

NEW ADDITIONS TO THE FLORA OF ALAPPUZHA DISTRICT, KERALA STATE

New distribution Record to Flora of Alappuzha District, Kerala.

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Abstract- The occurrence of *Andrographis macrobotrys* Nees. (Acanthaceae), *Canthium angustifolium* Roxb. (Rubiaceae), *Hoya wightii* Hook.f. (Asclepiadaceae), *Premna serratifolia* L.(Verbinaceae) and *Strobilanthes hamiltoniana* (Steud.) Bosser & Heine (Acanthaceae) are reported from different sacred groves of Alappuzha district, Kerala.

Key words: *Andrographis macrobotrys*, *Canthium angustifolium*, *Hoya wightii*, *Premna serratifolia*, *Strobilanthes hamiltoniana*.

Introduction

Alappuzha is the smallest district in Kerala referred to as the Venice of the East by the immense of natural beauty. Regarding the Western Ghats, Alappuzha is the only districts which have no forest cover or mountain range. The Earth summits and different projects are aimed at the conservation and protection of biodiversity from the local level. The *Flowering Plants of Alappuzha* was good works on flowering plant diversity of Alappuzha district have a better understanding to the local plant species [1]. Due to incomplete documentation and lack of interest in taxonomy leads to the loss of plant species and promote the growth of invasive species.

Materials and Methods

The study was based on field observations and collections, by way of frequent visits during different seasons of the year to obtain taxonomic data for the identification of the plant species.

Result and Discussion

The following plants are collected from different region of Alappuzha district, namely

1. *Andrographis macrobotrys* Nees.(Acanthaceae)

Vernacular name: Uppali

Distribution in Kerala: Kollam, Palakad, Kozhikodu, Idukki, Pathanamthitta, Wayanad, Thrissur, Malappuram, Kannur.

Habit: Herb Habitat: Mostly seen in semi-evergreen forests.

Floral Description: The plant body is erect, sub shrub; stem solid, glabrous, coriaceous, leaves simple, lanceolate, petiole 6 mm long.

Inflorescence: racemes, upper axillary; Corolla pink with dark purple red blotches on lower lip. Calyx lobes 3 mm long, glandular hairy, corolla about 20 mm, tubular, upper lip entire, middle lobe of the lower lip broader than laterals. Fruit is a capsule of 25 mm long, linear oblong, glandular hairy, many seeded, glabrous.

Flowering & Fruiting: September-February

Specimen collected from: 24/06/2022 at Sree Govindhapuram Kshethram, Thirunalloor, Cherthala taluk of Alappuzha district (N09⁰⁴42.8785 and E076⁰²1.592).

The herbarium specimen was kept in Department of Botany (KUBH), University of Kerala, Kariavattom Voucher/Accession No: KUBH 11160.

2. *Canthium angustifolium* Roxb. (Rubiaceae)

Vernacular name: Kattaramullu(Malayalam).

Distribution in Kerala: Kollam, Idukki, Pathanamthitta, Kannur, Thiruvananthapuram, Malappuram, Kozhikkode, Thrissur, Wayanad

Habit: Shrub *Habitat:* Seen in moist deciduous, semi-evergreen and evergreen forests.

Floral description: Plant body erect, spines slender, leaves to 11 x 5 cm, lanceolate, acuminate, petiole 3-6 mm long, stipulate, villous within. Inflorescence: Short cymes, sessile. Flowers shortly pedicelled, calyx tube nearly truncate, corolla 5mm, lobes lanceolate, spreading, anthers strongly cuspidate, hispid at tip. Style 3 mm, densely bearded at middle. Fruit: Drupe, globose, blackish when ripen.

Flowering & Fruiting: March-May

Specimen collected from: 08/01/2022 at Haripad, Karthikapally Taluk of Alappuzha district (E0 76⁰²811.4 and N09⁰¹442.3).

Specimen was kept in the Herbarium of Department of Botany (KUBH), University of Kerala, Kariavattom Voucher/Accession no: KUBH 11159.

3. **Hoya wightii** Hook.f. (Asclepiadaceae)

Vernacular name: Ellodiyan (Malayalam)

Distribution in Kerala: Kannur, Wayanadu, Palakad, Idukki, Thiruvananthapuram, Pathanamthitta.

