

**Queen Mary's College (Autonomous),
Chennai – 600 004.**



**NATIONAL SEMINAR
ON
“EXPLORING THE SCOPE OF PLANT SCIENCE”
(ESPS -2020)**



ABSTRACT & SOUVENIR

**Organised
By
Post Graduate and Research Department of Botany**

Date: 9th and 10th January 2020

SPONSORED BY : TANSCHÉ



SOUVENIR
of
NATIONAL SEMINAR
on
EXPLORING THE SCOPE OF PLANT SCIENCE
(ESPS- 2020)

on 9th & 10th JANUARY 2020



Organised by
POST GRADUATE AND RESEARCH
DEPARTMENT OF BOTANY
QUEEN MARY'S COLLEGE (A)
Chennai - 600 004,

Sponsored by
TANSCHÉ

ORGANIZING COMMITTEE OF THE SEMINAR

CONVENOR

Dr. S.Karpagam

ORGANIZING SECRETARIES

Dr. A.Vetriselvi

Dr. R.Vijayalakshmi

RECEPTION COMMITTEE AUDIO VISUAL COMMITTEE

Faculty

1. Dr. T.V.Poonguzhali
2. Dr. S. Shanmugavadivu
3. Dr. J. Amalorpavam
4. Dr. R. Sheela

Research Scholars

5. Anandhavalli
6. Iswariya G.

EDITING COMMITTEE

Faculty

1. Dr. S. Karpagam

Research Scholars

2. S.A.M. Kamalasanankari.
3. V.Ramya

CATERING AND HOSPITALITY

Faculty

1. Dr. A. Vetriselvi
2. Dr. R. Vijayalakshmi

STUDENTS OF I and II M.Sc. BOTANY

REGISTRATION COMMITTEE CERTIFICATE COMMITTEE

Faculty

1. Dr. R.Sridhar
2. Dr. V. Meenatchi Sundaravalli
3. Dr.A.M Sabitha rani

Research Scholars

4. S. Dorathy Selva Jeba Pritha
5. S. Sangeetha

SPONSOR COMMITTEE

Faculty

1. Dr. S. Karpagam
2. Dr. A. Vetriselvi
3. Dr. R. Vijayalakshmi

reared as ornamentals for their shape, orientation of spines and for its beautiful blooms and edible fruits.

The documented cacti specimens were collected and described taxonomically. The growth habits keep varying due to environmental conditions and hence utmost attention has been given to describe them. Spines orientations were extensively studied under high magnification microscope. As this study on cacti is almost a pioneering attempt in Chennai which yielded a very fruitful results that signifies research on cactus could be a promising one and still more explorations on various aspects on cactus may be extended in future.

Keywords: Cactus, Taxonomy, Spines, Microscopic Studies.

4. A Note on *Pamburus Missionis* (Wight) Swingle (Rutaceae) - A Lesser Known Evergreen Tree Species Native to Tamil Nadu

**ABDUL KADER S., DARWIN A., DEVARAJAN P.T., SANTHANAPANDI P.
AND WASIM AKRAM, S. A.**

Department of Plant Biology & Plant Biotechnology, Presidency College (Autonomous)
(Affiliated to University of Madras), Chennai - 5. Ecosociety of India, Tambaram.

