ICN Art. 9.3; McNeill *et al.* 2012). Here, the specimen kept in the country of origin at MEXU is designated as lectotype; all other specimens represent isolectotypes.

Nomenclature: To serve the stability of nomenclature (ICN Art. 14.2, McNeill *et al.* 2012), a proposal to conserve the established, but younger *A. dasyliroides* Jacobi & C.D.Bouché (1865) over the older *A. dealbata* E.Morren ex K.Koch (1862) is in preparation by the author.

Distribution: The type plant of *A. dasyliroides* Jacobi & C.D.Bouché cultivated at BG Berlin was indicated to have been collected by *Warszewicz* in Quezaltenango (“Quessoltinango”) in Guatemala (Jacobi 1865: 344). Hooker (1868) gives a Mexican origin for plants flowering at Kew. Berger (1915:83) recognizes *A. dasyliroides* and *A. dealbata* as separate species differing in leaf size. For the former, Berger repeats the Guatemalan origin, but for the latter, he provides the first documented localities in citing the collections *Pringle 6868* from 1898 (the type of *A. intrepida* Greenman 1899 which he refers to the synonymy) and *Pringle 8095* from 1899, both collected in the Mexican state of Morelos. Gentry (1982: 249) placed *A. dealbata* as well as *A. intrepida* in the synonymy of *A. dasyliroides*, rejected the purported origin from Guatemala as doubtful and cited three collections of Pringle and three own ones from Morelos as well as one collection from San Luis Potosí (*Rzedowski 7128a*). The latter most probably belongs to the recently published *A. graciellae* Galván & Zamudio (2013). A specimen collected in the state of Mexico (*Castañeda Rojas 72 et al.*, MEXU, digital image! accessed via SEINet 2013) extends the known range of the species.

Ullrich (1990) reported sterile plants named *A. dasyliroides* from near Yosondua in the state of Oaxaca, ca. 270 km south of Morelos, which were first collected there by A. B. Lau in 1988. Polka (2006) showed flowering plants in habitat near Yosondua as *Agave dasyliroides*, but these differ clearly from that species in having reddish-purple flowers. Recently, the plants from near Yosondua were published as a new species *Agave kavandivi* García-Mendoza & Chávez-Rendón (2013) which differs from *A. dasyliroides* esp. in its branched habit (vs. solitary in the latter), and its reddish inflorescences with purple flowers.

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