



## NOTE

## A New Synonym of *Dalbergia* (Leguminosae)

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**ABSTRACT:** Morphologic comparison shows *Dalbergia palauensis* Hosok., recorded as an endemic species to Caroline Island, Palau is conspecific with *D. beccarii* Prain and then the former was reduced as synonym of the later.

**KEY WORDS:** *Dalbergia*, *Dalbergia beccarii*, *Dalbergia palauensis*, Leguminosae, new synonym.

### INTRODUCTION

The genus *Dalbergia* L. f. belongs to the Subfamily Papilionoideae, Tribe Dalbergieae of the Leguminosae. It comprises about 250 species (Klitgaard and Lavin, 2005), pantropically distributed. While preparing the revision of *Dalbergia* from Asia, *D. palauensis* Hosok. and *D. beccarii* Prain were found to be morphologically very similar.

*Dalbergia beccarii* is distributed in South-East Asia, Australasia (Papua New Guinea) and Pacific Ocean (Solomon Islands). The populations always occur in swampy forests along rivers, margins of monsoon forests on river banks, or in beach forests (Prain, 1904; Sunarno and Ohashi, 1997). Hosokawa collected the *Dalbergia* in question during 1933 on the island of Palau as part of a general floristic investigation of the Caroline Islands. The next year, he described this collection as *D. palauensis* and *Hosokawa 6766* was designated as the type collections (Hosokawa, 1934). Since then, no other specimens have ever been found in the wild.

The leaflets and pods of *Dalbergia palauensis* were measured again from the holotype and isotypes. These measurements compared between *D. beccarii* Prain and *D. palauensis* Hosok. show they are conspecific (Table. 1). Therefore, a new synonym is proposed here. Costion and Lorence (2012) predicted Micronesia has the world's highest percentage of plant endemism per square kilometer and most of the endemic vascular plant species being restricted to the Caroline Islands with a large percentage restricted to Palau. While Costion (2013) found previous estimates of plant endemism rates for this region have proven to be overestimated by far.

### TAXONOMIC TREATMENT

***Dalbergia beccarii*** Prain, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 70: 64. 1901 & Ann. Roy. Bot. Gard. (Calcutta) 10(1): 33. pl. 6A. 1904; Sunarno & Ohashi in J. Jap. Bot. 72: 201–202. 1997. Types: Malaysia: Sarawak, *Beccari 566* (K!, lecto., designated by Sunarno & Ohashi, 1997), *Beccari 1105* (A!, syn.).

*Dalbergia palauensis* Hosok., Trans. Nat. Hist. Soc. Formosa [Taiwan] 24: 415. 1934. *syn. nov.* Type: Palau: Caroline Islands, *Hosokawa 6766* (TAI-image!, holo.; A!, BISH-image!, MICH-image!, US!, iso.).

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Fig.1. Comparison of the types of *Dalbergia beccarii* and *D. palauensis*. A: Lectotype of *D. beccarii* (K). B: Holotype of *D. palauensis* (TAI).

Table 1 Characteristic comparison between *Dalbergia beccarii* Prain and *D. palauensis* Hosok.

	<i>D. beccarii</i>	<i>D. palauensis</i>
Leaflet	11–17; oblong, slightly retuse at apex, finely pubescent on both surfaces; 7–11 × 3.5–4.	13–17; oblong, slightly retuse at apex, finely pubescent on both surfaces; 7–10 × 3.5–4 mm.
Leaf rachis	pubescent	pubescent
Petiolute	ca. 0.5mm, puberulous	ca. 0.5mm, puberulous
Pod	Irregularly ovate, apiculate, glabrous, coriaceous and firm, pale-brown, 1-seeded, thickened and faintly reticulated opposite the seed, 13–15 × 7–10 mm.	Irregularly ovate, apiculate, glabrous, coriaceous and firm, pale-brown, 1-seeded, thickened and faintly reticulated opposite the seed, 14–15 × 8–9 mm.



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## 黃檀屬 (*Dalbergia* L.f.) 一新異名

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摘要：形態學比較結果表明特有分佈于帛琉加羅林島的 *Dalbergia palauensis* Hosok. 與 *D. beccarii* Prain 為同種，因此將前者處理為後者的異名。

關鍵詞：黃檀屬、*Dalbergia beccarii*、*Dalbergia palauensis*、豆科、新異名。