Habit: Climber

Habitat: Evergreen forests.

Endemism: South Western Ghats.

Description of plant: *Hoya wightii* (Asclepiadaceae) is a pendulous epiphyte mostly seen in the evergreen forest and endemic to the South Western Ghats with altitude of 1000-1600. The plants are basally woody, and with twining or pendulous stem developing adventitious roots from the internodes. The genus *Hoya* is characterized by persistent inflorescences with flowers having rotate corollas, staminal coronas with revolute margins, pollinia with pellucid margins, and narrow, spindle-shaped seeds without conspicuous wings. The leaves are fleshy and glabrous [3]. Flowers two to numerous in sessile clusters or in peduncled umbel like cymes [4]. Leaves simple, glabrous, opposite about 7X4 cm. Stem thick, petiole 2cm, flowers yellowish white, pedicellate, lobed. Corolla 5, about 2cm of fleshy lobes, deep purple, seeds 4.

Flowering and fruiting: April-August.

Specimen collected from: 29/04/2023 at EK Kavala, Cherthala Taluk of Alappuzha District (E076⁰ 1909.9 and N0 09⁰3854.4)

4. **Premna serratifolia** L. (Verbinaceae)

Vernacular name: Appel, munja, Indian headache tree

Distribution in Kerala: Kottayam, Kannur, Kozhikkode, Kasaragode, Thrissur, Ernakulam.

Habit: Under tree Habitat: Seen in moist sandy soil or scrub jungles along seacoasts and mangrove forests.

Floral description: Leaves simple, opposite, estipulate, petiolate, pubescent, elliptic, obtuse, apex acuminate, margin entire or subserrate, glabrous above except along the appressed midrib, chartaceous. Flowers bisexual, greenish-white, in terminal corymbose paniced cymes, bracteolate, calyx small, bilipped, 5 lobed, corolla tube short, stamens 4, didynamous condition inserted below the throat of corolla tube, anther ovate, ovary superior, 2-4-celled, ovules 4, style linear, bifid stigma. Fruit is a drupe, seated on the calyx, globose, purple, seeds oblong.

Flowering and Fruiting: January-November.

Specimen collected from: 16/09/2022 at Kainakary, Kuttanadu Taluk of Alappuzha district (E09.460081⁰ and N0 76.394413⁰).

Specimen was kept in the Herbarium of Department of Botany (KUBH), University of Kerala, Kariavattom Voucher/Accession no: KUBH 11158.

5. **Strobilanthes hamiltoniana** (Stued.) Bosser & Heine. (Acanthaceae)

Distribution in Kerala: Wayanad, Kozhikodu, Malappuram, Thrissur.

Habit: shrub Habitat: Garden escaper.

Floral description: *Strobilanthes hamiltoniana* (Stued.) Bosser & Heine is a branched woody medicinal plant (2). The plant body is about 1m high, branched, quadrangular. Leaves simple, 14X8 cm, opposite, ovate to elliptic, serrate, acuminate, glabrous, petiolate. Inflorescence is panicle, bracteates, Flowers purple to light violet, corolla tube 1 cm, Stamens 4, didynamous, connate at base, filaments are free, anther lobes small, dorsifixed. Ovary on a small disc, style slightly exerted, pubescent. Fruit is a capsule, seeds 4, ovate in shape.

Flowering and fruiting: October – February.

Specimen collected from: 01/05/2022 at Mullikulangara, Mavelikkara Taluk of Alappuzha district (E0 76⁰3233.8 and N0 9⁰1321.6)

Specimen was kept in the Herbarium of Department of Botany (KUBH), University of Kerala, Kariavattom Voucher/Accession no: KUBH 11157.

