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Diospyros subrhomboidea King & Gamble (Ebenaceae): A Newly Recorded Species from Peninsular Thailand

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ABSTRACT

Diospyros subrhomboidea King & Gamble, a previously known species from Indonesia (Sumatra, Java, Kalimantan) Malaysia (peninsular Malaysia, Sarawak), and Singapore is newly recorded from peninsular Thailand. From this report of *D. subrhomboidea*, descriptive data, color images and a description of the collecting locality are provided.

Keywords: *Diospyros subrhomboidea*, peninsular Thailand, newly recorded, *Diospyros*.

INTRODUCTION

The genus *Diospyros* L. is the largest genus of the family Ebenaceae containing over 600 species so far reported in the tropics and subtropics (Wallnöfer, 2001; Duangjai *et al.*, 2006; 2009), of which *ca.* 300 species occur in Asia and the Pacific area, 98 species in Madagascar and the Comoro Islands, 94 species in African mainland, ca. 100 species in America, and 15 species in Australia (Wallinofer, 2001). In the most recent publications of Diospyros in Thailand, there were 60 species (Phenklai, 1981, Duangjai *et al.*, 2018). During a field trip in Khlong Naka Wildlife Sanctuary, Suksamran District, Ranong Province, which is located near the Isthmus of Kra, *Diospyros subrhomboidea* King and Gamble was found. Previous reports of its distribution were described from Indonesia Malaysia, Singapore. In the present paper, *Diospyros subrhomboidea* King and Gamble is recorded for the first time from Thailand.

MATERIALS AND METHODS

The herbarium specimens of *Diospyros* (including type specimens and digital images) deposited at Bangkok Herbarium (BK), Bangkok Forest Herbarium (BFK), Kew Herbarium,(K), Leiden Herbarium (L) and Paris Muséum national d'histoire naturelle (P) were studied. Field work was done in Khlong Naka Wildlife Sanctuary, Suksamran District, Ranong Province, to collect herbarium specimens and ecological habitat.

RESULTS

Taxonomic treatment

***Diospyros subrhomboidea* King & Gamble.**
(Figure 1)

J. Asiatic Soc. Bengal, Pt 2, 79: 209, 1905; Fl. Java 2: 186, 1965 (syntype: Paris; P00721740).

***Diospyros confusa* Bakh.**
Gard. Bull. Singapore 7: 167. 1933.

***Diospyros jaheri* Bakh.**
Gard. Bull. Singapore 7: 173, 1933.

Evergreen shrub to small tree, up to 4 m high, trunk crooked, outer bark blackish- brown, smooth or sparsely lenticelled, inner bark thick, yellow and becoming yellowish- brown; sapwood white; young twigs tawny-pubescent, horizontal, dark brown to blackish when dry, buds densely tawny-pubescent. Leaves, simple, alternate; petiole 2–35 mm long, tawny-pubescent to tomentose; lamina, ovate-lanceolate to sub-rhomboidal, 1.5–2.5 × 3.5–6 cm, base acute (rarely obtuse), apex bluntly acuminate, margin ciliate to entire, both surfaces olivaceous-brown when dry, the upper dark, glabrous except the puberulous midrib, the lower sparsely adpressed pubescent to tomentose especially on the bold midrib; secondary veins 4–5(–6) pairs, curved, slightly impressed above, raised below, faintly ascending

