



# *Anredera cordifolia* (Tenore) Steenis (Basellaceae) - a new record for India

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## ABSTRACT

*Anredera cordifolia* (Tenore) Steenis is reported for the first time from India. It is presented here with updated nomenclature, brief description, notes on distribution for better understanding.

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## Keywords

*Anredera cordifolia*,  
Steenis,  
Twiner.

## Introduction

The genus *Anredera* Juss. is the largest one in the family Basellaceae, with about 12 species distributed throughout the tropical and subtropical Americas and Caribbean<sup>1</sup>. During intensive botanical surveys conducted along the hilly tracts of Dindigul district of Tamil Nadu, the author has collected some interesting specimens of the family Basellaceae. After a critical study based on relevant literature<sup>2</sup>, it has been identified and confirmed as *Anredera cordifolia* (Tenore) Steenis. Hitherto there is no authentic report on the occurrence of this species either from Tamil Nadu<sup>3-5</sup> or India<sup>6-23</sup> and hence, the present finding constitute a new record for India.

## Materials and Methods

Intensive field surveys were conducted between January 2008-December 2010 in various places of the Dindigul Hills of Tamil Nadu. All the collected specimens were poisoned, processed and labelled by standard herbarium methods<sup>24-25</sup>. All collections are deposited in Ashoka Trust for Research in Ecology and the Environment (ATREE) Herbarium, Bangalore.

A brief description, photographs and other related data are given here for easy identification of the taxa in the field.

*Anredera cordifolia* (Tenore) Steenis, Fl. Malesiana, Ser. 1, Spermatoph. 5(3): 303. 1957. *Boussingaultia cordifolia* Tenore in Ann. Sci. Nat., Bot. sér. 3, 19: 355. 1853; Shu, Fl. China 5: 445. 2003; Eriksson in Kew Bull. 62(2): 311. 2007. *B. gracilis* Miers, J. Bot. 2: 161. 1864. *B. gracilis* Miers f. *pseudobaselloides* Hauman, Anales Mus. Nac. Hist. Nat. Buenos Aires 33: 356. 1925. *B. gracilis* Miers f. *typica* Hauman, Anales Mus. Nac. Hist. Nat. Buenos Aires 33: 355. 1925. *B. gracilis* Miers var. *pseudobaselloides* (Hauman) L.H.Bailey, Gentes Herb. 8: 80. 1949. *Anredera cordifolia* (Tenore) Steenis subsp. *gracilis* (Miers) Xifreda & Argimón, Monogr. Syst. Bot. Missouri Bot. Gard. 74: 1245. 1999.

**Twiner;** branchlets sub fleshy. **Leaves** ovate-subcordate, 2–6 × 0.5–5.5 cm, thinly fleshy, base rounded or cordate, apex acute, producing small axillary tubercles (bulbils). **Racemes** many flowered, 7–25 cm long. **Bracts** shorter than pedicel, narrow, persistent. **Pedicel** 0.2–0.3 cm long. Lower bracteoles broadly triangular, hyaline, apex acute, persistent; upper bracteoles

greenish white, flattened, orbicular to broadly elliptic, shorter than perianth. **Flowers** ca. 0.5 cm across, fragrant. **Perianth** white, inflexed; tepals ovate or oblong - elliptic, 0.2–0.3 × 0.1–0.2 cm, apex blunt. **Stamens** white; filaments reflexed at apex in bud, spreading in anthesis. **Style** white, split to 3 stigmatic arms, each with 1 club-shaped or broadly elliptic stigma. **Fruits** not collected.

**Flowering:** June–October

**Distribution:** *Globally:* Tropics & Subtropical regions; *Locally:* Tamil Nadu (Palni Hills (Western Ghats) & Sirumalai Hills (Eastern Ghats)).

**Specimens examined:** Western Ghats: Tamil Nadu: Dindigul District: On way to Pannaikadu, 1035m, 17-8-2009, R. Kottaimuthu 291169 : Eastern Ghats: Tamil Nadu: Dindigul District: On way to Ponnuruki from Ooradi, 1085m, 22-6-2009, RKM 291102; On the way to Agasthiyarpuram from Sirumalai puthur, 1090m, 22-6-2010, R. Kottaimuthu 291790.

## Results and Discussion

*Anredera cordifolia* (Tenore) Steenis, native from Paraguay to southern Brazil and northern Argentina, is widely cultivated as an ornamental vine in tropical regions of the world<sup>26</sup>. Even though this climber is common in the Palani hills of Western Ghats and Sirumalai hills of Eastern Ghats it has not been reported by previous workers<sup>27-28</sup>.

Perusal literature survey revealed that none of the Indian flora has reported this species. Hence, the present collection is an addition to the flora of India.

*Anredera cordifolia* has become a major problem in some areas where it has been naturalised due to its invasiveness<sup>29</sup>. This species has become a major pest in places where it is cultivated, such as Hawaii, Australia, New Zealand, South Africa & other Pacific Islands<sup>30-31</sup>. It is difficult to control because of its rapid growth and very effective vegetative reproduction by means of the tubers because of this reason this species is considered an aggressively colonizing alien species. Now, for effective management of this invasive species, knowledge about its ecology, morphology, phenology, reproductive biology, physiology and phytochemistry is essential.

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