

Scientific Journey (from 1988 to till date)



V. SAMPATH KUMAR
Scientist, CNH,
BSI, Howrah

Taxonomic studies on the tribe *Mentheae* (Labiatae) in India

(Ph.D. – Calcutta University)

- ❑ Research scholar of CNH, BSI under 'Flora of India' project from 1988 to 1993.
- ❑ Scientific Asst. from 1993 to 1997.
- ❑ Botanist from 1997 to 2001 (ANRC, PortBlair).
- ❑ Scientist (CDRI, Lucknow) from 2001 to 2002.
- ❑ Scientist in BSI since Sept. 2002. Served in Hqrs., Kolkata; DRC, Hyderabad; SRC, Coimbatore; RBG, Kew (as Indian Botanical Liaison officer); presently working at CNH, Howrah.

Botanist

Andaman & Nicobar Regional Centre, Port Blair (1997-2001)

Study of floristic & ecological aspects of Ritchie's Archipelago (incl. Rani Jhansi Marine National Park, 1998-2000) and Kalpong Hydro-electric project site (2000-01). The Kalpong HEP study jointly made with Dr. P.V. Sreekumar, the then Scientist of ANRC.

Flora of Andaman & Nicobar Islands (vol. II)

Myrtaceae to Alangiaceae (16+3 = 19 families)

(co-authored by L.N. Ray and P.S.N. Rao)

**Alangiaceae, Apiaceae, Araliaceae, Barringtoniaceae,
Begoniaceae, Cactaceae, Caricaceae, Cornaceae,
Cucurbitaceae, Datiscaceae, Lecythidaceae, Lythraceae,
Melastomataceae, Memecylaceae, Myrtaceae, Onagraceae,
Passifloraceae, Punicaceae, and Sonneratiaceae**

Mangroves of Andaman & Nicobar Islands

- ❖ 32 species recognized out of 35 reported (all species found in Andaman group; only 15 from Nicobar group).
- ❖ Added – *Xylocarpus gangeticus* (Prain) Parkinson (not included by Dagar *et al.* (1991) and Dagar & Singh (1999); Banerjee (2002) in his Indian account)
- ❖ Excluded – *Bruguiera sexangula* (Lour.) Poiret, *Cynometra ramiflora* L. (not found in India), *Rhizophora x lamarckii* Mont., and *Sonneratia apetala* Buch.-Ham.

Vernacular names of A & N Island Plants
The plants' vernacular names used by the tribes of these islands along with their uses were compiled and submitted (500 pp.).



Barren Island – the only active volcano in India



Scientist in Central Drug Research Institute (CSIR)

(June 2001 – Sept. 2002)

Worked on Natural products and Biological screening projects

Scientist in Botanical Survey of India since Sept. 2002

Herbarium Database

CAL Herbarium data of the families *Dilleniaceae*, *Amaryllidaceae* and *Hydrocharitaceae* collected in 2002.

For Flora of Andaman & Nicobar Islands the families *Apiaceae*, *Cactaceae*, and *Myrtaceae* were studied in 2003 and 2004.

Components of Biodiversity Digital Library

For the proposed collaborative project between Botanical Survey of India and NISCOM, New Delhi to create a **Components of Biodiversity Digital Library (CBDL)**, prepared Morphological Characters of Angiosperms (Glossary of Terminology) by referring various literatures and studying the various family characters.

Components of Biodiversity Digital Library

The following 13 taxa were selected as model species and detailed description along with citations, type, phenology, habitat, chromosome number, Palynological data etc. were prepared/collected from various sources:

Dicotyledons: *Aegle marmelos* (L.) Correa (**Rutaceae**);
Calotropis gigantea (L.) R. Br. (**Asclepiadaceae**);
Cissampelopsis ansteadii (Tad. & Jacob) C. Jefferey & Y. L. Chen (**Asteraceae**); *Hibiscus trionum* L. (**Malvaceae**);
Indigofera tinctoria L. (**Fabaceae**); *Michelia champaca* L. (**Magnoliaceae**);
Ophiorrhiza oppositiflora Hook.f. (**Rubiaceae**); *Paracroton pendulus* (Hassk.) Miq. subsp. *zeylanicus* (Thw.) Balakr. & T. Chakrab. (**Euphorbiaceae**);
Pogostemon benghalensis (Burm.f.) Kuntze (**Lamiaceae**).

