

***Bauhinia wallichii* J.F. Macbr. (Leguminosae-Caesalpinioideae),
a species new to Thailand**

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ABSTRACT. *Bauhinia wallichii* (Leguminosae-Caesalpinioideae) is newly recorded from Thailand. The species is described and illustrated.

The distribution of *Bauhinia wallichii* J.F. MacBr. was discussed by K. & S.S. Larsen (1980) in the treatment of the Caesalpinioideae for Flore du Cambodge, du Laos et du Vietnam. At that time the species was reported from Assam, Myanmar and northern Vietnam. Since then it has been reported by Zhang & Chen (1996) from Yunnan. Recently it has also been collected from Thailand, at Doi Phuka in Nan. The material is deposited in AAU and BKF.

Bauhinia wallichii J.F. Macbr., Contrib. Gray. Herb. n.s. 59: 23. 1919.— *Phanera macrostachya* Benth. in Miq., Pl. Jungh.: 262. 1852.— *Bauhinia melanophylla* Merr., J. Arn. Arb. 23: 172. 1942.

Large woody climber with tendrils. *Young branches* furrowed, glabrescent, soon glabrous; older stems flattened with coarse, woody tendrils forming dense spirals. *Stipules* oblong, ca. 4.5 by 1.3 mm, outside sparsely hairy, inside glabrous, early caducous. *Petioles* 3–6 cm, sparsely pubescent to glabrous; lamina glabrous above, sparsely hairy below particularly on the nerves when young later glabrous, suborbicular, most often broader than long, on the flowering branches 6–12 cm, from almost entire with a sinus less than 3 mm to bifid 1/5 with a broad sinus; base cordate, often deeply so, apex of lobes acute to acuminate, often the lobes are curved in wards, nerves 9–11. *Leaves* on sterile branches larger with lamina 12–14 cm, with deeper and wider sinus and acuminate lobes. *Inflorescence* of terminal racemes, often branched with one shorter and one longer branch, the longest up to 20 cm long. *Axis* finely appressed hairy. *Bracts* lanceolate, acuminate, ca. 3 mm, hairy outside. *Pedicels* appressed hairy as the axis, 10–15 mm with minute bracteoles inserted above the middle. *Buds* ovoid, ca. 10 mm, densely light brownish pubescent with silky appearance. *Hypanthium* asymmetric, campanulate, slightly curved, striate, 5–7 mm. *Calyx* cup-shaped, 5-lobed, lobes obtuse, ca. 4 mm, densely light brown hairy outside, almost glabrous inside. *Petals* subequal, densely light brown silky hairy on both surfaces the median one less so inside; claw 2–4 mm; lamina ovate to orbicular, 5–8 mm. *Stamens* 3,

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fertile; filaments ca. 2 cm, light green, flattened, glabrous, except for an occasional line of hairs, during anthesis enrolling and seemingly totally glabrous; anthers dark brown, ca. 2 mm; staminodes 5, joined to form a digitate body 3–4 mm (Fig. 1 C). *Ovary* shortly stipitate, densely brownish pubescent, ca. 10 mm; style glabrous, thin, ca. 10 mm; stigma small, light yellowish-green turning red. *Young pods* brownish, mature pods not seen. Fig. 1–3.

Pollen. The pollen grains are 3-colporate with a rugulose tectum (Fig. 2). They belong to the *curtisii* pollen type together with e.g. *B. japonica* Maxim. (Larsen, 1975) and *B. wuzhengyii* S.S. Larsen (in sched). However, it must be emphasized that even if their palynology is similar, the group of species referred to the *curtisii* pollen type is probably heterogenous.

Thailand.—NORTHERN: Nan, Doi Phuka, R. POOMA 1503 (AAU, BKF).

Distribution.—India (Assam), Myanmar, China (Yunnan), northern Vietnam.

Ecology.—Open lower montane forests by stream at about 1200 m.

Note.—The material from Thailand deviates slightly in leaf shape from what was considered by the author to be the normal variation range of the species. The full variation of many species in *Bauhinia*, particularly in the leaves from the flowering branches to the older stems and sterile shoots as well as juvenile individuals, has yet to be clarified.

