



Lectotypification of *Cypselea meziana* (Aizoaceae, Sesuvioideae)

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The name *Cypselea meziana* was originally published by Müller (1908: 72) and recently transferred to the genus *Sesuvium* Linnaeus (1759: 1058) as *S. mezianum* (Müller 1908: 72) Bohley & G. Kadereit in Bohley *et al.* (2017: 138). This is an endemic Paraguayan species, represented by creeping perennial herbs, rooted at the nodes, that grows in salty soils (Bohley *et al.* 2017). Morphologically, *S. mezianum* displays a unique feature in comparison with the other perennial *Sesuvium* species, i.e. 3 stamens (vs. 5 or more).

As part of the ongoing floristic, nomenclatural, and taxonomic studies of Aizoaceae in the Southern Cone [see e.g., Jocou *et al.* 2019, Jocou *et al.* in prep. (on nomenclature of Ruschieae), Minué & Jocou in prep. (on floristic, nomenclatural, and taxonomic of *Sesuvium*)], the name *Cypselea meziana*, which appears to be untypified, have been investigated from the nomenclatural purposes.

Müller (1908: 72) proposed *Cypselea meziana* giving a detailed description, the provenance (“Paraguay auf Salzboden bei L’Assomption”), the collector and the number of collection (“BALANSA n. 2663”); a morphological comparison with *C. humifusa* Turpin (1806: 219) was also given.

Note that the Müller’s (1908: 72) citation “BALANSA n. 2663” must be corrected to “BALANSA n. 2263”, due a typographical error. In fact, the specimen Balansa n. 2663 is actually *Varronia paucidentata* (Fresenius 1857: 25) Friesen (1933: 173) (see Hartmann 2017: 384).

Both Bohley *et al.* (2017: 138) and Hartmann (2017: 384) cited the specimen at G (barcode G00102877) as holotype. However, we traced one further specimen at P (barcode P04583791) and a sheet at F (barcode V0360256F) bearing a photo of the G specimen. Note, moreover, that Müller (1908: 72) did not indicate where the cited Balansa’s specimen was deposited. Also, it cannot be assured that K. Müller has not seen the P specimen. As a consequence, the G specimen indicated by Bohley *et al.* (2017) and Hartmann (2017) cannot be regarded as the holotype [see Art. 9.1 of *Shenzhen Code* (Turland *et al.* 2018) and the considerations given by McNeill (2014) and Turland *et al.* (2020)]. In addition, the use of the term “holotype” cannot be corrected to “lectotype” under Art. 9.10 of ICN, since these publications are later January 1, 2001 and the requirements of Art. 7.11 are not met (see also McNeill 2014, Prado *et al.* 2015 and Turland *et al.* 2020). According to the Art. 9.3 and 9.6 of ICN, the three specimens are syntypes and a lectotypification is necessary.

Both the G and P specimens include the following original label: “B. BALANSA.—PL. du PARAGUAY.—1874—1877 | N° 2263 | Tiges couchées. Plaines bordant le Rio-Paraguay, couvertes D’efflorescences saleés, á l’Assomption | 8bre [as “Octobre” on the P specimen] 1875”. A Müller’s handwriting label “*Cypselea Meziana* K. Müller | K. Müller 1908” also occurs on the G00102877, therefore Hartmann (l.c.) hypothesized that this specimen was the only one seen by K. Müller.

Both the G and P specimens morphologically match the protologue by Müller (1908: 72) and correspond to the current concept of *Sesuvium mezianum* (see e.g., Bohley *et al.* 2017, Hartmann 2017). Due to its good conservation and quantity of material, we designate here as lectotype the specimen at P (P04583791, Fig. 1).

Sesuvium mezianum (Müller) Bohley & G. Kadereit in Bohley *et al.* (2017: 138) ≡ *Cypselea meziana* Müller (1908: 72, as “Meziana”).

Lectotype (designated here):—PARAGUAY. Asunción, *Plaines bordant le Rio Paraguay, couvertes D’efflorescences saleés, á l’Assomption*, October 1875, Balansa 2263 (P04583791 [digital image]!, Fig. 1); isolectotypes G00102877 ([digital image]!, image available at <http://www.ville-ge.ch/musinfo/bd/cjb/chg/adetail.php?id=45782&base=img&lang=en>), F-V0360256F ([digital image]!, image available at <https://collections-botany.fieldmuseum.org/catalogue/3005096>).