Monocotyledons: *Acanthephippium bicolor* Lindl. (**Orchidaceae**)

Cynodon dactylon (L.) Persoon (**Poaceae**); *Iris tectorum* Maxim. (**Iridaceae**); *Nypa fruticans* Wurm. (**Areaceae**).

Components of Biodiversity Digital Library

The family Capparaceae, comprising 60 taxa belong to 7 genera has been selected as a model family. From the published source, for each taxa correct name, basionym and synonyms with important citations, brief description, phenology as well as chromosome numbers, pollen data, uses, if any, were prepared.

Based on this data, the software for CBDL has been developed by the NISCOM.

Prepared the genera list of both Dicots and Monocots by referring to the recent published literature. As far as possible the standard abbreviation of the author's name has been provided in that list. **In the updated list 256 Angiosperm families have been listed, of which 212 families with 2343 genera belong to Dicots and 44 families with 761 genera belong to Monocots (2004 data).**

Flora of India

Certain groups/genera of the Labiates have been revised – tribe Mentheae, subfamily Pogostemonoideae, genera *Isodon* (Benth.) Spach, *Meriandra* Benth., *Perowskia* Benth., *Siphocranion* Kudo and *Ziziphora* L. Presently working on *Nepeta* L.

The family Lecythidaceae (incl. Barringtoniaceae) has been studied (co-authored by Drs. Tapas Paul and Subir Bandyopadhyay).

While preparing the checklist of Dicots in connection with the CBDL project, some interesting nomenclatural and distributional changes in Indian Magnoliaceae were noticed. “Magnoliaceae of Indian Region – an appraisal” has been prepared. Total 30 taxa (28 species and 2 varieties) are recognized. **Further, in this account only two endemic magnolias are recognized compared to five by Raju (1993) in *Flora of India* (vol. 1).**

Flora of West Bengal

The families Barringtoniaceae, Sarcospermataceae and Symplocaceae have been studied. The family Labiatae also studied (co-authored by Dr.(Mrs.) Arti Garg).

Presently editing the families for monocot volumes (V & VI) (co-editor Dr. V.P. Prasad).

Flora of Greater Hyderabad

Several local trips were made to the Hyderabad and Secunderabad areas and collected the specimens and identified during 2007-2008. Transferred to SRC, Coimbatore in April 2008.

Survey and Documentation of Plants in Velliangiri hill Range

Field trips were made to this Southern part of the Western Ghats and collected the specimens and identified during 2008-2010. The hills lie between the longitudes $6^{\circ} 40'$ and $7^{\circ} 10'$ E and latitudes $10^{\circ} 55'$ and $11^{\circ} 10'$ N. The altitude of these hill ranges varies between 500 to 1850 m from MSL. The project was initiated by Dr. C. Murugan, upon his posting at ANRC, it was continued and the report was submitted.

Dr. Murugesan, Scientist 'B', ERC - Ph.D. thesis, but BSI team covered hill ranges like Siruvani, Boluvampatty and Anaikatty too.



Flora of Kerala

(Vols. II, III & IV)

The families Buddlejaceae, Caricaceae, Chloranthaceae, Loganiaceae, Myristicaceae, and the genus *Crotalaria* L. (Leguminosae) were studied. Mss. yet to be published.

Besides, corrections were carried out in the submitted manuscripts of Moraceae, Ulmaceae etc. in order to bring them in the Flora of Kerala format.

Training Course on Herbarium Methodology

The training course is being organised at SRC, Coimbatore at every year in summer holidays (two-week) especially for the college staff (Group D) – 4 years conducted (2008 to 2011).

Being a co-ordinator, the manual on Herbarium Technique was prepared and supplied and imparted training, besides making all the arrangements for the course .



Indian Botanical Liaison Officer At Royal Botanic Gardens, Kew (Oct. 2011 to Oct. 2013)

Total 850 images of type /authentic specimens, of which about 250 were obtained by making correspondence with the curators of the various other European herbaria or by downloading from JSTOR; **240 protologues and 200 articles** (about 3500 pages); 3 books related to the Botanic Gardens in India were sent to various researchers in different Research Institutions (including to various units of BSI) Universities and Colleges in India. Besides, more than 50 articles (including Bryophyte and Lichen related) were sent. Apart from these, Portrait images (high resolution) of various British Botanists procured and sent to CNH.

