

Telosma procumbens (Apocynaceae): A new record to the Flora of India

Nath P.C.* & K. Pagag

Department of Botany, Sibsagar University, Joysagar, Sivasagar, Assam, India.

*E-mail: pnath_123@yahoo.co.in

Abstract: *Telosma procumbens* (Blanco) Merr. (Apocynaceae) is reported for the first time from India. A detailed description along with a color photo plate of the species and its dissected flower parts are provided herein to facilitate the identification of the species.

Key words: Angiosperm, climber, India, flora addition, Tinsukia.

Introduction

The genus *Telosma* Coville belongs to the tribe Marsdenieae (Asclepiadoideae, Apocynaceae; Takhtajan, 2009) and is represented by about ten species distributed in tropical Asia and tropical Africa (POWO, 2023) including Madagascar. In India, the genus is represented by two species *T. cordata* (N.L.Burman) Merr., and *T. pallida* (Roxb.) Craib (Eflora India, 2024).

During the course of exploration of plant diversity in Tinsukia District, the first author collected a species of Apocynaceae with beautiful inflorescences, twining shrub, growing on roadsides about 10 km from Tinsukia town, on the way to Duliajan, Assam. After a thorough examination of the live specimens and consultation of the literature (Merrill, 1912, 1918; Brown, 1921; Li *et al.*, 1995), the species was identified as *Telosma procumbens* (Blanco) Merr. (Table 1.). The species is native to the Philippines, parts of southeastern China, Thailand and Vietnam (POWO, 2023), and represents here a new addition to the Flora of India.

Received: 21.04.2023; Revised & Accepted: 30.08.2024

Published Online: 30.09.2024

Materials and Methods

Standard methods were followed for the collection and preparation of herbarium specimens (Jain & Rao, 1977). Flowering specimens were collected during the spring season, photographs were captured (Canon EOS 450D), field data was recorded and voucher specimens were prepared. Flowers were dissected and observed under the microscope (Labomed CZM6). Detailed morphological observations were recorded and described. Relevant taxonomic literatures and protologues were consulted. Herbarium specimens were consulted (K, P). The voucher specimen will be deposited in the ASSAM Herbarium, Shillong.

Taxonomic Treatment

Telosma procumbens (Blanco) Merr., Phillip. J. Sci., C7: 243. 1912. *Pergularia procumbens* Blanco, Fl. Phillip: 201. 1837. **Fig.1**

Terrestrial woody climber; stem specked with lenticels, glabrous, terete or slightly pubescent. Roots tap and branched, Leaf lamina ovate to oblong or oblong-elliptic, 6–13 × 4–6 cm, apex acute, slightly curved, margin entire, base broadly cuneate to subcordate; petioles 1.5–3.5 cm long. Inflorescences cymose, axillary, umbelliform, 18–30-flowered, peduncle 1.5–3 cm long. Flowers greenish-yellow, c. 1.5 cm long, odorless; pedicel 1.5–2.5 cm long. Calyx 5-partite, c. 3 mm long, connate at the base. Corolla lobes 5, oblong, c. 8 × 5 mm, twisted, margin and inner side of corolla with trichomes, tube as long as corolla lobes, with

