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Halenia (Gentianaceae) a new genus to Thailand

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ABSTRACT. *Halenia elliptica* D.Don, a new generic record for Thailand, is described and illustrated.

INTRODUCTION

During a field trip to Doi Inthanon in October 2000, I had a chance to visit the lower montane vegetation characterized by open pine tree (*Pinus kesiya*) mixed with some small shrubs of *Vaccinium sprengelii*. *Rhododendron* spp. grow near cliffs and *Iris collettii*, *Viola biflora* and a *Hypericum* sp. are common as ground cover. *Halenia elliptica* D. Don was found in small numbers and is a new record for Thailand. Unfortunately, this plant faces extinction in this area because of disturbance from cattle and forest fires. Moreover, the area is used for trekking and camping without any strict regulations. It is strongly recommended that this unique area of Doi Inthanon should be conserved and treated with a well-planned tourism programme like the one at Kio Mae Pan in the upper elevations of Doi Inthanon National Park.

HALENIA

Borkhausen in Roemer, Arch. Bot. (Leipzig) 1: 25. 1796.

Annual or perennial herbs. *Roots* slender, fibrous. *Leaves* opposite or whorled. *Inflorescences* terminal or axillary, in clusters or sometimes in lax panicles of cymes. *Terminal clusters* umbel-like. *Bracts* leaf-like, sessile. *Flowers* 4-merous. *Calyx* divided nearly to the base. *Corolla* campanulate, divided to below middle, spured near base of each lobe. *Stamens* inserted on corolla tube. *Ovary* 1-locular. *Style* short. *Stigma* 2-lobed. *Capsules* ovoid, 2-valved, many seeded. *Seeds* ellipsoid to subglobose; seed coat smooth.

About 100 species, mainly in temperate regions of the northern hemisphere; one species in Thailand.

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Halenia elliptica D.Don, Lond. Edinb. Philos. Mag & J. Sci. 8:77. 1836; C.B.Clarke in Fl. Brit. Ind. 4: 99. 1885; T.N. Ho & J.S. Pringle in Fl. China 16: 100. 1995; A. Aitken in Fl. Bhutan. 2: 611. 1999.— *Swertia centrostemma* Wall. in Wall. Cat. 4385, nom. nud. Type: India, *Royle* s.n. (holotype ?LIV, not seen). Figs. 1, 2.

Annual herb. *Stem* erect, 8–30 cm, quadrangular, winged, simple or branched in upper part. *Leaves* ovate-elliptic to narrowly elliptic, up to 2.3 by 1.5 cm, apex rounded to acute, base cuneate, 3–5 veined, upper leaves sessile; lower leaves petiolate, 1–1.5 cm long. *Inflorescence* of lax panicles. *Pedicels* 0.5–4 cm long. *Calyx*: tube ca. 0.5 mm long; lobes slightly dimorphic, ovate-elliptic to narrowly elliptic, 6–7.5 by 2.8–4 mm, apex mucronate to acute, 3-veined. *Corolla* bluish to purple, tube ca. 1 mm long; lobes obovate, ca. 10 by 0.6 mm, apex mucronate, spurs curved, 0.8–1.5 cm long. *Filaments* 4.5–7 mm long, unequal in length thickened towards base; anthers subovoid, 1 by 1.5 mm. *Ovary* ovoid-ellipsoid, 5–7 by 3–4 mm; style ca. 4 mm long; stigma ca 0.6 mm long. *Capsule* ovoid-ellipsoid, 7–9 by 3–5 mm, enclosed by the persistent calyx and corolla.

Thailand.— NORTHERN: Chiang Mai, Doi Inthanon National Park, *Suksathan* 2832 (QBG , BKF).

Distribution.— India (Sikkim), Bhutan, Nepal, Myanmar, China.

Ecology.— Uncommon on open grassy slope in pine forest, ca. 1700–1800 m. Flowering September–October.

Vernacular.— Rit ngoi (หรีดงอย) (Chiang Mai).

Notes.— Ho & Pringle (1995) separated two varieties of this species based on the length of corolla (including the spur): 2.5 cm in var. *grandiflora* and 1–1.5 cm in var. *elliptica*. The plants from Doi Inthanon have variation in the length of corolla between 1.5–2.5 cm. This suggests that it may not be possible to maintain these two varieties.

