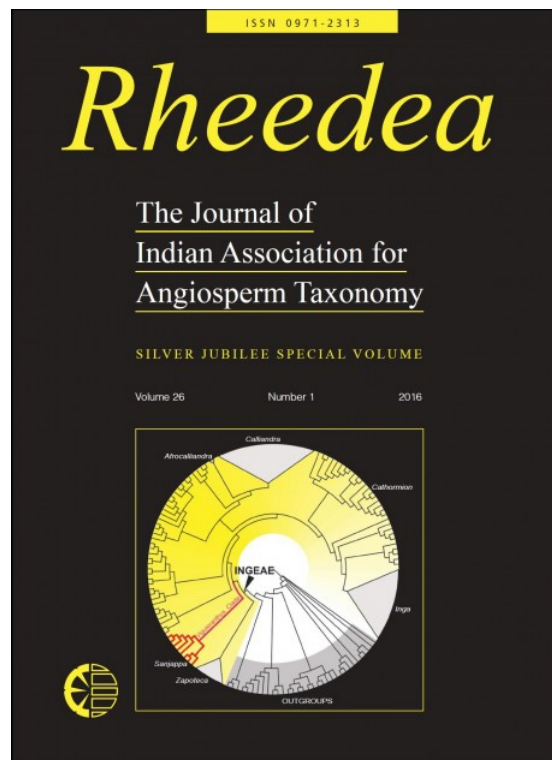




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# *Linaria canadensis* (Plantaginaceae): A new record for India

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## Abstract

*Linaria canadensis* (L.) Dum.Cours., a species native to North America, is reported here as a new distributional record for India from Tamil Nadu. Detailed description and photographs are provided to facilitate accurate identification.

**Keywords:** India, *Linaria canadensis*, Megamalai Hills, New Record, Tamil Nadu

## Introduction

*Linaria* Mill. (Plantaginaceae) is the largest genus of tribe Antirrhineae, native to temperate regions of Europe, northern Africa and Asia, comprising of *c.* 150 species in the world (Saerz *et al.*, 2004; Mabberley, 2008). During the floristic exploration in the Megamalai Wildlife Sanctuary located in Theni district of Tamil Nadu, we have collected an interesting specimen belongs to the family Plantaginaceae. After a critical examination of specimen with pertinent literature (Rhoads *et al.*, 1993; Magee & Ahles, 2007; Mohlenbrock, 2014), it was identified as *Linaria canadensis* (L.) Dum.Cours., a species so far not reported from India, and hence reported here as an addition to the flora of India along with detailed description, photographs and field notes to facilitate easy identification.

***Linaria canadensis*** (L.) Dum.Cours., Bot. Cult. 2: 96. 1802. *Antirrhinum canadense* L., Sp. Pl.: 618. 1753. *Nuttalanthus canadensis* (L.) D.A. Sutton, Rev. Tribe Antirrhineae: 457. 1988.

### Fig. 1

Herb, erect, 40–70 cm high. Stems terete, ribbed, glaucous, *c.* 5 mm in diam., hollow; internodes 0.5–2.5 cm long, much-elongated in flowering branch. Leaves sessile or subsessile, usually opposite, alternate towards apex, linear to linear-oblong, 0.3–3 cm long, obtuse at base, entire, recurved at margins, obtuse to acute at apex, slightly succulent, glaucous on both surfaces. Racemes 10–20 cm long; pedicels cylindrical, to 1.5 cm long, glandular-hairy; bracts linear-lanceolate, 0.5–1 cm long, acute at apex, glandular-hirsute. Calyx campanulate, 5-lobed; lobes divided up to base, imbricate, unequal, ovate-lanceolate,

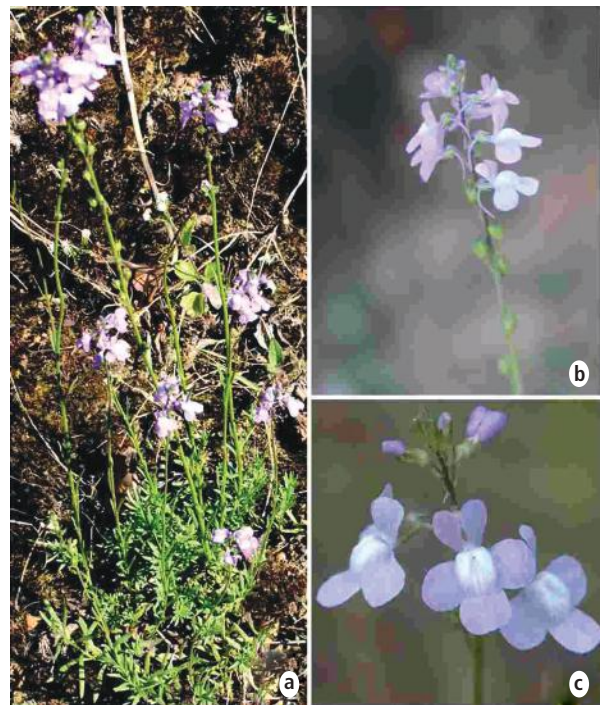


Fig. 1. *Linaria canadensis* (L.) Dum.Cours.: a. Habit; b. Inflorescence; c. Flowers close-up.

narrowly obtuse to acute at apex, glandular-hairy. Corolla bilipped, violet; upper lip deeply 2-lobed, erect; lower lip 3-lobed, divided up to half of lip; tube *c.* 0.5 cm long, base elongated into a spur; spur cylindrical, up to 2.5 mm long, sparsely pubescent. Stamens 4, didynamous, inserted; anthers *c.* 0.2 mm long. Ovary ovoid or globose, *c.* 0.2 mm in diam., glandular-hairy; style apical, cylindrical, *c.* 0.2 mm long, persistent; stigma simple. Capsules globose, *c.* 1.2 mm, hairy with

persistent style, 2-celled, opening by apical valve. Seeds many, minute, rugose, grey to brown.

*Flowering & Fruiting*: February–July.

*Habitat*: Grows in tea plantations and on roadsides between 1400 and 1700 m elevation.

*Specimen examined*: INDIA, **Tamil Nadu**, Theni district, Upper Manalar, 1600 m, S. Karuppusamy & V. Ravichandran 1441 (MH & The Madura College Herbarium, Madurai).

*Distribution*: Native of North America (Canada and USA), naturalized in European part of Russia and probably an escape in India (Tamil Nadu).

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