Chamaecrista rotundifolia (Leguminosae – Caesalpinioidae) – A new record for India

K. Sankara Rao*, H.R. Bhat1 and Y.N. Seetharam2
Centre for Ecological Sciences, Indian Institute of Science, Bengaluru – 560 012, Karnataka, India.
1655/6, 7th Cross, Bandappa Street, Yeswanthapur, Bengaluru – 560 022, Karnataka, India.
2Department of Biological Science, Bangalore University, Bengaluru – 560 056, Karnataka, India.
*E-mail: bharadwaj@ces.iisc.ernet.in

Abstract
Chamaecrista rotundifolia (Pers.) Greene, hitherto known to occur in tropical America is reported here as a new record for India from Bengaluru, Karnataka. A brief description with photographs of the herbarium specimen as well as the live plant is provided.

Keywords: Chamaecrista rotundifolia, India, New Record

Introduction
Chamaecrista Moench (Leguminosae: Caesalpinioidae – Cassieae) is represented by c. 330 species, usually of herbs and rarely shrubs, that are confined to tropical and temperate America to East Asia with highest diversity in Brazil (Lewis et al., 2005; Mabberley, 2008). Chamaecrista differs from Cassia s. str. in having distichous phyllotaxy, radially symmetrical or asymmetrical flowers with all stamens straight having basifix and poricidal anthers. It differs from Senna in its 2 bracteoles, radially symmetrical flowers and uniform stamens; further, differs from both Cassia s. str. and Senna in having anther sutures fringed with interlocking hairs (Tucker, 1996).

During one of the field trips, the senior author collected a specimen of Chamaecrista growing wild in open localities amidst grasses and other small herbs at Hebbal, Bengaluru. A careful review of the Indian Floras and monograph on Indian subtribe Cassiinae (Singh, 2001) followed by confirmation of the identity by legume experts at Botanical Survey of India, Kolkata and Royal Botanic Gardens, Kew, revealed that the plant under study is C. rotundifolia (Pers.) Greene which was earlier known to occur in tropical America (Irwin & Barneby, 1982). Thus it constitutes a new record for India and hence this report.


Fig. 1. Chamaecrista rotundifolia (Pers.) Greene: a. Flowering twig; b. Stipules magnified.

Fig. 2. Chamaecrista rotundifolia (Pers.) Greene: a. Herbarium specimen showing the semi-erect habit, flowers and fruits; b. Bifoliolate leaf; c. Stipules.
Annual. Stem prostrate or semi-erect, up to 28 cm long, pubescent to sub-glabrous. Leaves bifoliolate; leaflets asymmetrically subrotundate to broadly obovate, up to 2.1 × 1.7 cm, obtuse at apex; main nerves 4 or 5; petioles c. 4 mm long. Stipules lanceolate-cordate, c. 7 × 3 mm. Flowers 1 – 2 (–3), axillary, c. 5 mm across; pedicels c. 2 cm long. Sepals lanceolate, up to 3 × 1 mm, usually ciliate at margins. Petals obovate, c. 4 × 2 mm, glabrous, yellow. Fertile stamens 5, straight, somewhat unequal; filaments very short; anthers linear-oblong, up to 2 mm long, erosestrate, glabrous, poricidal. Ovary pubescent. Pods linear, up to 3 × 0.4 cm, flat, hairy, dehiscing elastically; pedicels filiform, up to 3.5 cm long; seeds rectangular, 2 – 3 mm long, obliquely and transversely oriented, flattened.

Flowering & Fruiting: November – February.

Habitat: Open localities.


English: Round-leaf Cassia.

Note: Chamaecrista rotundifolia reported here is of the typical variety, i.e., var. rotundifolia.

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Literature Cited


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