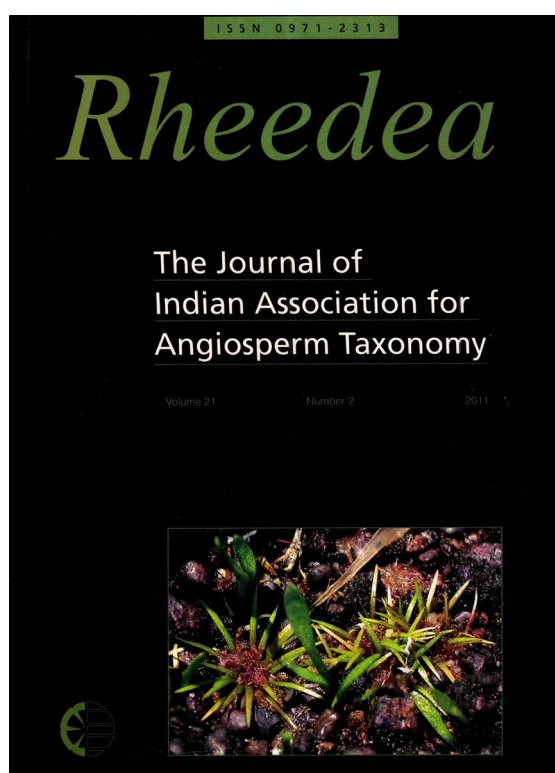




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## *Acrotrema uniflorum* var. *uniflorum* (Dilleniaceae) – A new record for India

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### Abstract

*Acrotrema uniflorum* Hook. var. *uniflorum*, a Sri Lankan endemic is reported for the first time for India from Pathanamthitta district of Kerala, southern Western Ghats. It is apparently similar to *A. arnottianum* Wight, an endemic species of the southern Western Ghats, but can easily be distinguished from the latter by its short-peduncled inflorescence, less number of stamens and green juvenile leaves. It is described here with photographs to facilitate easy identification.

**Keywords:** *Acrotrema uniflorum* var. *uniflorum*, Dilleniaceae, India, New Record

### Introduction

*Acrotrema uniflorum* was described by Hooker in 1837 based on Mrs. Col. Walker's collection from the Adams Peak in Sri Lanka. Since then it was treated variously by different authors (Thwaites, 1858; Hooker & Thomson, 1872; Trimen, 1893). Wadhwa (1996) included six varieties under this species and considered all of them as endemic to Sri Lanka. *Acrotrema uniflorum* Hook. var. *uniflorum* was collected during one of the floristic explorations in Moozhiyar forests, Pathanamthitta district, Kerala. The identity was confirmed by studying type specimens (*Thwaites* 265) housed at MH and photographs at L. Since *A. uniflorum* var. *uniflorum* is an endemic taxon of Sri Lanka, its collection from India forms a new distributional record for India. It is described here with photographs to facilitate easy identification.

**Acrotrema uniflorum** Hook., *Icon. Pl.* 2: t. 157. 1837; Hooker & Thomson, *Fl. Ind.* 1: 64. 1855 & in Hooker, *Fl. Brit. India* 1: 33. 1872; Thwaites, *Enum. Pl. Zeyl.*: 2. 1858; Trimen, *Handb. Fl. Ceylon* 1: 7. 1893; Wadhwa in Dassanayake, *Rev. Handb. Fl. Ceylon* 10: 126. 1996, var. **uniflorum**: Wadhwa in Dassanayake, *Rev. Handb. Fl. Ceylon* 10: 126. 1996. *A. uniflorum* Hook. var. *petiolare* Thwaites, *Enum. Pl. Zeyl.*: 2. 1858, '*petiolaris*'; Bentham & Hooker in Hooker, *Fl. Brit. India* 1: 33. 1872, '*petiolaris*'; Trimen, *Handb. Fl. Ceylon* 1: 7. 1893. **Fig. 1a, b**

Perennial herbs with woody root stocks. Stem short, erect, simple, rarely with stoloniferous runners. Leaves subradical, obovate or broadly obovate,

7 – 24 × 4.5 – 1.3 cm, obtuse or subcordate at base, crenate-dentate at margins, chartaceous, pilose above and along the nerves below, green above and pale below; lateral nerves 18 – 27 pairs, subhorizontal, raised below; petioles 5 – 7 cm long, broadly winged, glabrous above, pilose below. Racemes axillary, to 3 cm long, 2 – 6-flowered. Flowers 1.7 – 2.5 cm across, yellow; pedicels 4.5 – 7 cm long, hairy, red. Bracts c. 1.5 × 1 cm, bifid at apex, glabrous inside, villous outside. Sepals 5, ovate, c. 7 × 4 mm, glabrous inside, hairy outside. Petals 5, ovate, c. 10 × 6 mm, obtuse at apex, 3 – 5-nerved at base. Stamens 30 – 38; filaments to 2.5 mm long, glabrous; anthers erect, linear, c. 2 mm long, poricidal. Carpels 3, more or less united on the adaxial side; ovary c. 3 mm long, glabrous; style linear, c. 4 mm long, glabrous; ovules many. Capsules 0.8 – 1 cm long, 3-loculed, irregularly dehiscent; seeds many, reniform, punctate.

*Note:* *Acrotrema uniflorum* var. *uniflorum* is apparently similar to *A. arnottianum* Wight. It can be distinguished from the latter by the anomocytic stomata, sinuate epidermal cells, unicellular long narrow and tapering trichomes, short peduncles bearing 4 – 7 flowers and stamens ranging from 30 to 38. It is further distinguished by the juvenile green leaves while in *A. arnottianum*, they are red in colour turning green variegated with white along the midrib and lateral veins. This variety can easily be distinguished from the rest of the varieties of *A. uniflorum* by its much longer petiole (up to 7 cm long).

