



A new species of *Lindernia* (Linderniaceae) from India

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Abstract

A new species, *Lindernia tamilnadensis* is described and illustrated from Vijayanarayanan, Tirunelveli district of Tamil Nadu, India. The species shows similarity with a worldwide distributed species, *Lindernia rotundifolia* in its leaf and seed characters but differs mainly in comparatively smaller floral parts, lanceolate calyx lobes, in the absence of trichomes at the base of the anterior corolla lobes, the presence of staminodal appendages, undeflexed fruiting pedicels and globose capsules. Detailed description, illustration and other relevant notes are provided.

Key words: Scrophulariaceae, Linderniaceae, South India

Introduction

The genus *Lindernia* Allioni (1766:178, t5) comprises about 100 species (Fischer 1999), distributed almost throughout the tropical and temperate regions of both the old and new world (Lewis 2000). The centers of diversity of *Lindernia* are situated in Africa (Fischer 1992) and South East Asia (Philcox 1968).

This genus was originally placed in the Scrophulariaceae *sensu lato*. Based on molecular studies, Rahmanzadeh *et al.* (2005) segregated *Lindernia* along with 12 other genera from the rest of Scrophulariaceae to a new family Linderniaceae. According to him, the new family forms a monophyletic group characterized by a unique abaxial staminal filament with a club shaped appendage.

A preliminary studies on the genus *Lindernia* shows that there are 30 taxa reported from India (28 species, 1 subspecies and 1 variety), among them 25 are known from South India (Mukherjee 1945, Sivarajan & Mathew 1983, Sivarajan 1983, Murugan *et al.* 2002, Tandyekkal & Mohanan 2010, Ratheesh *et al.* 2012).

During the present study for the revision of the genus in Peninsular India, we came across good population of an interesting *Lindernia* species growing along with several other herbaceous angiosperms along the banks of occasional ponds flooded by monsoon rains. Critical comparison with allied taxa has confirmed this to be a new species and is described here. It is closely related to *L. rotundifolia* (Linnaeus) Alston (1931:214) but can be distinguished by the characters shown in Table 1.

Taxonomy

Lindernia tamilnadensis M.G. Prasad & Sunojk., *sp. nov.* (Fig. 1)

Diagnosis:—*Lindernia tamilnadensis* is related to *L. rotundifolia*, but differs mainly in comparatively smaller floral parts, in the absence of trichomes at the base of the anterior corolla lobes, the presence of staminodal appendages, undeflexed fruiting pedicels and globose capsules.

Type:—INDIA. Tamil Nadu: Tirunelveli district, Vijayanarayanan, 40 m, 18 March 2012, M.G. Prasad & P. Sunojkumar CU117880 (Holotype: CALI; Isotypes: CALI, MH).

Erect or procumbent tufted herb, up to 15 cm high, rooting from the basal nodes. *Stem* slender, weak, 4-angled, glabrous, highly branched from the base; internodes about 2.5 cm long. *Leaves* sessile, 0.5–1.5 × 0.4–1.2 cm, ovate,

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