

***Entada reticulata* Gagnep. (Leguminosae-Mimosoideae),
Newly Recorded for Thailand**

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ABSTRACT

Entada reticulata Gagnep. is reported for the first time in Thailand, with a full description and illustrations. Two variants of *E. reticulata* are recognized: the red-flowered and the green-flowered forms.

Entada reticulata Gagnep. Not. Syst. 2: 59 (1911); in Fl. Gén. I-C. 2: 64. 1913; Nielsen, Adansonia, ser. 2, 19 (3): 343. 1980.

E. tamarindifolia Pierre ex Gagnep., l.c.; in Fl. Gén. I-C. 2: 63. 1913, p.p.; Pham Hoang Ho, Ill. Fl. S. Viet-Nam, ed. 2, 1: 794, f. 2006. 1970.

Trailing or climbing shrub. *Leaves* bipinnate, alternate, petioles 1–1.6 cm long, rachis puberulous, 1.4–3 cm long; pinnae 2 pairs, 4–9 cm long; the terminal pinnae transformed into tendrils; leaflets opposite, 8–19 pairs per pinna, 6–16 by 2–5 mm, narrowly oblong, apex retuse, mucronate, velutinous on both surfaces. *Inflorescence* axillary, spiciform raceme, 5–12 cm long, rachis puberulous; pedicel *ca* 1 mm long. *Sepal* green or dark red, 1–1.2 mm long, united, campanulate, 5-toothed, velutinous. *Petal* green or dark red, 5, free, 3–4 mm long, oblong-lanceolate to oblanceolate, acute, eglandular. *Stamens* 10, fertile, free; anthers glabrous; filaments up to 5 mm long. *Ovary* superior, sessile, glabrous, 1.5–2 mm long; style about 5 mm long. *Pod* 4.5–13 cm long and 1.2–1.9 cm broad, at first green, glabrous, curved and turned brownish when ripe; valves splitting transversely at maturity into 1-seeded segments; exocarp coriaceous, loosening, leaving the persisting endocarp as a closed envelope around seed; endocarp chartaceous; the segments falling away from the suture, which persists as an empty frame. *Seeds* 8–8.5 mm in diameter, 4–9, subglobular with a brown hard sclerotesta.

The genus *Entada* comprises approximately thirty species widely distributed in tropical areas of the World and about nine species in Asia. I. C. Nielsen (1985) reported three species from Thailand, two giant climbers, i.e. *Entada rheedii* Spreng. and *E. spiralis* Ridl. and one trailing or climbing shrub, *E. glandulosa* Pierre ex Gagnep.

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In comparison with *E. glandulosa*, it was found that *E. reticulata* is smaller in almost characters, except the many more number of pairs of leaflets (Table 1). There are two forms of *E. reticulata*, from different areas, They differ significantly in their sepal and petal color and petal shape. The red-flowered form was found in Phu Lon Forest, Sri Mueang Mai District, Ubon Ratchathani Province, its sepal and petal is dark red and its petal is oblanceolate, whereas the green-flowered form possessing green sepal and petal and oblong-lanceolate petal was collected in Kaeng Sri Khot Forest, Sirindhon District, Ubon Ratchathani Province.

The voucher specimens of *E. glandulosa* (Wong 213) and *E. reticulata* (Green-flowered: Wong 214, 215; Red-flowered: Wong 216, 217) were deposited at Bangkok Herbarium, Botany Section, Botany and Weed Science Division, Department of Agriculture, Ministry of Agriculture and given serial number as BK 62478, BK 62476, BK 62479, BK 62477 and BK 62475, respectively.

Table 1 Comparative characters of *Entada reticulata* Gagnep. and *E. glandulosa* Pierre ex Gagnep.

Characters	<i>E. glandulosa</i>	<i>E. reticulata</i> (green-flowered)	<i>E. reticulata</i> (red-flowered)
Leaf:			
pinnae length (cm)	7–9	4–8.5	7–9
petiole length (cm)	2–3	1.1–1.6	1–1.4
rachis length (cm)	2.5–4.5	1.4–3	1.4–2
Leaflets:			
pairs	6–8	12–19	8–17
width (mm)	7–9	2–3	3–5
length (mm)	15–30	6–12	10–16
Inflorescence:			
length (cm)	12–15	5–7	6–12
florets number	67–100	32–52	36–66
sepal color	brownish red	green	dark red
petal color	green	green	dark red
petal shape	oblong-lanceolate	oblong-lanceolate	oblanceolate
Pod:			
width (cm)	(2.5)3–3.7	1.2–1.8	1.7–1.9
length (cm)	(14)25–29	4.5–13	10.5–12
seeds number	(7)10–11	4–9	5–7
seed diameter (mm)	12–16	8–8.5	8–8.5
segment length (cm)	2–2.5	1.4–1.5	1.4–1.5

Distribution.— Cambodia, Laos, and Thailand. In Thailand the green-flowered form was collected from Kaeng Sri Khot Forest, Sirindhon District, Ubon Ratchathani Province and the red-flowered form was collected in Phu Lon Forest, Sri Mueang Mai District, Ubon Ratchathani Province. The root is used as a medicinal plant in treatment of chronic wounds and abscesses by local application and young pod as vegetable like some other legumes.

