

HYDRANGEACEAE

THAWATCHAI WONGPRASERT*

Erect herbs or undershrubs, rarely scandent. Leaves simple, opposite, rarely distichous, exstipulate, serrate or dentate. Flowers in compound corymbs or panicles, actinomorphic; gamosepalous, toothed or-lobed; petals 4–10, valvate or imbricate, fleshy; stamens in normal flowers 6–14, perigynous; filaments free or subconnate; anthers 2-celled; ovules numerous, axile or parietal placentas; styles 2–5, free or connate at base; stigma thick. Fruit a berry or loculicidal capsule. Seeds small; embryo in axis of fleshy albumen.

Two genera (*Hydrangea* and *Dichroa*) 3–4 species in tropical and sub-tropical Asia, *Dichroa* is the only genus in Thailand.

Dichroa

Lour., Fl. Coch. 301. 1790.—Cyanitis, Reinw., in Blume, Cat. Gew. Buitenz. 68. 1823.

Erect shrub. *Leaves* lanceolate, serrate. *Flowers* many, in terminal panicle; flowers and fruits dark blue; calyx-tube adnate to ovary; petals valvate. *Stamens* twice the number of petals. *Anthers* large, thick, ovoid, shallowly incised at both ends. *Ovary* 3/4 inferior. *Styles* 5, divergent. *Ovules* numerous on 3 to 5 parietal placentas. *Berry* 1-celled.

Only one species in Thailand.

Dichroa febrifuga Lour., Fl. Coch. 301. 1790; Hook.f., Fl. Br. Ind. 2: 406. 1878; Brand., Ind. Trees: 297. f. 126. 1978; Lecomte., Fl. Gén. I.-C. 2: 688. f. 68. 1916; Ridl., Fl. Mal. Pen. 1: 681–682. 1922.

* The Forest Herbarium, Royal Forest Department, Bangkok 10900, Thailand.

Undershrub, 1–2.50 m high; bark greyish-brown, with large pith. *Leaves* elliptic, obovate to oblanceolate, 13–20 by 5–9 cm, apex acuminate, base cuneate or attenuate, margin serrate; chartaceous, sparsely pubescent on both surfaces, with few scattered hairs along midrib, secondary nerves and veins; nerves 8–11 pairs, fine arched and more or less anastomosing near margin; petiole slender, 2–5 cm long, sparsely hairy, then glabrescent. *Panicles* pubescent 6–15 cm long, 5–10 cm wide; peduncle 5–10 cm long; pedicel ca 1 cm long; calyx-tube 6–8 toothed, campanulate, glabrous inside, sparsely hairy outside. *Petals* 4–7, oblong or ovate-acute or obtuse; pale to dark blue, glabrous, 6–7 by 2.5–3 mm. *Stamens* 10 or 20, epigynous, filaments adherent to the corolla. *Anthers* oblong or ovate, ca 2 mm long, blue, longitudinally dehiscent. *Filaments* glabrous, filiform 4–5 mm long. *Ovary* ovoid or conical. *Styles* ca 5 mm long. *Stigmas* blue. *Berry* globose, baccate; ca 5 mm diam; sparsely hairy to glabrous; intense glossy blue when ripe, crowned by the persistent calyx lobes; styles in the center. *Seeds* numerous, small obovoid testa reticulate.

T h a i l a n d.— NORTHERN: Chiang Mai (Doi Monchong, Doi Suthep, Doi Angkhang, Doi Inthanon, Doi Pha Hom Pok), Nan (Doi Phukha), Tak; NORTH-EASTERN: Loei (Phu Kradueng); SOUTH-EASTERN: Chanthaburi (Khao Soi Dao); SOUTH-WESTERN: Kanchanaburi (Kwae Noi River, Thung Yai Naresuan Wildlife Sanctuary); PENINSULAR: Chumphon (Khao Nom Sao), Ranong (Khao Pota Luang Kaeo), Surat Thani (Kao Naung), Krabi (Khao Phanom Bencha), Nakhon Sithammarat (Khao Luang), Trang (Khao Chong).

D i s t r i b u t i o n.— Tropical and Subtropical Asia (Nepal, India, Bhutan, Sikkim, Burma, China, Vietnam, Cambodia, Thailand and Malesia).

E c o l o g y.— Seasonal rain forest on clayey soil and often along streams upto montane evergreen forest; alt. 200–2,000 m.

V e r n a c u l a r.— Hom dong (หอมดง), hom kham (หอมคำ), yai krang (ยาขกร้าง) (Peninsular).

