

## Transfers from *Polianthes* into *Agave* (Asparagaceae/Agavaceae): new combinations

Joachim Thiede

Schenefelder Holt 3, 22589 Hamburg, Germany (email: joachim\_thiede@gmx.de)

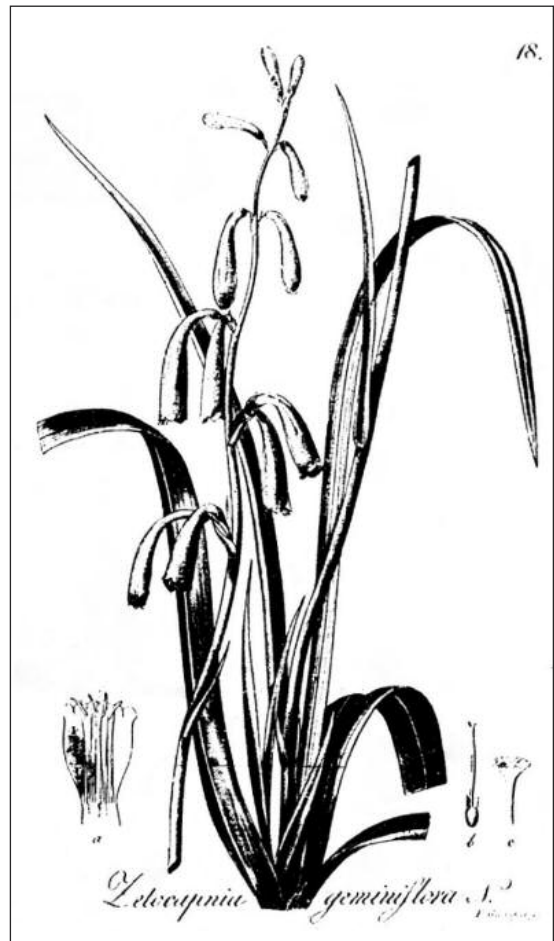
**Summary:** For two recently published species of *Polianthes*, *P. alboaustralis* E.Solano & Ríos-Gómez and *P. cernua* Art.Castro, J.G.González & Aarón Rodr., binomials in *Agave* are proposed: *Agave alboaustralis* (E.Solano & Ríos-Gómez) Thiede comb. nov. and *Agave neocernua* Thiede nom. nov.

**Zusammenfassung:** Für zwei kürzlich veröffentlichte Arten von *Polianthes*, *P. alboaustralis* E.Solano & Ríos-Gómez und *P. cernua* Art.Castro, J.G.González & Aarón Rodr., werden Binomen in *Agave* veröffentlicht: *Agave alboaustralis* (E.Solano & Ríos-Gómez) Thiede comb. nov. und *Agave neocernua* Thiede nom. nov.

Most phylogenetic studies of *Agave* L. and related genera (Asparagaceae/Agavaceae) thus far published, based on molecular data (Bogler & Simpson, 1996; Bogler *et al.*, 2006; Good-Avila *et al.*, 2006) or morphological data (Hernández-Sandoval, 1995; Tambutti in Eguiarte *et al.*, 2006), showed that the small genera *Manfreda* Salisb., *Polianthes* L. and *Prochnyanthes* S.Watson are nested within the large genus *Agave*, thus rendering *Agave* as traditionally circumscribed paraphyletic. The sole exception is the molecular AFLP study of Gil-Vega *et al.* (2007) which groups *Manfreda*, *Polianthes* and *Prochnyanthes* separate from and not nested within *Agave*.

For a taxonomic synopsis, Thiede (2001) converted these phylogenetic results into classification and suggested a monophyletic re-circumscription of *Agave*: *Manfreda*, *Polianthes* and *Prochnyanthes* were included in *Agave* and together classified as *Agave* Subgenus *Manfreda* (Salisb.) Baker. The necessary new combinations to accommodate this revised circumscription of *Agave* were published by Thiede & Eggli (1999, 2001), Etter & Kristen (2007), Thiede (2012), and Govaerts & Thiede (2013).

For a forthcoming, updated second edition of a taxonomic synopsis of *Agave* (Thiede, in prep.), two recently published new species of *Polianthes* need to be transferred to *Agave*:



**Figure 1** *Agave coetocapnia* (M. Roem.) Govaerts & Thiede was formerly known as *Polianthes geminiflora* (Lex.) Rose, the most widespread species of the former genus *Polianthes*. This plate of *Coetocapnia geminiflora* Link & Otto (“Zetocapnia” [sic!]; Link & Otto, *Icon. Pl. Rar.*: t. 18, 1828) was designated as lectotype (iconotype) for *Agave coetocapnia* ( $\equiv$  *Coetocapnia geminiflora*) by Govaerts & Thiede (2013: 331).

***Agave alboaustralis*** (E.Solano & Ríos-Gómez) Thiede, **comb. nov.**

**Basionym:** *Polianthes alboaustralis* E.Solano & Ríos-Gómez, *Phytotaxa* **174**(2): 98(–103), 2014.

***Agave neocernua*** Thiede, **nom. nov.**

Replaced synonym: *Polianthes cernua* Art. Castro, J.G.González & Aarón Rodr., *Phytotaxa* **201**(2): 143(–147), 2015.

A replacement name (nomen novum) is necessary due to the earlier *Agave cernua* A.Berger (1915: 122).

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