

Dimetra (Oleaceae), a new genus record for Lao PDR

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ABSTRACT

The monotypic genus *Dimetra*, represented by *D. craibiana*, was previously known to be endemic to Thailand. A specimen from Xaignabouri Province, Lao PDR is reported here as new generic record for Lao PDR; a detailed description and photographs are provided.

KEYWORDS: *Dimetra craibiana*, Lamiales, Myxopyreae, taxonomy, Xaignabouri.

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INTRODUCTION

The genus *Dimetra* Kerr, contains only one species, *D. craibiana* Kerr, and was established by Kerr (1938) based on a single specimen collected by himself from the North-Eastern region of Thailand. Initially, *Dimetra* was first assigned to Oleaceae-Jasmineae by Kerr (1938) but subsequently suggested to belong to Verbenaceae (Airy Shaw, 1952; Stant, 1952; Johnson, 1957). In the Flora of Thailand, *Dimetra* was not treated in Oleaceae but rather suggested to belong to Nyctanthaceae in conjunction with *Nyctanthes* L. (Green, 2000). However, in the new classification by Wallander & Albert (2000), *Dimetra* was classified in Oleaceae-Myxopyreae based on molecular evidence and supported by morphology. Tribe Myxopyreae consists of *Dimetra*, *Myxopyrum* Blume and *Nyctanthes*, and these genera share the apomorphic character of ascending ovules (Wallander & Albert, 2000).

During exploration in Xaignabouri Province, in the northern part of Lao PDR in May–August 2019, two specimens of Oleaceae were collected and deposited in the Queen Sirikit Botanic Garden Herbarium (QBG) and, after consulting the relevant literature (Green, 2000; Newman, 2013), they were identified as *Dimetra craibiana*. The genus *Dimetra*

was previously known to be endemic to the North-Eastern and Eastern regions of Thailand (Green, 2004; Newman, 2013); *Dimetra* has never been reported in Lao PDR (Newman *et al.*, 2007a; Newman *et al.*, 2007b; Lee, 2016). Therefore, these collections represent a new genus and species record for Lao PDR, and a description, distribution and colour photographs based on the Lao material are provided below for their easier recognition.

DESCRIPTION

Dimetra craibiana Kerr, Bull. Misc. Inform. Kew 1938: 127. 1938; Fl. Siam 2: 408. 1939; Newman, Fl. Thailand 13(3): 525. 2017. Type: Thailand, Nong Bua Lamphu, *Kerr 8611* (holotype **BM** [BM000604671!] seen on digital image; isotypes **BK**, **K** [K000979298!] seen on digital image). Fig. 1.

Subshrub or perennial herb with woody rootstock. *Rootstock* terete, numerous, single or few-branched. *Stem* erect, ca 20 cm tall; branchlets 4-angled, scabrid-pilose. *Leaves* simple, opposite; petiole 3–6 mm long, strigose; lamina lanceolate or elliptic, 2.2–4 × 1.2–2 cm, chartaceous, upper surface shortly scabrid-hispid, green, lower surface densely strigose, grayish green, base narrowly cuneate, apex acute or subacute; midrib slightly raised above,

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prominent below, whitish, secondary veins often 3 on each side of the midrib, almost reaching the margin. *Inflorescences* axillary, cymose-capitate, 5–9-flowered; peduncle 1.2–4 cm long, strigose; outer bracts linear-oblongate, 7–8 × 1–1.5 mm, greenish, apex acute or acuminate, densely pilose outside, sparsely, shortly pilose inside, inner bracts similar but smaller, 5–6.5 × ca 0.75 mm. *Flowers* sessile or subsessile. *Calyx* deeply 4-lobed, divided to the base, persistent, greenish, densely pilose outside, sparsely, shortly pilose inside; tube very short, ca 0.5 mm; lobes linear, 4–6.5 × 0.2–0.5 mm. *Corolla* hypocrateriform, white with yellow at throat, sparsely, shortly pilose outside; tube yellow at $\frac{3}{4}$ from the base of the corolla tube with white at above of corolla tube, gradually widening above, 3–5 mm long, velutinate inside; lobes 4 or 5, white, rounded, ca 4.5 × 4 mm, margins obscurely crenulate, imbricate in bud. *Stamens* 2, epipetalous; filament 0.5–1 mm long; anthers oblong, 1.5–2 mm long,

