

Prunus kaengkrachanensis (Rosaceae), a new species from Southwestern Thailand

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ABSTRACT. A new species, *Prunus kaengkrachanensis* Nagam., Tagane & Suddee is described from Kaeng Krachan National Park, Petchaburi, Thailand.

KEY WORDS: Kaeng Krachan National Park, *Prunus*, *Prunus kaengkrachanensis*, Rosaceae, Thailand.

INTRODUCTION

The genus *Prunus* L. (Rosaceae) consists of more than 200 species of trees or shrubs widely distributed in Asia, Europe, North and South America (Mabberley, 2008). The species in Thailand were listed by Craib (1931), Vidal (1970) and Pooma & Suddee (2014), and the most recent one of these accounts, Pooma & Suddee (2014), enumerated 11 species of *Prunus* including four exotic ones.

Plants recently collected by the authors from Kaeng Krachan National Park, Phetchaburi, Southwestern Thailand in 2014 are most similar to *P. polystachya* (Hook.f.) Kalkman that is distributed in Sumatra, the Malay Peninsula, Singapore (and Brunei?) (Kalkman, 1965; Prance & Whitmore, 1983; Kalkman, 1993; Chong *et al.*, 2009). The specimens lack flowers but are clearly distinguishable from *P. polystachya*, in particular by the densely hairy endocarp. *Prunus polystachya* is common and widely distributed in Peninsular Malaysia, but it has not been recorded from Thailand, and Kaeng Krachan National Park is geographically isolated from its distribution range. Here we describe this plant as a new species on the basis of fruiting material.

DESCRIPTION

Prunus kaengkrachanensis Nagam., Tagane & Suddee, **sp. nov.**

The species is similar to *Prunus polystachya*, but differs in leaves cuneate to attenuate at base (vs. rounded to truncate), subglobose fruits (vs. transversely ellipsoid, and slightly flattened laterally) with a densely hairy (vs. glabrous) endocarp. Typus: Thailand, Phetchaburi, Kaeng Krachan National Park, near Phanoenthung ranger substation, 947 m alt., 28 May 2014, *Tagane et al. T2978* (holotype **KYO!**, isotypes **BKF!**, **FU!**, **K!**, **P!**). Fig. 1, Map 1.

Tree ca 20 m tall. *Bark* greyish brown, smooth. *Twigs* puberulous when young, soon glabrescent, lenticellate, drying blackish. *Leaves* coriaceous, elliptic to elliptic-ovate, 9.5–15.2 × 4.4–7.1 cm; apex acuminate to obtuse; base cuneate to attenuate, sometimes oblique; margin entire, recurved when dry; midrib and secondary veins sunken above, raised below; secondary veins 8–11 pairs; tertiary veins scalariform-reticulate, inconspicuous above, faintly visible below, glabrescent above, slightly pubescent below; basal glands 2, in the contracted leaf base, distinctly bulging above, deeply hollowed

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below. *Petiole* 0.9–1.6 mm long, glabrescent. *Stipule* not seen, caducous. *Racemes* in axils of leaves near the top of branchlets, solitary or 2–3-branched near the base, without terminal bud, 12–28-flowered (by scars); fruiting axes erect, 3.2–6 cm long, puberulous with golden-brown short hairs; fruiting pedicels 3–4 mm long. *Flowers* not seen. *Fruits* subglobose, 1.8–2 cm in diameter, green; exocarp glabrous except around insertion, or very sparsely hairy; endocarp densely hairy

inside, the hairs ca 1.3 mm long, cream. *Seed* 1, flattened, 1.5×1.1 cm, sparsely covered with cream-coloured hairs.

Thailand.— SOUTH-WESTERN: Phetchaburi [Kaeng Krachan National Park, near Phanoenthung ranger substation, $12^{\circ}49'30.78''\text{N}$, $99^{\circ}21'54.26''\text{E}$, alt. 947 m, 28 May 2014, fr., Tagane et al. T2978 (holotype **KYO!**, isotypes **BKF!**, **FU!**, **K!**, **P!**); same locality, $12^{\circ}49'19.70''\text{N}$, $99^{\circ}21'57.70''\text{E}$, 23 Oct. 2013, st., Tagane et al. T2072 (**BKF!**, **FU!**)].

