

***Gleditsia* Linn. (Leguminosae-Caesalpinioideae) a Genus New to Thailand**

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Some time ago I received a plant collected in Chiang Mai province, northern Thailand, by Mrs. C. Chermisrivathana, Department of Horticulture, Kasetsart University, Bangkok. The collection belongs to the genus *Gleditsia* not previously reported from Thailand and not included in Flora of Thailand.

According to Vidal in Fl. CLV 18: 68. 1980, four species occur in Laos and Vietnam, three of which are indigenous, viz. *G. rolfei* Vidal y Soler, *G. fera* (Lour.) Merr., and *G. pachycarpa* Balansa ex Gagnep.

The protologues of the two first species are almost identical and it seems most adequate to treat them as conspecific. In P, however, no type specimen has been found on which *Mimosa fera* Lour. was based; but not only the descriptions correspond to *G. rolfei*, also the vernacular name cited by Loureiro “tao giác” is applied to *G. rolfei*. The conclusion therefore must be to retain the oldest name, *G. fera*, and select a suitable lectotype in P. This viewpoint is also shared by Li Lin-chu, Fl. R. P. Sinica 39: 85. 1988.

Below amended generic keys to the Leguminosae-Caesalpinioideae in Fl. Thail. 4(1): 2 – 4. 1984 is provided.

1. General key

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|---|----------------------|
| 16. Sepals apparently valvate or not clearly imbricate in bud | |
| 16* Stems unarmed. Flowers bisexual; hypanthium very short; petal 1; fertile stamens 9 | 15. <i>Sindora</i> |
| 16* Stems spiny. Flowers unisexual, polygamous or dioecious; hypanthium campanulate; petals 5; fertile stamens 5 – 10 | 21. <i>Gleditsia</i> |

2. Key to fruiting specimens

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| 22. Leaflets 10 – 18 pairs | |
| 22* Pod oblong, incurved, light brown, 5 – 15 by 1 – 2.5 cm | 17. <i>Tamarindus</i> |
| 22* Pod straight or slightly curved, blackish, 15 – 30 by 3 – 4 cm | 21. <i>Gleditsia</i> |

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GLEDITSIA

Sp. Pl.: 1056. 1753; Benth. & Hook. f., Gen. Pl. 1: 568. 1865; Taubert in Pflanzenfam. 3. (3): 168. 1892; Hutchinson, Gen. Fl. Pl. 1: 266. 1964; Robertson & Lee, J. Arn. Arb. 57: 26. 1976; Vidal in Fl. CLV 18: 68. 1980; Polhill & Vidal in Polhill & Raven ed., Adv. Leg. Syst. 1: 87. 1981.— *Caesalpiniioides* Kuntze, Rev. Gen.: 166. 1891.— *Pogocybe* Pierre, Fl. For. Cochinch. 5: Fig. 392 B. 1899.

Trees often provided with spines. Stipules very small. Leaves pinnate or bipinnate, spirally arranged. Leaflets opposite or alternating, assymmetric with crenulate margin. Inflorescences in usually narrow panicles resembling spikes or racemes. Bracts small, bracteoles small or O. Flowers unisexual, dioecious or polygamous. *Hypanthium campanulate*. Sepals 3–5 not covering the petals in bud. Petals 3–5, equal. Stamens 4–10. Ovary sessile or shortly stipitate. Pods dehiscent or not. Seeds compressed to globose; albuminous. — Ca 15 species of which 11 in S. and E. Asia. In Thailand one species.

Gleditsia fera (Lour.) Merr., Philip. J. Sc. Bot. 13: 141. 1918; Trans. Amer. Phil. Soc. 24: 190. 1935; Vidal in Fl. CLV 18: 72. 1980.— *Mimosa fera* Lour., Fl. Cochinch.: 652. 1790.— *Gleditsia rolfei* Vidal y Soler, Rev. Pl. Vasc. Filip.: 115. 1886; Hui Lin Li, Woody Fl. Taiwan: 349. 1963.— *G. formosana* Hay., J. Coll. Sci. Univ. Tokyo 30: 85. 1911.— *G. thorelii* Gagnep., Not. Syst. 2: 212. 1912; Fl. Gén. I.-C. 2: 114. 1913. Figure 25.

Tree up to 14 m high, branches greyish-brown; spines stout, branched up to 13 cm long. *Leaves* pinnate, rachis glabrous to sparsely pilose, 11–18 cm; leaflets 6–12 pairs, opposite, subopposite or alternating, obliquely elliptic to rhomboid-oblong, 25–50 by 10–18 mm, obtuse or slightly emarginate at apex; obliquely cuneate at base; margin crenulate-denticulate; upper surface glabrous shining, lower dull; midrib oblique at base, lateral veins fine, 12–18 pairs. *Petiolule* 0.5–1 mm. *Inflorescence* supra-axillary, raceme-like, compound; rachis pubescent, 7–16 cm. *Flowers* yellowish-green; 6–9 mm diam.; hypanthium pubescent outside, glabrous inside. *Sepals* 5 triangular-lanceolate ca 4 mm, pubescent outside. *Petals* 5 oblong-ovate, ca 4 mm. *Male flowers*: stamens 10 with filaments long pubescent in the lower half; ovary reduced. *Female flowers*: staminodes 10(–5); ovary densely yellowish-brown sericeous; ovules ca 20. *Pods* compressed, straight or slightly curved, coriaceous, 15–30(–40) by 3–4(–6) cm, pubescent when young, later glabrous, blackish-brown; stipe, 3–15 mm; beak 2–5 mm. *Seeds* 15–20, flat, ovate-oblong, 8–12 by 5–6(–10) mm, smooth, brown.