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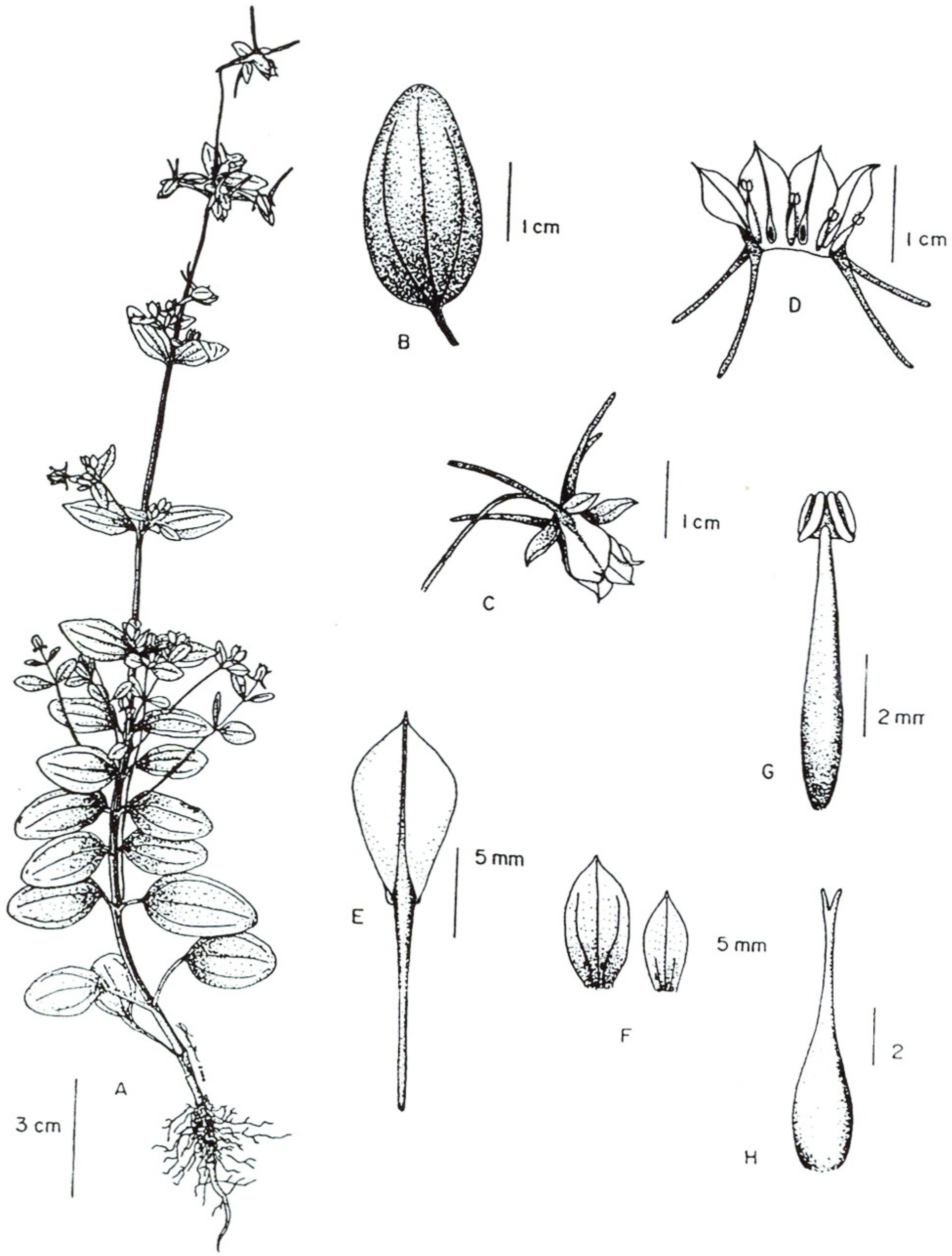


Figure 1. *Halenia elliptica* D.Don: A. habit; B. leaf; C. flower; D. opening corolla; E. corolla; F. calyx lobes; G. stamen; H. pistil.



Figure 2. *Halenia elliptica* D.Don: Doi Inthanon National Park, Chiang Mai.