

Distributional status and a new synonym for *Corchorus pseudo-olitorius* (Malvaceae) in India

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Abstract: The distributional status of *Corchorus pseudo-olitorius* Islam & Zaid (Malvaceae) in India is reassessed based on critical examination of herbarium specimens and relevant literature. *Corchorus tirunelveliensis* Kalaiselvan, Selvak. & Rajakumar is found to be conspecific to *C. pseudo-olitorius* and is consequently reduced to synonymy. This communication presents details of the taxonomy, habitat, distribution, and phenology of *C. pseudo-olitorius*, along with photographs.

Keywords: *Corchorus*, India, New synonym, Tamil Nadu, Taxonomy

Introduction

The genus *Corchorus* comprises 74 species (POWO, 2023). In India it is represented by nine species (Choudhary *et al.*, 2016; Mao & Dash, 2020), of which eight species are known to occur in the state of Tamil Nadu (Narasimhan & Irwin, 2021). In 2016, Kalaiselvan *et al.* described a new species, *Corchorus tirunelveliensis* Kalaiselvan, Selvak. & Rajakumar from the Tirunelveli district of Tamil Nadu, India. While exploring the narrow endemics of Tamil Nadu, the authors came across *C. tirunelveliensis*. A more detailed examination based on extensive field exploration across different parts of southern India and critical examination of type specimens revealed that the newly described species is conspecific to *C. pseudo-olitorius*. Hence, *C. tirunelveliensis* is treated here as a synonym of *C. pseudo-olitorius*.

Corchorus pseudo-olitorius was originally collected from Hala, approximately 25 miles north of Hyderabad (Sindh), Pakistan, and was initially considered endemic to Pakistan (Islam, 1960). Subsequent collections revealed its extended distribution to Somalia, Kenya, Tanzania, and several parts of India. Singh and Viswanathan (1991) were the first to report this species from Delhi, thereby recording it for the flora of India; they also suggested that *C. pseudo-olitorius* might represent a natural hybrid between *C. olitorius* L. and *C. trilocularis* L. Mahapatra *et al.* (2003) reported this species from Tirunelveli District, Tamil Nadu. Subsequently, Khatun and Alam (2010), through differential chromosome banding and isozyme assays, clearly demonstrated cytogenetic and biochemical distinctions between *C. pseudo-olitorius* and *C. trilocularis*, indicating that the two taxa are genetically distinct species rather than hybrids.

Taxonomic Treatment

Corchorus pseudo-olitorius Islam & Zaid in Islam, *Biologia* (Lahore) 6: 174. 1960; Singh & Viswanathan, *Bull. Bot. Surv. India*, 33(1–4): 319. 1991; Mahapatra *et al.*, *Curr. Sci.* 84(8): 984. 2003; Balkrishna *et al.*, *Indian J. Forest.* 43(3): 240. 2020. *Type:* PAKISTAN, **Hala**, Hyderabad (Sindh), 01.11.1958, A.S. Islam H.3206/58 (iso K [K000687608 digital image!]).

Corchorus tirunelveliensis Kalaiselvan, Selvak. & Rajakumar, *Ind. J. Forest.* 39: 87. 2016. **syn. nov.** *Type:* INDIA, **Tamil Nadu**, Tirunelveli, Moolaikaraipatti, 30 m, 18.01.2012, Kalaiselvan,



Fig. 1. *Corchorus pseudo-olitorius* Islam & Zaid: **a.** Flowering twig; **b.** Leaf—adaxial view; **c.** Leaf—abaxial view; **d.** Capsule; **e** & **f.** Flower. *Corchorus olitorius* L.: **g.** Flowering twig; **h.** Capsule; **i** & **j.** Flower with stamens (photos by P.B.S. Yadav).

Selvakumari & Rajakumar 2304 (holo JCH!; iso MH [MH00003552, MH00003553!]). **Figs. 1–3**

Annual herbs; stem erect, cylindric, 25 to 80 cm tall, unbranched or scarcely branched, glabrous. Leaves oblong, oblong-lanceolate, 3–4.3 × 0.8–1.2 cm, apex acute, margins serrate, base cuneate, usually with a pair of basal setae, 1–2 mm long; petioles slender, 5–7 mm long, glabrous. Stipules subulate, 1–2 mm long. Flowers axillary, usually solitary or 2–3 in cluster. Sepals 5, linear-oblong, c. 4 mm long, finely ciliate along margins, torulose. Petals 5, obovate, 4–5 mm long, ciliate at base. Stamens many, about 20. Ovary linear, 2–2.5 mm long, setulose. Capsules cylindric, 2–3 cm long, setulose, straight or slightly curved, splitting into 3 valves, tapering into a short apical beak. Seeds many, angular, verrucose, brownish black.

Flowering & Fruiting: Flowering from September to December; fruiting from December to January.

Habitat: Dry lands, in agriculture crop fields, urban areas.

Note: In India, this species is currently reported only from Delhi and Tamil Nadu. However, it is often overlooked during field surveys due to its close morphological similarity with *C. olitorius*. Such misidentification may have led to underestimation of its actual distribution range. Careful taxonomic scrutiny is therefore essential for accurate documentation of the species.

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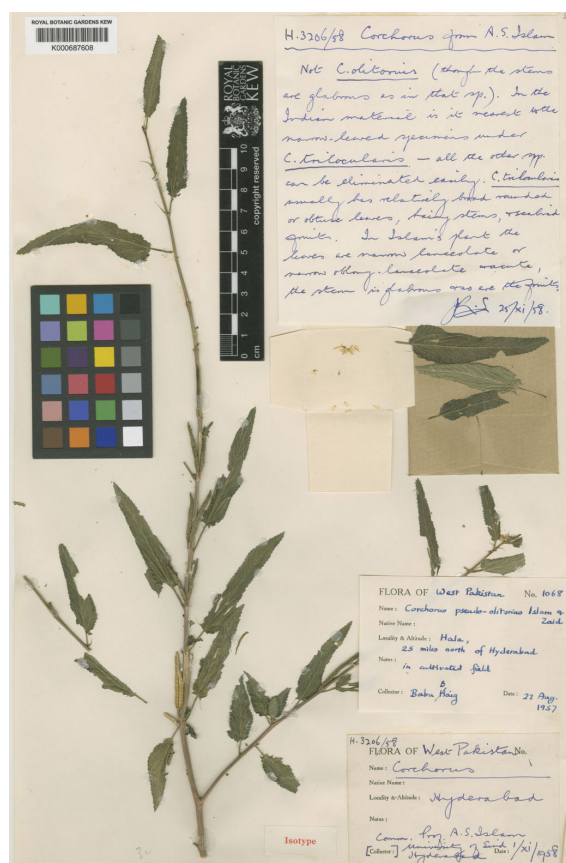


Fig. 2. Isotype of *Corchorus pseudo-olitorius* Islam & Zaid (K [K000687608]). © The Board of Trustees of the Royal Botanic Gardens, Kew.



Fig. 3. Isotype of *Corchorus tirunelveliensi* Kalaiselvan, Selvak. & Rajakumar (MH [MH00003552]) © Southern Region Centre, Botanical Survey of India, Coimbatore.

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