

## **Dealing with *Indigofera Nivea* (Leguminosae) — A New Name for Madagascar and a New Combination for Africa**

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## I. CALLMANDER, Martin W., Jean-Noël LABAT & Brian D. SCHRIRE:

### Dealing with *Indigofera nivea* (Leguminosae) – a new name for Madagascar and a new combination for Africa

#### Introduction

This first note deals with the name “*Indigofera nivea*” which comprises two homonyms (one based on material from Madagascar and the other on material from southern Africa). A new species name is required for the illegitimate later homonym published by VIGUIER (1949) for which no valid name is available. The name *I. viguieri* Callm. & Labat is published here note for this Malagasy species. *Indigofera nivea* Spreng. was validly published by SPRENGEL in 1826, but has been generally overlooked or confused in the literature. It is an earlier name for the southern African plant that has been known as *Indigastrum argyraeum* (Eckl. & Zeyh.) Schrire (SCHRIRE, 1992). A new combination in the genus *Indigastrum* Jaub. & Spach is required, which is published here as *I. niveum* (Spreng.) Schrire & Callm. Another tentative use of the specific epithet *nivea* was as a misapplied synonym of *Indigofera glomerata* E. Mey. (MEYER, 1832). He placed a question mark in his synonymy indicating his doubt about the identification of the Sprengel name.

#### Taxonomy and nomenclature of *Indigofera nivea* Spreng.

*Indigofera viguieri* Callm. & Labat, **nom. nov.**

≡ *Indigofera nivea* R. Vig. in Notul. Syst. (Paris) 13: 368. 1949 [non Spreng., Syst. Veg. 3: 273. 1826].

**Typus:** MADAGASCAR. **Prov. Mahajunga:** Ambongo, rive droite de la Mahavavy, Itampika, 13°38'23"S 48°40'06"E, V.1902, fl., *Perrier de la Bâthie 1434* (holo-: P [P0007766]!; iso-: K [K000392972]!, P [P0007767, P0007768]!).

*Observations.* – *Indigofera nivea* R. Vig., published in VIGUIER (1949), is endemic to Madagascar and was accepted as a valid name in “Leguminosae of Madagascar” by DU PUY & al. (2002). Viguier’s name is in fact a later homonym of *I. nivea* Spreng., and no valid name is available for the Malagasy species. The species is a small subshrub with densely white-woolly leaves and stems. *Indigofera viguieri* can be distinguished from the most closely related species, *I. kirkii* Oliv., by its densely white-woolly leaves (vs. the thinly white strigose leaves in *I. kirkii*), the more coriaceous texture of the leaves, and pods with 3-5 (vs. 1-3) seeds (DU PUY & al., 2002). It is known from only two collections made by Perrier de la Bâthie in northwestern Madagascar on sand dunes bordering the Betsiboka and Mahavavy rivers.

*Etymology.* – We name this species after René Viguier (1880-1931), from Caen (France), who made a major contribution to the knowledge of *Leguminosae* in Madagascar. René Viguier undertook a full revision of the family that he left unpublished when he died in 1931. Most of Viguier’s work was validated posthumously thanks to H. Humbert (VIGUIER, 1949, 1950, 1952) and his unpublished manuscript, “les Légumineuses de Madagascar” served as the basis for the “Leguminosae of Madagascar” (DU PUY & al., 2002).

*Conservation status.* – With an EOO of 18 km<sup>2</sup> and only two collections known, both dating back over one hundred years, and these comprising only two subpopulations, none of which occur in a protected network, *I. viguieri* is best assigned a preliminary status of “Critically Endangered” (CR A3c; B2ab[iii]) following the IUCN Red List Categories and Criteria (IUCN, 2001) (calculation following CALLMANDER & al., 2007).

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BDS: Herbarium, Library, Art & Archives, Royal Botanic Gardens Kew, Richmond, Surrey, TW9 3AB, United Kingdom.

***Indigastrum niveum* (Spreng.) Schrire & Callm., comb. nova**

= *Indigofera nivea* Spreng., Syst. Veg. 3: 273. 1826.

**Typus:** SOUTH AFRICA. W. Cape Prov.: Willdenow 13890 (holo-: B-W!).

= *Indigofera argyraea* Eckl. & Zeyh., Enum. Pl.: 239. 1836. = *Indigastrum argyraeum* (Eckl. & Zeyh.) Schrire in *Bothalia* 22: 168. 1992. **Typus:** SOUTH AFRICA. E. Cape Prov.: Tembuland, nr. Klipplaat R. & Swart Kei R., by Shiloh Mission, 1060-1200 m, I-III.1832, *Ecklon & Zeyher 1595* (lecto-: S!; isolecto-: B! G! M! SAM! TCD!) (lectotypified by SCHRIRE, 1992).

*Observations.* – Taxonomic research by SCHRIRE (1991, 1992, 1995) and molecular phylogenies (SCHRIRE & al., 2003, 2009), provided the background that justified the resurrection of the genera *Microcharis* Benth. and *Indigastrum*, which had generally been placed in synonymy under *Indigofera* L. (SCHRIRE, 1992). Among others, the taxon *Indigofera argyraea* was therefore transferred to the genus *Indigastrum*. In “Plants of southern Africa: names and distribution” (ARNOLD & DE WET, 1993), Schrire placed *Indigofera nivea* in synonymy under *Indigastrum argyraea*, based on unpublished information before he was able to study the type. More recently after studying the type in the Willdenow collection in Berlin, the identity of the Sprengel name was confirmed, and it became apparent that *Indigofera argyraea* and *I. nivea* are indeed conspecific, the necessary new combination being made here.

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