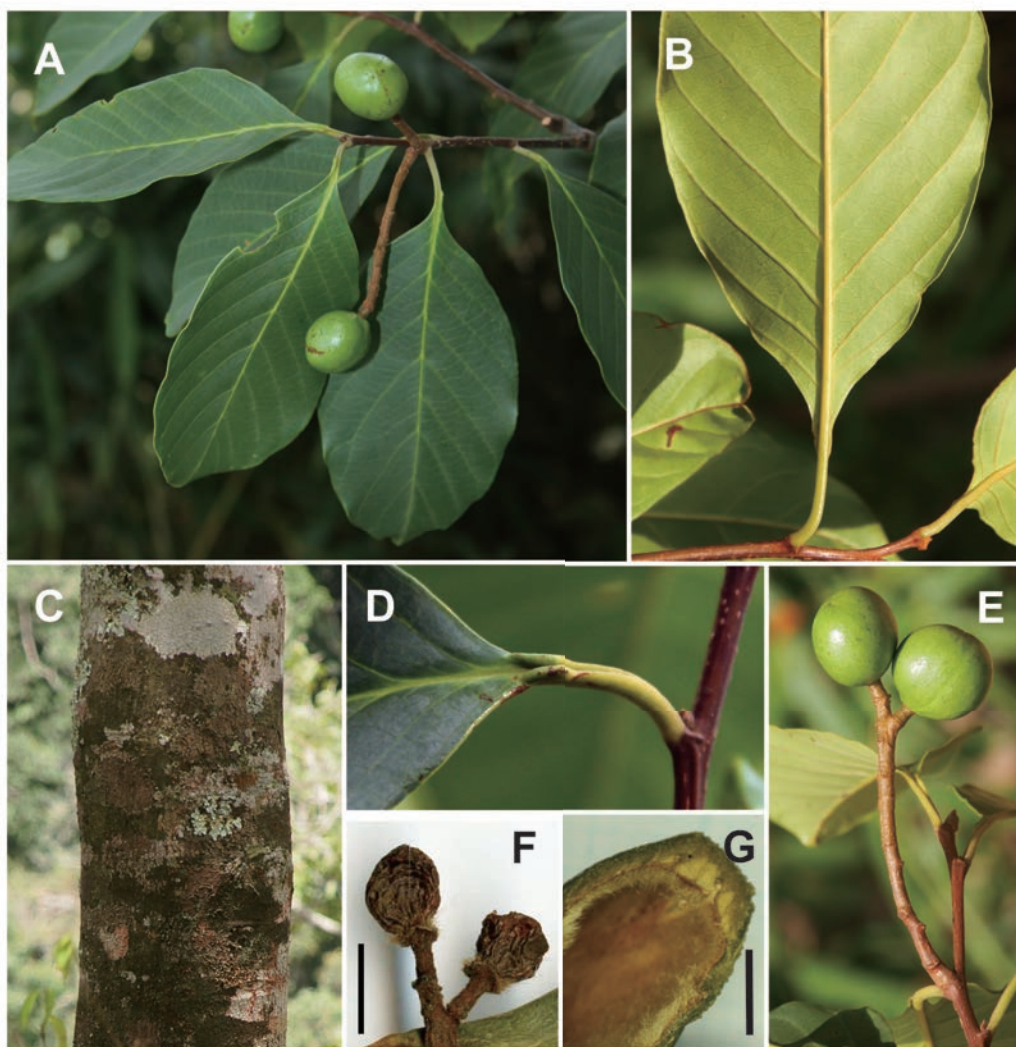


Figure 1. *Prunus kaengkrachanensis* Nagam., Tagane & Suddee. A. fruiting branchlet; B. abaxial leaf surface; C. bark; D. a pair of glands in the contracted leaf base; E. an infructescence bearing globose fruits; F. immature fruits showing hairy insertion; G. dissected fruit showing densely hairy endocarp. Photos: A–E. 28 May 2014, Kaeng Krachan National Park; F & G. Tagane et al. T2978 (KYO). Scale bar = 5 mm (F), 3 mm (G).

Distribution.— Only known from the type locality.

Ecology.— In evergreen lower montane forest, at 947–960 m altitude. The only fruiting specimen was collected in May.

Note.— *Prunus kaengkrachanensis* and *P. polystachya* are easily distinguished from other species of wild *Prunus* in Thailand by the large and thick leaves with two distinct hollowed glands at the base. They are also similar in having fruits of almost the same size.

Conservation status.— Data deficient (DD). *Prunus kaengkrachanensis* does not seem to be rare near Phanoenthung ranger substation. In our plot survey established at 960 m alt., three saplings were found within a plot of 100 × 5 m. However, to evaluate its conservation status, we need more information on its accurate numbers of individuals/populations and the distribution range.



Map 1. Distribution of *Prunus kaengkrachanensis* Nagam., Tagane & Suddee.

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