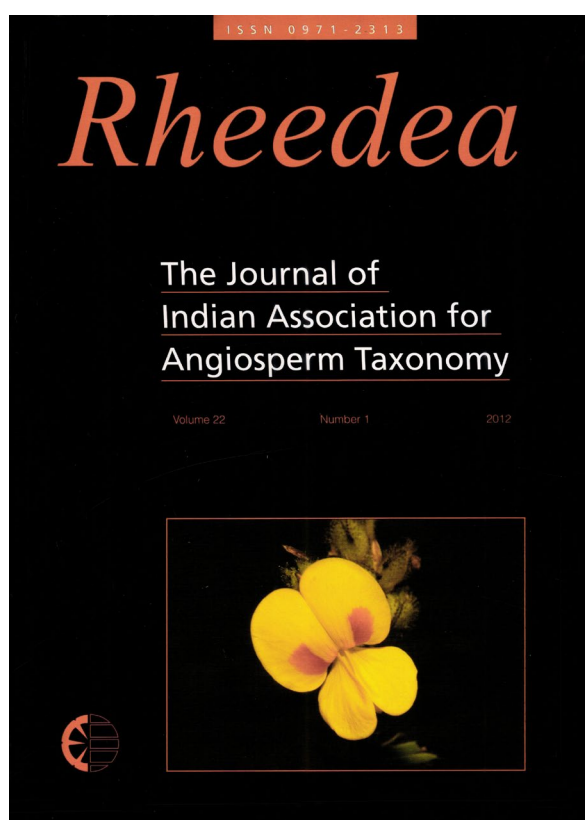




## *Anredera cordifolia* (Basellaceae) – An addition to the non-indigenous flora of India

Rasingam L. & P. Lakshminarasimhan



How to cite:

Rasingam L. & P. Lakshminarasimhan 2012. *Anredera cordifolia* (Basellaceae) – An addition to the non-indigenous flora of India. *Rheedeia* 22(1): 16-17.

<https://dx.doi.org/10.22244/rheedeia.2012.22.01.05>

Received: 01.06.2011

Revised and accepted: 15.03.2012

Published in print: 30.06.2012

Published Online: 30.06.2012



## *Anredera cordifolia* (Basellaceae) – An addition to the non-indigenous flora of India

L. Rasingam\* and P. Lakshminarasimhan<sup>1</sup>

Keystone Foundation, Kotagiri, Nilgiris – 643 217, Tamil Nadu, India. Present Address: Botanical Survey of India, Deccan Regional Centre, Hyderabad – 500 048.

<sup>1</sup>Central National Herbarium, Botanical Survey of India, P.O. Botanic Garden, Howrah – 711 103, West Bengal, India.

\*E-mail: rasingam@gmail.com

### Abstract

*Anredera cordifolia* (Ten.) Steenis belonging to the family Basellaceae is reported here as an addition to the non-indigenous flora of India from the Nilgiri Biosphere Reserve, Tamil Nadu. A detailed description and photographs are provided.

**Keywords:** *Anredera cordifolia*, Basellaceae, India, New Record, Nilgiri Biosphere Reserve

### Introduction

While preparing the pictorial field guide to the forest plants of Dhimbam Ghats (Sathyamangalam), one of us (LR) collected a climber with semi-succulent leaves and long white inflorescence at Asanur and later from Nehru Park, Kotagiri, Nilgiris. On critical examination with relevant literature, the plant was identified as *Anredera cordifolia* (Ten.) Steenis.

*Anredera* Juss. (Basellaceae), native to the tropical and subtropical Americas and Caribbean, comprises of 12 species (Eriksson, 2007). In India, so far only one species, viz., *A. baselloides* (Kunth) Baill. was known to occur (Santapau & Henry, 1973; T.K. Paul, pers. comm., 2011). *Anredera cordifolia*, commonly known as Heartleaf Madeira vine, Lamb's tail and Mignonette vine and is native to southern and central South America and cultivated as an ornamental in tropical and subtropical regions worldwide (Wagner *et al.*, 1999; Eriksson, 2007). This species is often naturalised and has also become an aggressive weed in southern Africa, Australia, Europe, southern North America, the Pacific Islands and New Zealand (Starr *et al.*, 2003). In India, it is known to occur in many hill stations of southern India but has not been reported in any of the earlier works (Kumari, 1987; Matthew, 1999; Reddy *et al.*, 2008). Hence, the species is reported here as an addition to the non-indigenous flora of India. A detailed description and photographs are provided for easy identification.

*Anredera cordifolia* (Ten.) Steenis, Fl. Males. 5: 303. 1957; R. Erikss., Kew Bull. 62: 311. 2007. *Boussingaultia cordifolia* Ten., Ann. Sci. Nat. Bot. Ser. 3, 19: 355. 1853.

