

**VAILIA ANOMALA, A NEW NAME FOR BLEPHARODON MUCRONATUM
(APOCYNACEAE, ASCLEPIADOIDEAE)**

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ABSTRACT

The common Mesoamerican species *Blepharodon mucronatum* (Schltdl.) Decne. is transferred to the genus *Vailia* Rusby. Since *Vailia mucronata* Rusby precludes that epithet, the next available name results in the combination ***Vailia anomala*** (Brandege) W.D. Stevens, **comb. nov.**

Blepharodon Decne. was originally described with nine species, including *B. mucronatum*, (Decaisne, 1844) and was lectotypified with *B. lineare* (Decne.) Decne. by Fournier (1885). The genus has been twice reviewed (Fontella & Marquete, 1973; Morillo, 1976) and with gradual additions now comprises about 66 published names and perhaps 15–20 recognizable species, all South American except *Blepharodon mucronatum*, which ranges from central Mexico to northern South America. Morillo (1976) excluded *Blepharodon mucronatum* from the genus: “My definition of *Blepharodon* eliminates *B. mucronatum* as a member of the genus. *Blepharodon mucronatum* differs from *Blepharodon* (as defined here) by its vesicular corona segments and its stipitate gynostegium.” However, Morillo did not suggest another name for the species and floristic treatments have only used the name in *Blepharodon* (e.g. Balick et al. 2000; Molina, 1975; Spellman, 1975; Standley & Williams, 1969; Stevens, 2001, 2009).

Molecular studies have, to date, too poorly sampled the species of *Blepharodon* to offer any guidance for the proper placement of *B. mucronatum*. However, it seems from those molecular studies (Liede, 2005, 2013; Rapini et al. 2003, 2006) that *Blepharodon* is not monophyletic, with two species, *B. lineare* and *B. ampliflorum* E. Fourn., standing well apart from the remaining species. In his review, Morillo (1976) divided the genus into two (unpublished) morphological subgenera, with *Blepharodon lineare* representing the type subgenus and *B. ampliflorum* as a synonym of *B. lineare*. Besides the list of floral differences described by Morillo (1976), these plants are the only erect (non-twining) species of the genus and have strikingly large flowers. Earlier, Woodson (1941) had reached the same conclusion: “The nine species assigned to *Blepharodon* by Decaisne fall into two groups superficially marked by voluble or erect herbaceous habits, but accompanied by interesting differences in the corona and pollinia as well.” Woodson went on to ineffectively typify the genus with the twining species. Standley & Williams (1969) made a similar observation: “Decaisne’s generic description seems to be based on a mixture of two genera. We accept the name based on *B. mucronatum*.”

The only generic synonym of the current circumscription of *Blepharodon* is *Vailia* Rusby, described with the single species *V. mucronata* Rusby. Morillo (1997) added *Vailia salicina* (Decne.) Morillo, based on *Blepharodon salicinum* Decne., and considered *V. mucronata* to be a synonym of that name. Morillo further suggested that *Vailia* belonged in the tribe Marsdeniae rather than the Asclepiadeae, because of the erect pollinia. The pollinium position is actually ambiguous and Liede (1996), Goyder (2009), and Endress et al. (2014) have maintained the species as *Blepharodon* in the Asclepiadeae.

It seems clear that in the future *Blepharodon* will be restricted to the two southern South American erect species, *B. lineare* and *B. ampliflorum*, and that the Mesoamerican species needs a new name. It is not yet clear whether *Vailia* can accommodate species with both short, erectish pollinia and long pendent pollinia, as well as with both vesicular and laminar corona lobes. My best guess is that this expanded concept of *Vailia* will survive, and I have chosen to place the Mesoamerican species there.

VAILIA ANOMALA (Brandege) W.D. Stevens, **comb. nov.** *Philibertia anomala* Brandege, Univ. Calif. Publ. Bot. 4: 277. 1912. *Blepharodon anomalum* (Brandege) Schltr., Repert. Spec. Nov. Regni Veg. 13: 283. 1914. *Astephanus mucronatus* Schltdl., Linnaea 8: 518. 1833 [1834], non *Vailia mucronata* Rusby, 1898. *Blepharodon mucronatum* (Schltdl.) Decne. in A. DC., Prodr. 8: 603. 1844. **TYPE: MEXICO. San Luis Potosí.** Rascón, Aug 1911, C. A. Purpus 5258 (holotype: UC; isotypes: F, MEXU, MO).



Figure 1. Flower of *Vailia anomala* with white, vesicular corona lobes. Stevens 27809. Photo: O.M. Montiel.



Figure 2. Lateral view of flowers of *Vailia anomala* with white, vesicular corona lobes. Stevens 28310. Photo: O.M. Montiel.



Figure 3. Flowering shoot of *Blepharodon lineare*, type species of the genus. Fuentes 5731. Photo: A.F. Fuentes C.



Figure 4. Flower of *Blepharodon amazonicum* (Benth.) Fontella & Marquete, a typical non-type *Blepharodon* with laminar corona lobes. *Van der Werff et al.* 24571. Photo: R. Rojas.

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