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Figure 1. *Bauhinia wallichii*: A. Flowering shoot; B. Bud.; C. Part of flower showing hypanthium and 5-digitate staminodial body, lower part of ovary and 2 minute staminodes. Upper left tip of leaf from sterile branch. Drawn from Pooma 1503

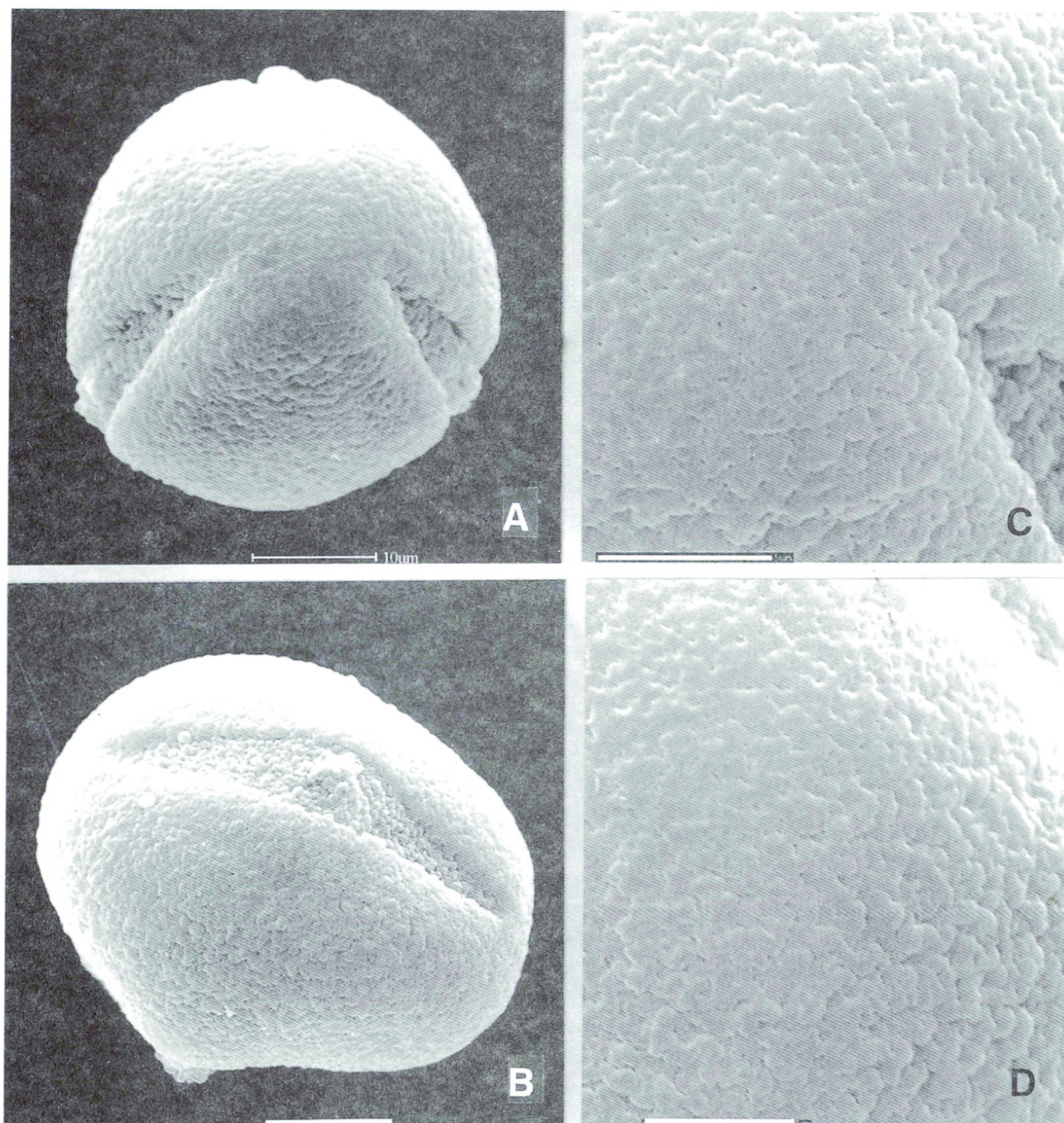


Figure 2. Scanning electron micrographs from acetolysed pollen of *Bauhinia wallichii*: A. & B. Whole pollen grain in polar view and Equatorial view; C. & D. Detail of tectum at mesocolpia and apocolpia.- Scale bars 10 µm for A & B and 5 µm for C & D.



Figure 3. *Bauhinia wallichii* J.F. Macbr.; Photo: R. Pooma (BKF).