Ecology.— In dry mixed deciduous forests and dry deciduous dipterocarp forests; especially on limestone and altitude up to 500 m.

Vernacular.— Bar bon (บ้าน).

MATERIAL STUDIED

Wong 213 (BK 62478): flower and pod of *Entada glandulosa* Pierre ex Gagnep.

Wong 214 (BK 62476): flower of the green-flowered form of *E. reticulata* Gagnep.

Wong 215 (BK 62479): pod of the green-flowered form of *E. reticulata* Gagnep.

Wong 216 (BK 62477): flower of the red-flowered form of *E. reticulata* Gagnep.

Wong 217 (BK 62475): pod of the red-flowered form of *E. reticulata* Gagnep.

ACKNOWLEDGEMENTS

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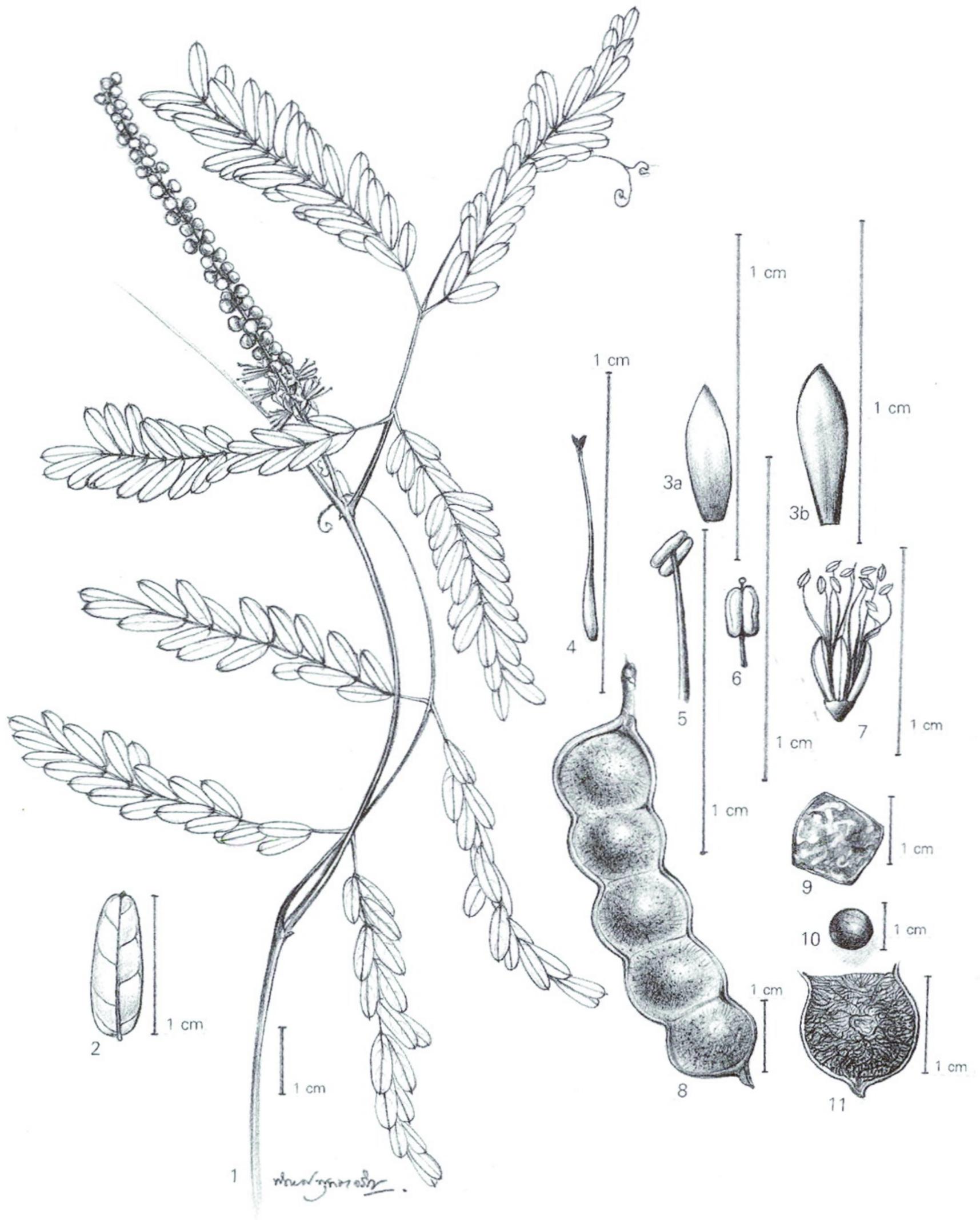


Figure 1. *Entada reticulata* Gagnep.: 1. branch with inflorescence 2. leaflet 3a. petal (green-flowered) 3b. petal (red-flowered) 4. pistil 5. stamen 6. anther 7. floret 8. pod 9. endocarp 10. seed 11. segment of pod. Wong 214 (BK 62476), Wong 215 (BK 62479) and Wong 216 (BK 62477).



Figure 2. *Entada reticulata* Gagnep. (red-flowered).



Figure 3. *Entada reticulata* Gagnep. (green-flowered).



Figure 4. *Entada reticulata* Gagnep., pod.