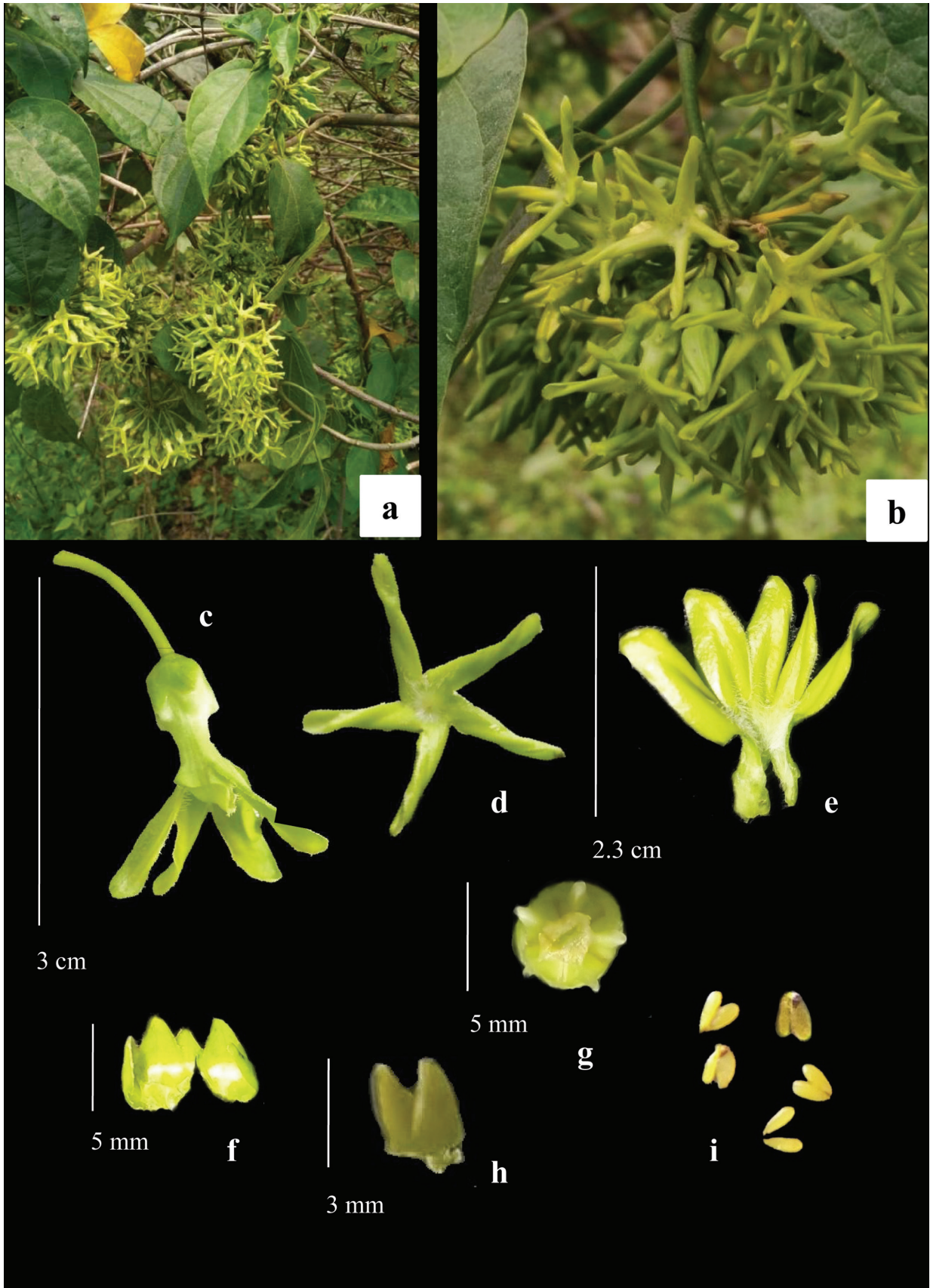


Fig. 1. *Telosma procumbens* (Blanco) Merr.: **a.** Habit; **b.** Inflorescence; **c.** Flower-lateral view; **d.** Corolla-front view; **e.** Corolla-opened; **f.** Calyx-opened; **g.** Gynostegium; **h.** Ovary; **i.** Pollinaria.

Table 1. Morphological comparison of *Telosma procumbens* with allied taxa.