ABSTRACT

Robert Wight in 1833 described a new species from the sandy coastal regions of South India as *Limonia mission is* Wight (Rutaceae) but this species was later transferred to the genus *Atalantia* as *Atalantia mission is* by Oliver in 1861. Again, *A. mission is* Oliv. was transferred to *Pamburus mission is* in 1916 by Walter T. Swingle but Gamble and Fischer (1921) had retained the name *A. mission is* Oliv. in their publication '*The Flora of the Presidency of Madras*'. The genus *Atalantia* Correa is a wild relative of *Citrus* L. genus and hence *Atalantia* species are used as rootstocks for grafting purposes to produce commercially important Citrus fruit trees. Of the 4 *Atalantia* species reported by Gamble and Fischer (1921), *A. monophylla* (L.) DC. is a common species while *A. mission is* (Wight) Swingle is not common. It was the second author who brought the specimens of *A. missionis* Oliv. [as *A. monophylla* (L.) DC.] for identification to the first author who sees this specimen first time. While checking with *The Flora of the Presidency of Madras*, it was identified as *A. missionis* Oliv. – an uncommon species. Therefore, we were interested in studying this species in detail regarding its distribution, botanical characters etc. Intensive field studies were carried out in Kancheepuram District in Tamil Nadu, South India; specimens were collected, examined, taxonomical data recorded and herbarium prepared. Photographs were taken. Data were also gathered from the literature. *Pamburus mission is* (Wight) Swingle is distributed in Tamil Nadu and Sri Lanka near the Coast and in dry regions. In Tamil it is called 'Kuruntu'. The Type specimen was collected from the sandy coastal region in Thanjavur district of Tamil Nadu. We have seen this species abundantly growing in Agaramthen sacred grove, near the Lake and Palanthandalam Tropical Dry Evergreen Forest. Among the population, two big trees with GBH 1.18 m and 7.5 height, 71.3 cm and 6 m height respectively were recorded. It is a much branched small

armed evergreen tree with solitary axillary stout spines of up to 7.8 cm long. Leaves simple, alternate, petiolate (petiole 1.4 cm long), elliptic or oval or oblong-obovate, up to 12.2 cm long and 7.2 cm broad, thick and leathery, glabrous, glandular-punctate, mature leaf tip rounded or emarginate or juvenile leaves obtuse with a mucro pointed downward, base rounded, margin minutely crenate, lateral veins inconspicuous, dorsal and ventral surfaces similar in appearance; new flushes purple coloured, young leaves pale green and mature leaves dark green; midrib raised on both the surfaces. Flowers pedicellate (pedicel 1 cm long), white, fragrant, borne in axillary and terminal racemes of 5-6 cm long. Sepals 4 or 5, small, pointed. Petals 4 or 5, obovate, about 1 cm long. Gynoecium 1 cm long. Fruit small, sub-globose, green, ripening to orange-yellow, about 2.5 cm in diameter, 4-5-celled, containing 1 or 2 seeds embedded in a gummy fluid.

This species has antibacterial (Pavithra *et al.*, 2009), antifungal (Jaya Sree *et al.*, 2015) and antiarthritic (Peeriga and Chandrasekhar, 2017) activities.

5. Butterflies and Their Behaviour

BAVANI GOVINDARAJULU

Assistant Professor, Department of Zoology, Queen Mary's College, Chennai-04

ABSTRACT

Butterflies are fascinating creatures with significant aesthetic values. They are diurnal and best pollinators with interesting behaviour patterns. They feed not only on the nectar of plants; they also feed on rotten fruits, decaying flesh, dungs and the mineral nutrients from the soil. Butterflies can fly only when the temperature is above 27° C. When the temperature is lesser they expose the underside of the wings to gain heat for flight. Behaviour patterns in butterflies are exhibited by three “P”s: Puddling, Perching and Patrolling, Many species of butterflies maintain territories and chase other butterflies which encounter their boundary lines. They also exhibit sexual dimorphism and interesting mimicry patterns. Host plants play a major role in influencing the behaviour pattern of butterflies.

6. Studies on Traditional Medicinal Uses of Asteraceae Family Members in Pilathara Village, Kannur District, Kerala.

ARUN V P, KUMARASAMY D. AND C. NAHENDRAN

Department of Botany, Annamalai University, Annamalai Nagar-608002

Email: avp.pilathara@gmail.com

ABSTRACT

Pilathara is a small village near Payyannur in Kannur district of Kerala. Asteraceae is the largest Dicot family and almost all Species in this family are having medicinal properties. The Asteraceae family in this area is represented by 8 Genera and 8 Species. The Taxa are *Acmella uliginosa*, *Ageratum conyzoides*, *Chromolaena odorata*, *Eclipta alba*,