shortly apiculate, dehiscent laterally. *Ovary* bilocular, divided to the base, ca 1 mm long, apex flat to convex, glabrous; style ca 3 mm long, glabrous; stigma bilobed, lobes ca 0.4 mm long, glabrous; ovules 1 each locule. *Fruit* not seen.

Distribution.— Laos, Thailand.

Specimens examined.— Lao PDR: Xaignaboury Province [Ban Na Kha, Botene District, alt. ca 300 m, 30 May 2019, *Maknoi et al. L17-079 (QBG!)*; same locality, 28 Aug. 2019, *Maknoi et al. L18-128 (QBG!)*].

Ecology & Phenology.— This species grows on open area of deciduous forest, alt. ca 300 m; flowering: May–August.

Notes.— *Dimetra craibiana* is easily distinguishable by the subshrub or perennial herb habit to 20 cm tall, simple and opposite leaves with scabrous surface, and the white hypocrateriform corolla with

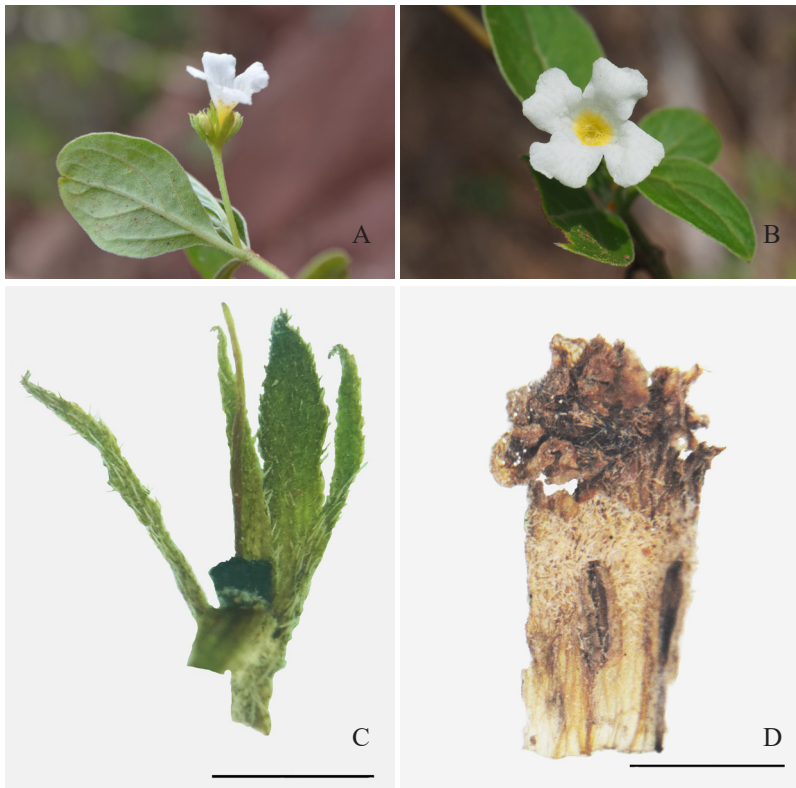


Figure 1. *Dimetra craibiana* Kerr: A. inflorescence; B. flower; C. flower with all petals removed, showing inner bract, calyx and ovary; D. corolla, showing inside of corolla tube and two stamens. Scale bar 2 mm (C, D). Photos taken by C. Maknoi (A, B) and S. Rakarcha (C, D).

yellow throat. Now, with this new record, the distribution of *D. craibiana* is in the mountain ranges of Thailand that extend to the border of Lao PDR. A good illustration of *D. craibiana* was provided by Kerr (1938, p. 128).

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