**Fig. 1**

Vine, evergreen. Stem semi-succulent, producing small axillary tubers (bulbils). Leaves simple, ovate to subcordate, 2 – 8 × 1 – 7 cm, rounded or cordate at base, acute at apex, thin-fleshy; petioles very short. Racemes axillary, pendent, simple or branched, many-flowered; rachis 7 – 25 cm long; each flower subtended by a persistent bract; lower bracteoles broadly triangular, acute at apex, hyaline, persistent; upper bracteoles orbicular to broadly elliptic, shorter than perianth, flattened, greenish white. Flowers c. 6 mm across, fragrant; pedicels 2 – 3 mm long. Perianth inflexed, patent in anthesis, white; segments 5, ovate or oblong to elliptic, c. 3 × 2 mm, blunt at apex. Stamens 5, opposite perianth segment, white; filaments apically reflexed in bud, spreading in anthesis. Styles white, split into 3 stigmatic arms, each with 1 club-shaped or broadly ellipsoid stigma. Fruits subtended at base by persistent, patent perianth.

*Flowering & Fruiting:* June – October.

*Habitat:* On forest edges, roadside fences and fallow lands between 1000 and 2000 m; very common.

*Distribution:* India (Tamil Nadu); America, Australia, China, Malaysia, Pacific Islands and South Africa.



Fig. 1. *Anredera cordifolia* (Ten.) Steenis: a. Habit; b. Inflorescence.

*Specimens examined:* INDIA, **Tamil Nadu**, Erode district, Asanur (Araepalayam), way towards Geddesal, 4.4.2009, L. Rasingam KFK-1; Nilgiris district, Kotagiri, Nehru Park, 30.7.2010, L. Rasingam KFK-2 (CAL).

*Notes:* The plant becomes a noxious weed in many countries and propagates vegetatively by means of bulbils. It climbs vigorously over trees and shrubs and affects terrestrial ecosystems by halting the regeneration and succession processes (Prior & Armstrong, 2001).

#### Acknowledgements

The first author is thankful to the Directors, Keystone Foundation, Kotagiri, for constant support and encouragement. One of us (PL) is thankful to the Director, Botanical Survey of India, Kolkata, for facilities. We are grateful to Dr. Roger Eriksson, Department of Plant and Environmental Sciences, University of Gothenburg, Sweden, for his expert

opinion on the identity of the species and Dr. V.P. Prasad, former Indian Botanical Liaison Officer, Royal Botanic Gardens, Kew, for his help in procuring literature.

#### Literature Cited

- Eriksson, R. 2007.** A synopsis of Basellaceae. *Kew Bull.* **62**: 297 – 320.
- Kumari, G.R. 1987.** Chenopodiaceae. In: Henry, A.N., Kumari, G.R. & V. Chithra (Ed.), *Flora of Tamil Nadu, India*. Ser. I: Analysis, Vol. 2. Botanical Survey of India, Coimbatore. pp. 194 – 196.
- Matthew, K.M. 1999.** *The flora of the Palni Hills*. Part 2. The Rapinat Herbarium, Tiruchirappalli.
- Prior, S.L. & T.R. Armstrong 2001.** A comparison of the effects of foliar applications of glyphosate and fluroxypyr on Madeira vine, *Anredera cordifolia* (Ten.) van Steenis. *Plant Prot. Q.* **16**: 33 – 36.
- Reddy, C.S., Bagyanarayana, G., Reddy, K.N. & V.S. Raju 2008.** *Invasive alien Flora of India*. National Biological Information Infrastructure, USGS, USA. pp. 1 – 35. ([http://www.gisnetwork.org/IndiaInvasivePlants/documents/assessment\\_Invasive\\_India-jan08.pdf](http://www.gisnetwork.org/IndiaInvasivePlants/documents/assessment_Invasive_India-jan08.pdf)).
- Santapau, H. & A.N. Henry 1973.** *A dictionary of the flowering plants in India*. CSIR, New Delhi. p. 25.
- Starr, F., Starr, K. & L. Loope 2003.** *Anredera cordifolia*. United States Geological Survey Biological Resources Division: Haleakala Field Station, Maui, Hawai'i. pp. 1–6. ([http://www.hear.org/Pier/pdf/pohreports/anredera\\_cordifolia.pdf](http://www.hear.org/Pier/pdf/pohreports/anredera_cordifolia.pdf)).
- Wagner, W.L., Herbst, D.R. & S.H. Sohmer 1999.** *Manual of the Flowering Plants of Hawai'i*. Vol. 2. Bishop Museum Special Production 83. University of Hawaii Press and Bishop Museum Press, Honolulu. p. 381.

Received: 1.6.2011

Revised and Accepted: 15.3.2012