U s e s.— The whole plant contains dichroine, dichroidin, 4–quinazolone, dichrin A.B., febrifugin and isofebrifugin. Decoction from roots and leaves is used as an emetics and anti-febrifuge.

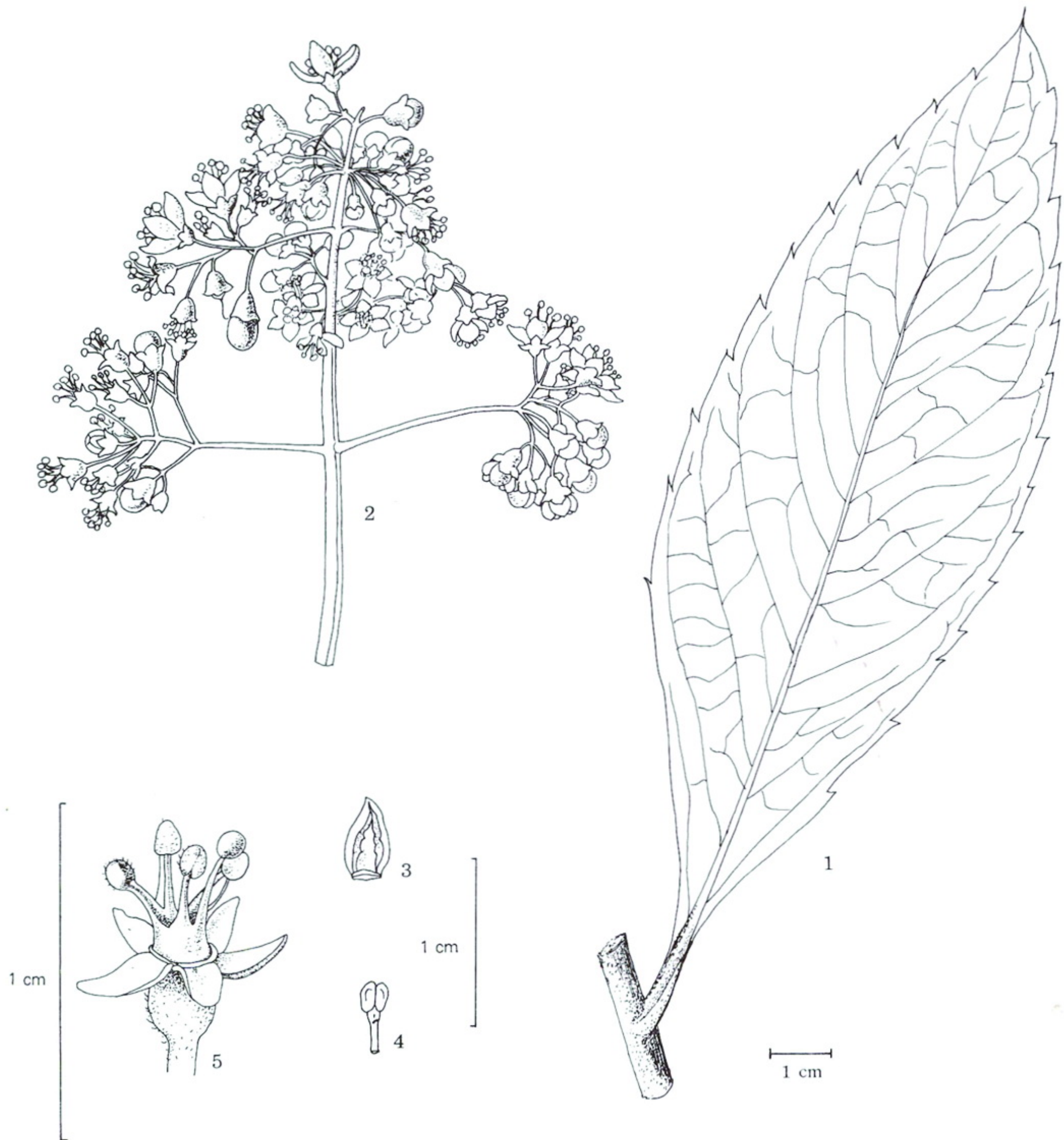


Figure 1. *Dichroa febrifuga* Lour. 1. leaf; 2. inflorescence; 3. petal; 4. stamen; 5. pistil



Figure 2. *Dichroa febrifuga* Lour.



Figure 3. *Dichroa febrifuga* Lour.