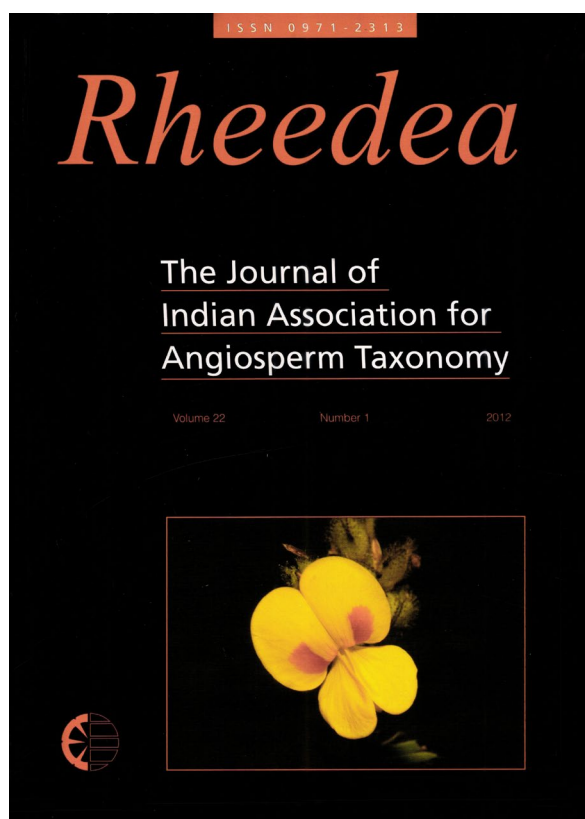




Chamaecrista rotundifolia (Leguminosae–Caesalpinioideae) – A new record for India

Sankara Rao K., Bhat H.R. & Y.N. Seetharam



How to cite:

Rao K.S., Bhat H.R & Y.N. Seetharam 2012. *Chamaecrista rotundifolia* (Leguminosae –Caesalpinioideae) – A new record for India. *Rheedia* 22(1): 66-67.

<https://dx.doi.org/10.22244/rheedia.2012.22.01.14>

Received: 19.06.2011

Revised and accepted: 26.03.2012

Published in print: 30.06.2012

Published Online: 30.06.2012



Chamaecrista rotundifolia (Leguminosae – Caesalpinioideae) – 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: Caesalpinioideae – 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 basifixed 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.

Chamaecrista rotundifolia (Pers.) Greene, Pittonia 4: 31. 1899. *Cassia rotundifolia* Pers., Syn. Pl. 1: 456. 1805.

Fig. 1, 2



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

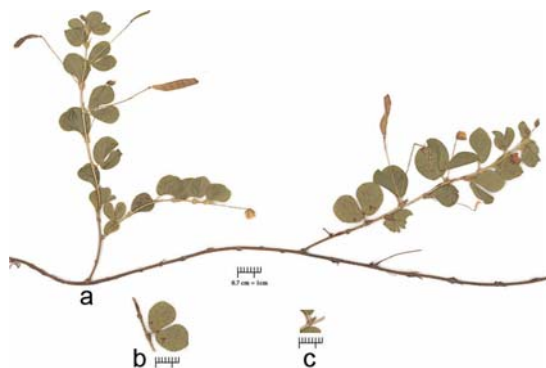


Fig. 2. *Chamaecrista rotundifolia* (Pers.) Greene: a. Herbarium specimen showing the semi-erect habit, flowers and fruits; b. Bifoliate leaf; c. Stipules.

Annual. Stem prostrate or semi-erect, up to 28 cm long, pubescent to sub-glabrous. Leaves bifoliate; 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, erostate, 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.

Specimen examined: INDIA, **Karnataka**, Bengaluru, Hebbal, near Veterinary College, November – December, 2010, Sankara Rao 2004 (CAL, JCB).

English: *Round-leaf Cassia*.

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

Acknowledgements

The authors are thankful to Dr. M. Sanjappa, former Director, Botanical Survey of India, Kolkata, the Director, Royal Botanic Gardens, Kew, for confirming the identity of the specimen and Dr. K.N. Gandhi, Harvard University, USA, for providing relevant literature. The senior author is also thank-

ful to Prof. K. Gopalakrishna Bhat, Poornaprajna College, Udupi, for encouragement and to the Chairman, Centre for Ecological Sciences, Indian Institute of Science, Bengaluru, for facilities.

Literature Cited

- Irwin, H.S. & R.C. Barneby** 1982. The American Cassiinae: A synoptical revision of Leguminosae tribe Cassieae subtribe Cassiinae in the New World. *Mem. New York Bot. Gard.* **35**: 455 – 918.
- Lewis, G., Schrire, B., Mackinder, B. & M. Lock (Ed.)** 2005. *Legumes of the World*. Royal Botanic Gardens, Kew.
- Mabberley, D.J.** 2008. *Mabberley's Plant-Book: A portable dictionary of plants, their classification and uses*. Third Edition. Cambridge University Press, Cambridge.
- Singh, V.** 2001. *Monograph on Indian Subtribe Cassiinae (Caesalpinioideae)*. Scientific Publishers (India), Jodhpur.
- Tucker, S.C.** 1996. Trends in evolution of floral ontogeny in *Cassia* sensu stricto, *Senna*, and *Chamaecrista* (Leguminosae: Caesalpinioideae: Cassieae: Cassiinae); A study in convergence. *Amer. J. Bot.* **83**: 687 – 711.

Received: 19.6.2011

Revised and Accepted: 26.3.2012