Characters	<i>T. cordata</i> (N.L. Burman) Merr.	<i>T. pallida</i> (Roxb.) Craib	<i>T. procumbens</i> (Blanco) Merr.
Stem	Glabrous, young pubescent, sparsely lenticillate	Densely pubescent	Glabrous, young branchlets pubescent, lenticillate
Petiole	c. 1.55 cm, pubescent	2–5 cm, pubescent	1.5–3.5 cm, pubescent
Leaves	Ovate, base cordate, apex acuminate; lateral veins 6 pairs, pubescent	Ovate-oblong, base deeply cordate, apex shortly acuminate, lateral veins 4–5 pairs, densely pubescent.	Ovate or oblong-elliptic, base cuneate to sub cordate, apex acuminate, lateral veins 4–6 pairs, pubescent
Peduncle	0.5–1.5 cm	0.5–1.2 cm	1–3 cm
Pedicels	0.7–1.5 cm long	c. 1 cm long, pubescent	1–1.5cm
Petals	Oblong, ciliate	Oblong, glabrous	Lanceolate, twisted, edges ciliate
Crown	Yellowish green	Pale cream	Greenish or greenish yellow
Odour	Odour less	Fragrant	Odour less
Petal lobes	Longer than corolla tube	Equal or shorter than corolla tube	Longer than corolla tube, upright, twice as long as long as corolla tube
Corona lobes	Shorter than anther appendages	Equal or longer than anther appendages	Equal to anther appendages
Pollinia	Oblong or reniform	Oblong	Oblong-lanceolate

trichomes in the throat; glabrous outside. Corona lobes 5, acuminate, as high as anther appendages, abaxially notched; membranous anther appendages incurved, filaments connate into a tube forming gynostegium; pollinia oblong-lanceolate, yellow, caudicles maroon, erect. Carpels 2, free, style-head pentangular, upper part short-conical.

Habitat: This species was found creeping on some shrubs nearby the road in the forest.

Flowering & fruiting: Flowering in April and fruiting from June to August.

Distribution: India, China, Philippines, Vietnam.

Specimens examined: INDIA, **Assam**, Tinsukia District, 10km southwest of Tinsukia town towards Duliajan on the roadside, 16.04.2023, P.C. Nath Sibcoll 225 & 226 (ASSAM). PHILIPPINES, *S. loc.*, 04.06.1948, Jose Vera Santos 4534 (US

[03268420] digital image); *S. loc.*, June 1914, R.C. McGregor 18549 (P [P03858920] digital image); *S. loc.*, June 1922, M. Ramos 40927 (P [P03858913] digital image).

Acknowledgements

The authors are thankful to the Authority of Sibsagar University for providing research facilities. The authors are also grateful to Priyanuj Shekhar Nath for his support during the field trip.

Literature Cited

- BROWN W.H. 1921. *Minor products of Phillipine forests*. Volume II. Bulletin No. 22. Department of agriculture and natural resources, Bureau of science, Manilla.
- BINGTAO LI, MICHAEL G. GILBERT & W.D. STEVENS 1995. Asclepiadaceae. In: WU Z.Y. & P.H. RAVEN (eds.), *Flora of China*. Volume 16. Beijing Science Press, Beijing and Missouri Botanical Garden Press, St. Louis. pp. 189–270.

204 *Telosma procumbens* (Apocynaceae) – a new record to the Flora of India

- E-FLORA INDIA 2024. *Checklist of plants of India*. Facilitated by the Botanical Survey of India. Available at: <https://efloraindia.bsi.gov.in> (Accessed on 18.02.2024).
- JAIN S.K. & R.R. RAO. 1977. *A handbook of field and herbarium methods*. Today and tomorrow's Printers and Publishers, New Delhi.
- MERRILL E.D. 1912. *A flora of Manilla*. Bureau of printing, Manilla.
- MERRILL E.D. 1918. *Species Blancoanae, a critical revision of the Phillipine species of plants described by Blanco and by Llanos*. Department of Agriculture and Natural Resources, Bureau of Science, Manilla.
- POWO 2023. *Plants of the World online*. Facilitated by the Royal Botanic Gardens, Kew. Available at: <https://plantsoftheworldonline.org> (Accessed on 18.4.2023).
- TAKHTAJAN A. 2009. *Flowering plants*. Springer, St. Petersburg.