Working at CNH from October 2013

- The family Lecythidaceae (incl. Barringtoniaceae) allotted was submitted, presently proof reading is being done.
- Editing of the manuscripts for Flora of West Bengal Monocot vols. V & VI in progress.
- Editing of the Flora of India vol. X is in progress.
- Study of the family Labiates in Bihar & Jharkhand initiated.
- Nomenclature course recently initiated.

BSI e-newsletter

The electronic format of the BSI Newsletter is being compiled and edited since August 2014. So far uploaded the newsletter upto October 2016, November 2016 prepared. The December 2016 designing in the software publisher is being carried out.



**Revision on the subgenera *Vignea*,
Vigneastra & *Psylophora* of the genus
Carex L. (Cyperaceae) in India**

Dr. Bikash Jana

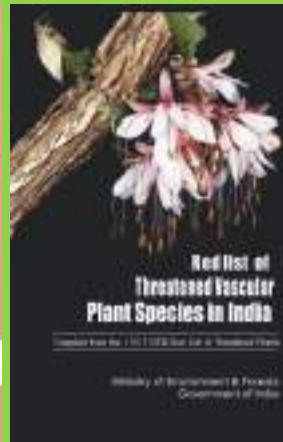
22nd July 2014 to 31st October 2015

Of the 33 species reported by C.B. Clarke (1894)
32 species are recognized in the present work, as the
Carex sikkimensis C.B. Clarke is merged under *C.*
fucata Boott ex C.B. Clarke.

Submitted the manuscript in Flora of India format

ENVIS CENTRE ON “FLORAL DIVERSITY”

BOTANICAL SURVEY OF INDIA



Web: www.bsienvvis.nic.in

Training Courses/Workshop attended (selectively mentioned)

- “Remote sensing Technology and its Applications” at NRSA, Hyderabad from 1-12 Feb. 1999.
- “Concepts of Information Technology & Office Suite” attended from 4th to 8th January 2010 at (5 days) at GES Info Systems, Coimbatore.
- Attended the workshop to develop protocols for assessing and monitoring Biodiversity held at Ernakulam on 22nd February 2010.
- Training programme on “Annual Performance Appraisal Report Writing” conducted at Institute of Government Accounts & Finance (INGAF), Chennai on 20th April 2011.
- ❖ Attended the scratchpad training course on 7th March 2012.
- ❖ Attended the one-day ‘CBD, CITES & Plant Health training’ on 13th January 2012.
- ❖ Two-day training in connection with the Data basing and Digitisation of the Herbarium specimens 19th and 20th January 2012.
- ❖ Twelve-week Latin course was attended on Wednesdays from 03rd October 2012 to 12th December 2012.

Technical/Administrative Work

- For the visited school/college students as a part of their herbarium study tour, history of BSI, herbarium methodology, the role of herbaria, various activities of BSI etc., were apprised.
- Specimens were received from various Institutions especially of the labiates were identified.
- Herbarium I/c in ANRC from 1997-2001 From 2004 to 2006 was Herbarium Hall 3– I/c and DRC from 2006 to 2008.
- In-charge of Library in ANRC, PortBlair, DRC, Hyderabad and SRC, Coimbatore. Vehicle in-charge in SRC.
- Served and serving as member of many committees like purchase and library.
- Acted as HoO in ANRC, CNH, DRC and SRC in the absence of regular HoO. Also acted as DDO in ANRC, DRC and SRC as and when required.
- In Project presentations on 'Kew Plant Conservation studies', acted as one of the Assessor's and submitted duly filled Assessment Sheet in the prescribed proforma.
- Assisted HoO in various activities as and when required.

Total number of papers published: 48 nos.

Book(s)/Chapters in Book(s) : 1/11 nos.

Periodicals (published/accepted): 37nos.

First author: 34nos.

Jointly/as co-author: 14 nos.

Articles published: 8 (incl. 3 in Hindi)

Reviewed project proposals/ Ph. D. thesis: 10 / 5 nos.

Reviewed manuscripts: 20 nos. + 5 nos. subject editor

Seminar/Conference/Workshop/Training/Exhibition : 20 nos.

(but several lunch time talk were attended on Mondays at Kew).

New taxa described : 3 + 1 (accepted) – syn. nova – 24 nos.

New combinations/names: 52 nos. (incl. two varieties raised to specific level) (The genus *Manglietia* merged with *Magnolia* – 26 comb. nov./ nom. nov.)

New reports to India/Region/state: 14 (incl. generic records)



Thanks