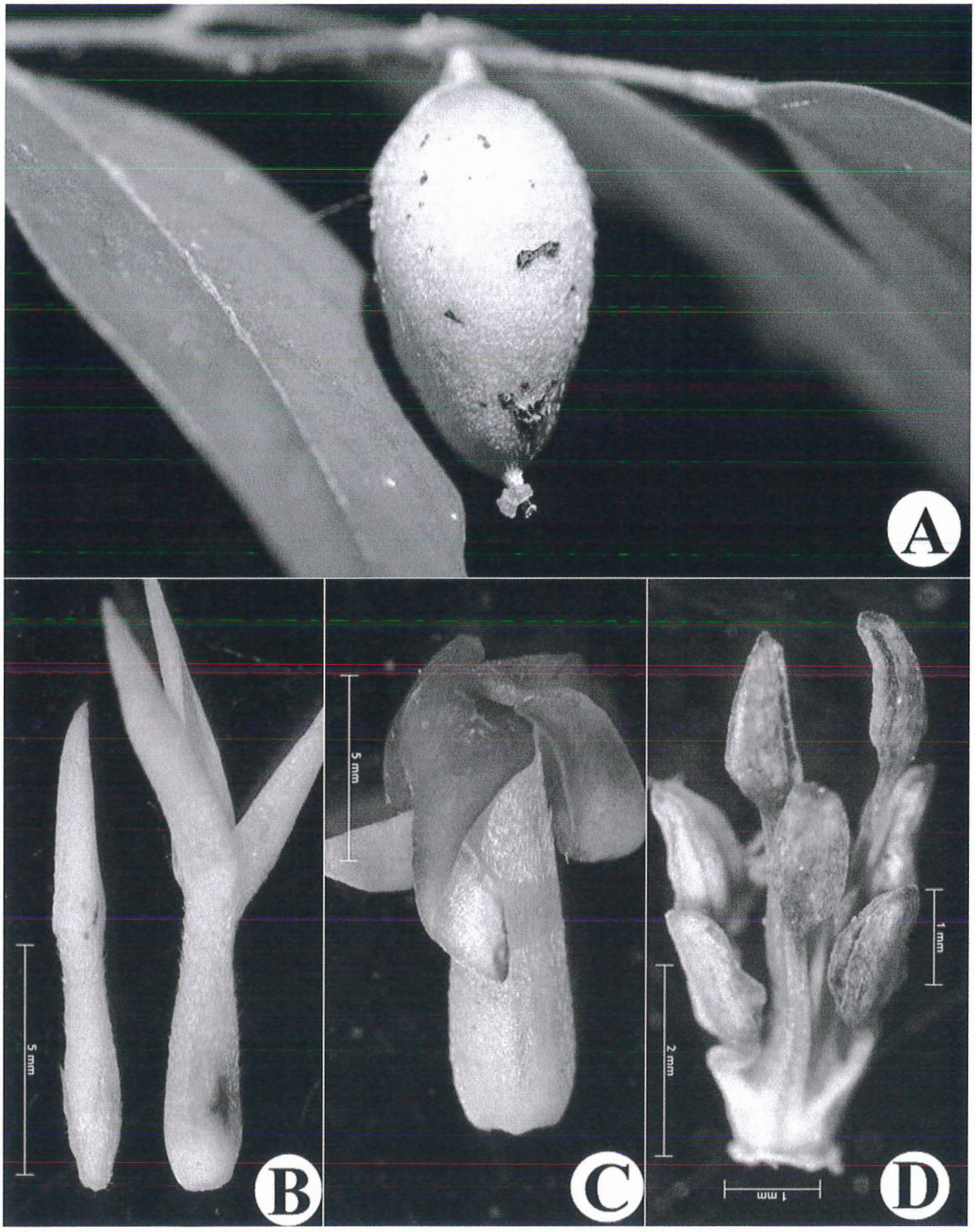


Figure 1. *Diospyros subrhomboidea* King & Gamble: A. Immature fruit, B. Male flower with 3 corolla lobes and male flower bud, C. Male flower blooming, D. Androecium bundle from male flower.

towards apex on both surfaces, anastomosing, tertiary veins inconspicuous, occasionally minutely translucent dotted. Male flowers, solitary or cyme with (1-) 2 (-3) florets, axillary on a short tomentose pedicel with 2 broad bracteoles. Calyx, 1.5–2 mm long, deeply divided into 3–4 lobes, connate at base, pubescent outside, glabrous inside, each lobe triangle shaped with apex sharply acuminate, imbricate, creamy to whitish. Corolla, salver-

shaped, deeply divided into 3–4 lobes; the corolla tube cylindrical, 8–12 mm long, 2.0–2.2 mm wide, tapering to the apex, tomentose outside, glabrous inside; corolla lobe as long as the corolla tube or slightly shorter the corolla tube, 6–12 mm long, 2.5–3.2 mm wide, oblong, corolla lobe with inflexed edges, twisted to the right in bud, golden yellow when flower blooming and turn to be yellowish brown when dry. Stamens (6-7- 8, connate near the base of the corolla tube, 4 shorter than the others; anther all ovate-oblong, 0.8–1.2 mm long, 0.8 mm wide, longitudinal dehiscence. Female flowers, not known. Fruit, berry, ellipsoid, sparely adpressed-puberulous, crowned by the conic style, 1.8–2.0 cm long, 6–9 mm wide. Fruit stalk 2–3 mm long with tawny-pubescent to tomentose.

Material examined. Thailand: Peninsular, Ranong Province (Khlong Naka Wildlife Sanctuary, Suksamran District), November 2018, WE–Nov.2018-1 (BK, BKF), WE–Mar.-2019-1 (BK, BKF).

Vernacular. Phlab Eiad: etymology for Thai name, Phlab = *Diospyros*, Eiad = small (southern Thai language) meaning this species is a shrub with small fruits.

Distribution. Indonesia (Sumatra, Java and Borneo), Malaysia (Perak, Sarawak), Singapore, and Thailand (Ranong).

Ecology. Primary moist evergreen forest, 150-350 m altitude, *Diospyros subrhomboidea* is growing with *Dipterocarpus kerrii* King, *D. grandiflorus* (Blanco) Blanco, *Shorea gratissima* (Wall. ex Kurz) Dyer, *Diospyros sumatrana* Miq., *D. ranongensis* Phengklai, and *Lithocarpus rassa* (Miq.) Rehder.

Phenology. Flowering: October–December, fruiting: March–April.

Note. *Diospyros subrhomboidea* is distinct from other species of Thai *Diospyros* in having a densely pubescent to tomentose on branches and petioles with ellipsoid fruit shaped, sparely adpressed-puberulous at outside, crowned by the conic style. It resembles *Diospyros buxifolia* (Bl.) Hiern, while *Diospyros buxifolia*'s morphological characteristics differ by corolla tube companulate (Backer and van den Brink, 1965).

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