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A new typification of *Hoya zollingeriana* (Apocynaceae, Asclepiadoideae)

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ABSTRACT. The typification of *Hoya zollingeriana* Miq. is discussed and a lectotype is selected from the original material. An earlier typification was based on a specimen belonging to a different taxon and is rejected.

Keywords. *Eriostemma*, *Hoya diversifolia*, Java, lectotype, neotype

Introduction

In the recently established online journal 'Hoya New' [http://www.rare-hoyas.com/publication.htm], *Hoya zollingeriana* Miq. was combined in *Eriostemma zollingerianum* (Miq.) Kloppenb. and typified (Kloppenburg, 2014). The combination is unnecessary as *Eriostemma* (Schltr.) Kloppenb. & Gilding (Kloppenburg & Gilding, 2001) is a genus that has been shown to be genetically and morphologically indistinguishable from *Hoya* R.Br. in all recently published phylogenies of the genus (Wanntorp et al., 2006a, 2006b; Wanntorp, 2007; Wanntorp & Forster, 2007; Wanntorp & Kunze, 2009; Wanntorp et al., 2011; Rodda & Ercole, 2014; Rodda et al., 2014; Wanntorp et al., 2014). *Eriostemma* is currently recognised at sectional level (*Hoya* sect. *Eriostemma* Schltr.). The species included in *Hoya* sect. *Eriostemma* are characterised by a terrestrial habit, large flowers (>3 cm across, often much larger), a prominently stalked staminal corona, club-shaped or clavate pollinia without pellucid margins, and large follicles with a thick spongy pericarp. Regardless of the taxonomic status of *Eriostemma*, the identity of *Hoya zollingeriana* needs to be ascertained as, since its publication, it has rarely appeared in the taxonomic literature. I have been able to find only two authors who cite the name: Koorders (1912: 100), who accepted the species even though he didn't examine any type material, and Backer & Bakhuizen van den Brink (1965: 269), who considered it to be a synonym of *Hoya diversifolia* Blume. Kloppenburg (2014) stated that 'Since no holotype species [sic] has previously been designated for this species: I hereby designate #12615 (BO) as the holotype'. That specimen is later indicated as *Miquel 12615* and a low-resolution photograph of the sheet, obtained before it was re-mounted in 1999, is also published. If that specimen is indeed original material for *Hoya zollingeriana* then Kloppenburg's paper can be considered to be an effective lectotypification following ICN Art. 9.9 (McNeill et al.,

2012) due to need to correct holotype to lectotype. In August 2014, I examined all *Hoya* specimens at BO and noted that the specimen indicated by Kloppenburg (2014) as *Miquel 12615* is instead *Teysmann 12615,* an undated sterile specimen collected in Sulawesi that I tentatively identify as *Hoya excavata* Teijsm. & Binn. *Teysmann 12615* is not amongst the materials cited by Miquel (1857: 518) in the publication of *Hoya zollingeriana* and, therefore, it cannot be the lectotype of the name. If there is no extant original material, and again applying Art. 9.9 of the ICN (McNeill et al., 2012), then the typification by Kloppenburg (2014) could possibly count as an effective neotypification. Given that Kloppenburg (2014) does not indicate whether he has made a thorough search for all original material of *Hoya zollingeriana,* I have examined herbarium specimens of *Hoya* at BO, BM, CGE, G, E, FI, K and P (herbarium codes from Thiers [continuously updated]) in an attempt to locate possible original material and verify whether Kloppenburg's (2014) effective neotypification should stand or not.

Lectotypification of *Hoya zollingeriana*

Hoya zollingeriana Miq., Fl. Ned. Ind. 2: 518 (1857) [20 Aug 1857]. – *Eriostemma zollingerianum* (Miq.) Kloppenb., Hoya New 3(1): 6 (2014) [27 Sep 2014] [epublished]. – TYPE: Indonesia, Java, bij Lalaei, Mei, *Zollinger, H.* s.n. (lectotype P [P05029459], designated here). = ***Hoya diversifolia*** Blume

Notes. Hoya zollingeriana was based on a Zollinger collection indicated only as 'Java, bij Lalaei, Mei' (Miquel, 1857). Zollinger's duplicates can be found in many herbaria, with significant sets at BO, CGE, G, K, LE, P. However, Zollinger's private set was lent to Miquel, who used it for his *Flora van Nederlandsch Indië* (Miquel, 1857), and is now incorporated into P (Van Steenis-Kruseman, 1950). In P I found a specimen (barcode P05029459, https://science.mnhn.fr/institution/mnhn/collection/p/item/p05029459) labelled *Hoya zollingeriana* in Miquel's handwriting. This is the only original material of the taxon that has been found. It is a well-preserved fertile specimen that can be identified as *Hoya diversifolia* Blume, a species also described from Java and widespread in East and Southeast Asia. Backer & Bakhuizen van den Brink (1965: 269) already previously synonymised *Hoya zollingeriana* under *H. diversifolia,* a decision I can confirm.

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