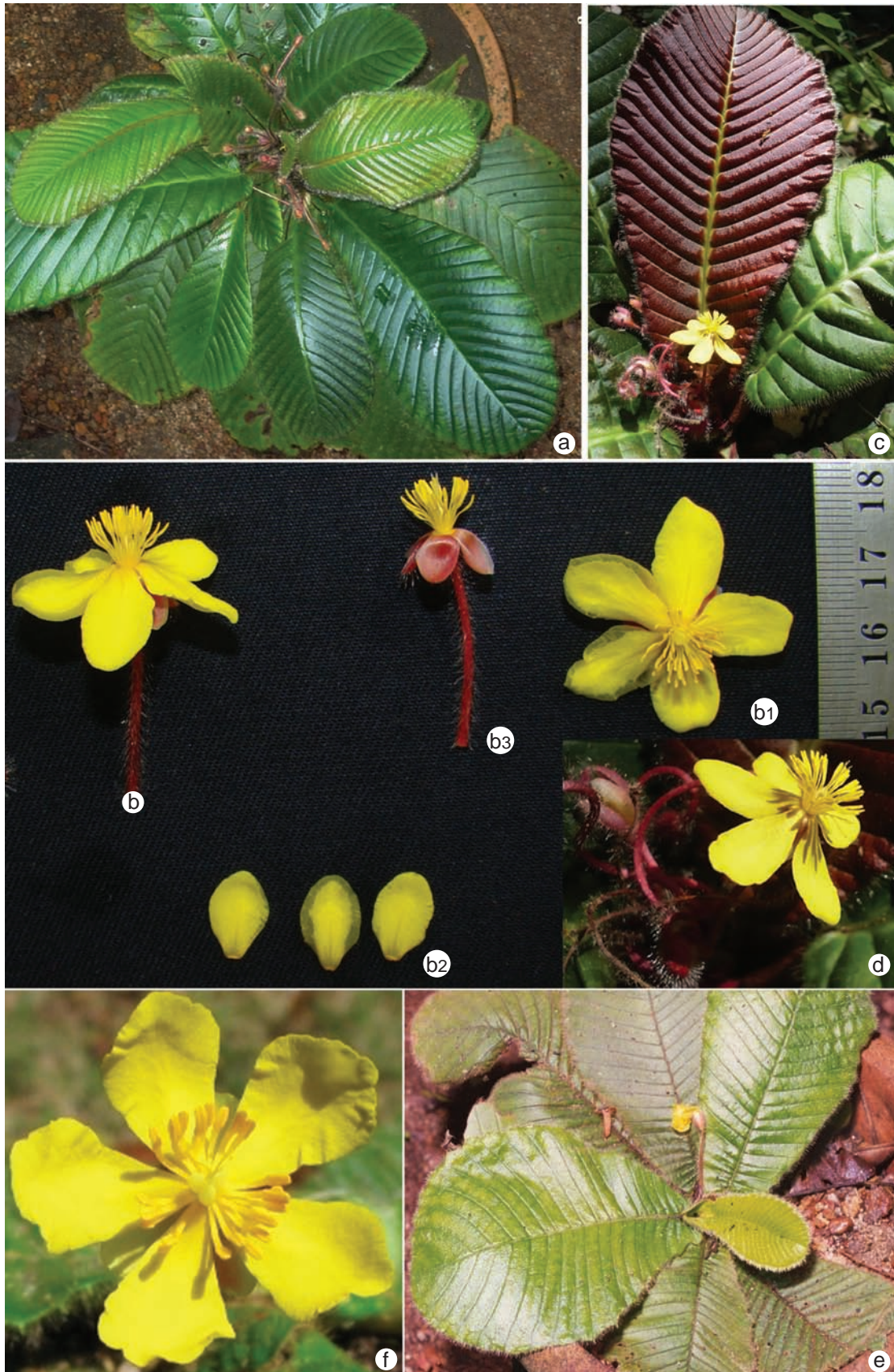


Fig. 1a, b & b1 – b3: *Acrotrema uniflorum* Hook. var. *uniflorum*; c & d: *A. arnottianum* Wight; e & f: *A. agastyamalayanum* E.S.S. Kumar *et al.*

Kumar *et al.* (2007) described another novelty in *Acrotrema* from Kerala, viz., *A. agastyamalayanaum*. The genus is represented by three taxa in India, viz., *A. agastyamalayanum*, *A. arnottianum* and *A. uniflorum* var. *uniflorum* (Fig. 1a – e) and they can be distinguished by the following key

1. Stems stoloniferous..... 2
1. Stems not stoloniferous **A. agastyamalayanum**
2. Peduncles to 3 cm long; stamens 50 – 70  
.....**A. arnottianum**
2. Peduncles 9 – 14 cm long; stamens 30 – 38  
.....**A. uniflorum** var. **uniflorum**

*Flowering & Fruiting:* Throughout the year.

*Habitat & Ecology:* It is a highly variable species found in the forest of wet zone in shady moist places between 450 and 1300 m in Sri Lanka (Wadhwa, 1996). It is located at about 300 m elevation in Moozhiyar forest, along the steep precipice amidst *Ficus hispida*, *Adiantum latifolium*, *Tectaria* sp., *Pteris* spp., *Osbeckia virgata* and *Melastoma malabathricum*.

*Specimens examined:* INDIA, Kerala, Pathanamthitta district, Moozhiyar, 17.3.2010, Roy & Renjith 69292 (TBGT).

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