Thailand.—NORTHERN: Chiang Mai (Fang, Doi Ang Khang), alt 1400 m (BK, AAU).

Distribution.— Philippines, Taiwan, China (Jiangxi, Hunan, Fujian, Guangdong, Guangxi), Laos (Suvannaket), Vietnam (Prov. Ha Tuyen, elsewhere cultivated).

Ecology.— On forest slopes in open vegetation, alt. 300–1400 m.

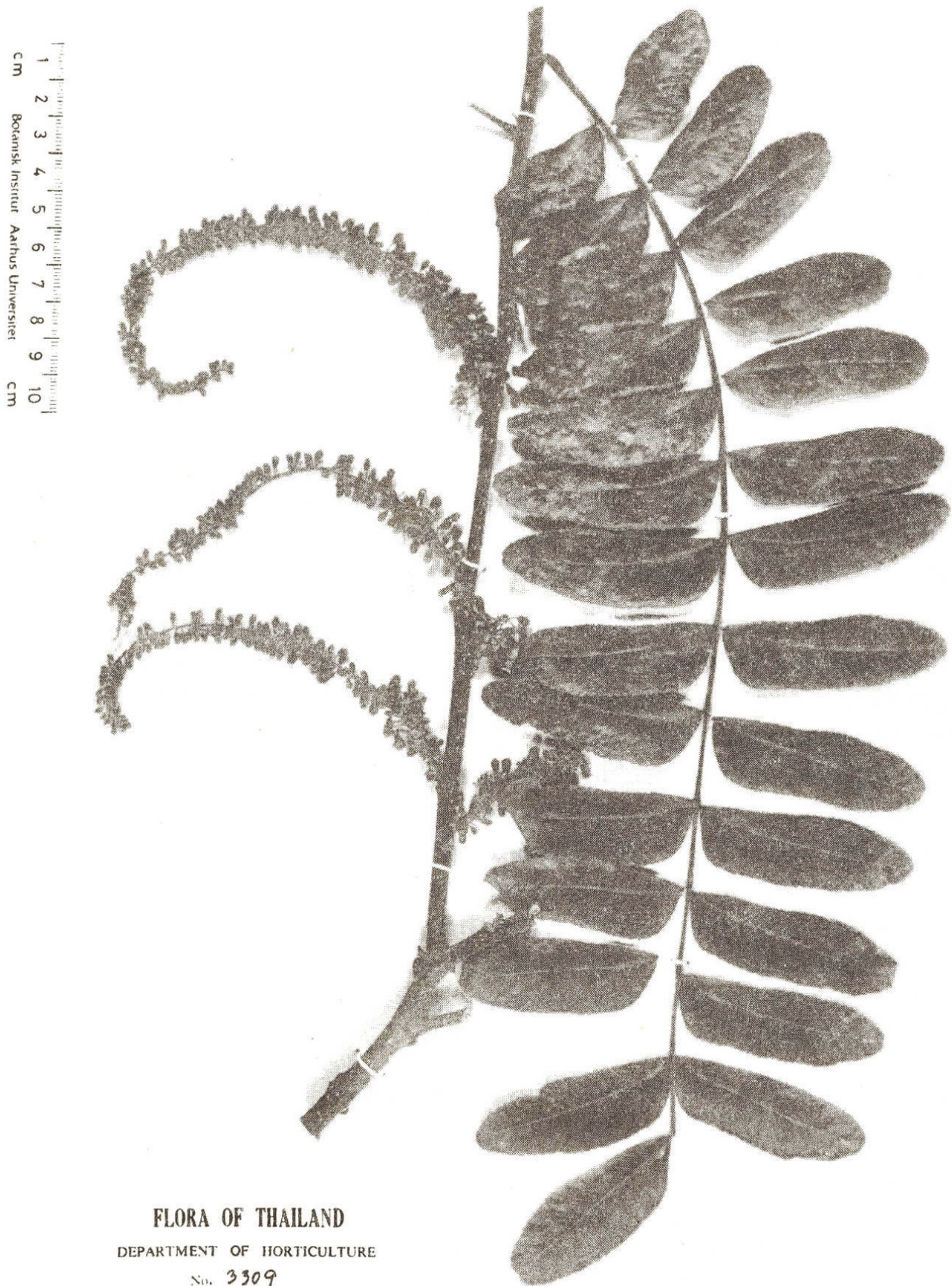
Uses.— Occasionally cultivated in China and Vietnam. The pods are used locally as an insecticide. A decoction of the leaves as a purgative.



FLORA OF THAILAND
DEPARTMENT OF HORTICULTURE
No. 3309
Locality Doi Ang Khang, Fang, Chiangmai
Altitude c. 1400 m.
Date 20 March, 1985
Local Name
Notes Tree c. 10 m. high, flowers greenish yellow, fruit flat, 20–30 cm. long with 17–19 seeds.
Collector C. Chemsirivathana

Figure 25. *Gleditsia fera* (Lour.) Merr.

Pods from Doi Ang Khang, Chiang Mai.



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Figure 26. *Gleditsia fera* (Lour.) Merr.

Flowering branch from Doi Ang Khang, Chiang Mai.