PLATE 1

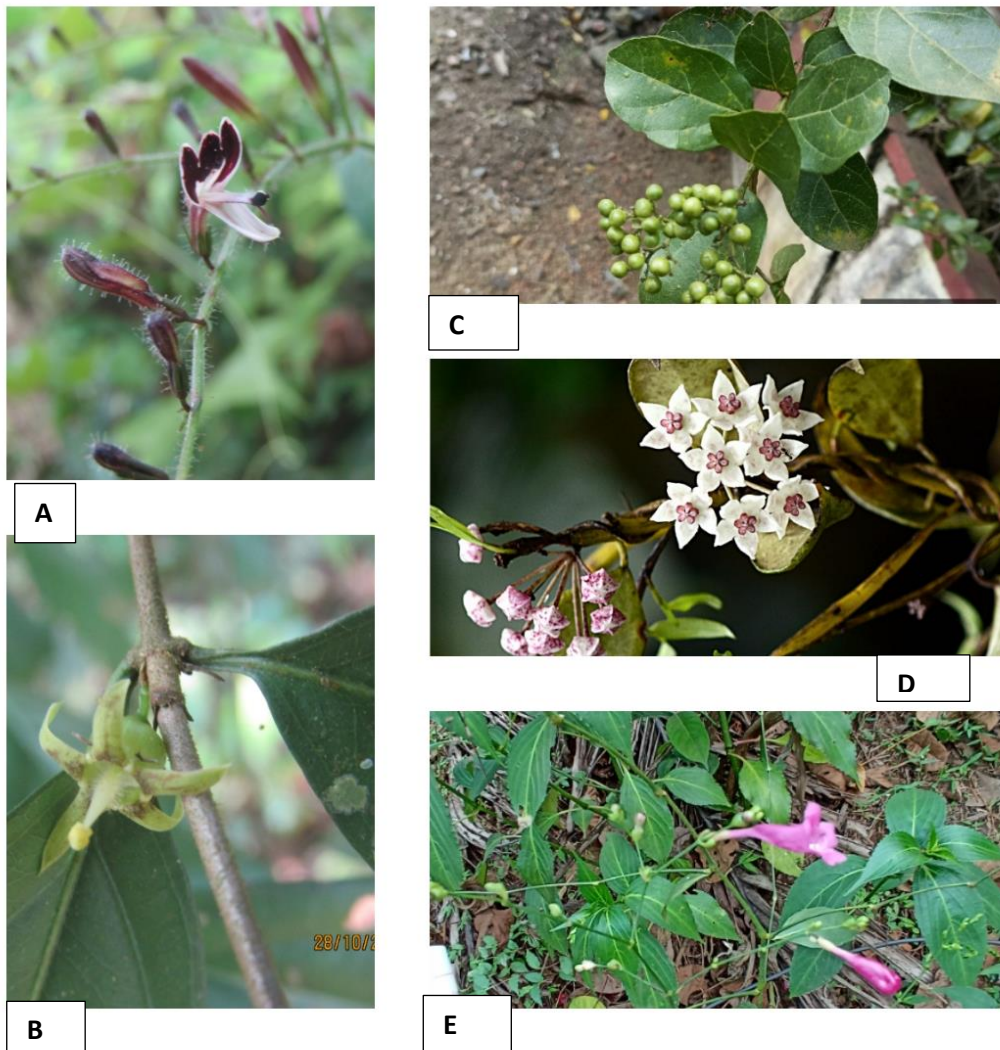


Fig A: *Andrographis macrobotrys* Nees. B. Flower of *Canthium angustifolium* Roxb..

C: *Premna serratifolia* L. habit D: *Hoya wightii* Hook.f. with flower E. Field image of *Strobilanthes hamiltoniana* (Stued.) Bosser & Heine.

CONCLUSION

Alappuzha is the smallest district in Kerala with a diverse topography. The present study reveals the occurrence of *Andrographis macrobotrys* Nees. (Acanthaceae), *Canthium angustifolium* Roxb. (Rubiaceae), *Hoya wightii* Hook.f. (Asclepiadaceae), *Premna serratifolia* L. (Verbinaceae) and *Strobilanthes hamiltoniana* (Stued.) Bosser & Heine (Acanthaceae) and are collected from different sacred groves of Alappuzha and it is the new additions to *Flora of Alappuzha district, Kerala*. Moreover, the lack of interest in botany and incomplete documentation leads to species loss and there is a need to advise the local people to conserve the *sacred groves* without disturbing the natural vegetation.

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