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LECTOTYPIFICATION OF MAXIMILIANEA TRIPHYLLA S.F. BLAKE (BIXACEAE)

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ABSTRACT

The specimen originally designated as type of *Maximilianea triphylla* S.F. Blake is a single sheet composed of two syntypes collected on different dates. These syntypes belong to two different families of plant and the one that consists of reproductive material is selected here as the lectotype of *M. triphylla* in order to fix the name as Bixaceae.

KEY WORDS: lectotypification, Maximilianea, Cochlospermum, Bixaceae

When Blake (1921) revised the American species of *Maximilianea* Mart. ex Schrank (1819), nom. rej. (=*Cochlospermum* Kunth (1822), nom. cons.) (Bixaceae) he described and illustrated *M. triphylla* S.F. Blake from a single specimen in the U.S. National Herbarium (US). This specimen (Fig. 1), however, consists of two collections made by Henri Pittier on separate dates at or near the same locality in north-central Venezuela. Flower buds, flowers, and an inflorescence stalk were collected by Pittier in April and leaves in July 1920, and these separate collections were combined and distributed as *Pittier 8930*. No species of *Maximilianea* (=*Cochlospermum*) had the combination of characters seen on this specimen (i.e., trifoliolate leaves and anthers opening by a single terminal pore) and as a consequence Blake (1921) not only described *M. triphylla* but also noted that this new species upset the subgeneric classification of *Cochlospermum* proposed by Planchon (1847).

Poppendieck (1980), who revised Cochlospermum worldwide, concluded that the sole specimen cited by Blake when he described Maximilianea triphylla was a mixture of two elements: flowers of C. vitifolium (Willd.) Spreng. and leaves of an unknown family of plant. Although Poppendieck (1980, 1981) associated the name *M. triphylla* with *C. vitifolium*, he failed to typify *M.* triphylla on the Bixaceae element since he applied the word type to the sheet and not to the reproductive material on that sheet. In fact, Poppendieck (1980: 218, note 1) explicitly stated in his revision that lectotypes were designated for accepted names only. Examination of the type in the U.S. National Herbarium confirms that the reproductive material is C. vitifolium and that the leaves are Pseudobombax septenatum (Jacq.) Dugand (Malvaceae). The leaves on the type have 3–5 leaflets (not 3 as stated and illustrated by Blake) and these leaflets lack abscission zones at the base of their petiolules, an apomorphy peculiar to Pseudobombax Dugand and one that the artist who illustrated Blake's paper captured well (Blake, 1921, fig. 1a). Not surprisingly, P. septenatum also flowers when leafless and it is easy to imagine Pittier inadvertently collecting the leaves of this species thinking he had the leaves of the other. Interestingly, Pittier does not appear to have attempted to identify his specimen, as the species name and word "Type" on the label of the type specimen (as well as the collection number and year) are in Blake's hand. A duplicate specimen deposited in NY has a similar discordant mixture of floral and vegetative elements.



Figure 1. Lectotype of *Maximilianea triphylla* S.F. Blake (*H. Pittier 8930*, US-flower buds, flowers, and inflorescence stalk only).

In order to fix the name published by Blake as a species of Bixaceae rather than Malvaceae, the following lectotype is proposed:

Maximilianea triphylla S.F. Blake, J. Wash. Acad. Sci. 11(6): 129, fig. 1b–e. 19 Mar 1921. Cochlospermum triphyllum (S.F. Blake) Pittier, Man. Pl. Usual. Venez. 141. 1926. TYPE: Venezuela. Carabobo: In hedges, Valencia and vicinity, Apr 1920 (fl), H. Pittier 8930 (lectotype, designated here: US-flower buds, flowers, and inflorescence stalk only! [bar code 1065095]; isolectotype: NY-flower buds and flowers only, as image! [bar code 00095010]) [= Cochlospermum vitifolium (Willd.) Spreng.].

The *Code* (McNeill et al., 2006; see Art. 8.2) now defines a specimen for the purposes of typification as "a gathering ... made at one time," which effectively proscribes the former and ill-advised practice of combining collections made on different dates. Certainly what tempted Pittier was the desire to make a "complete" specimen by associating leaves with the flowers of a species that was leafless when flowering, but as has been shown here we would have been better served if his two collections had been numbered and mounted separately.

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