ANNUAL SCIENTIFIC MEET 2017

Shri Vinod Maina Scientist –D BSI, AZRC Jodhpur

Joined
Botanical Survey of India, ANC, Port Blair on 04.08.1994 as Botanist

Pictorial Flora of Dhanikhari Experimental Garden

(BSI, ANC, Port Blair) (1994-2002)

Around **102** line drawings/ habit sketches prepared

As Garden In-Charge

- ➤ Conservation of orchids/ Endemic & Economic plants introduced in the garden
- ➤ Multiplication of RET species by cuttings, propagules & seeds
- ➤ Developed medicinal plant section
- ➤ Supervised the construction work of Orchid house, conservatory, Fern house & nursery shade



Survey of Kalpong river site in connection with Hydroelectric power project (North Andaman)

(BSI, ANC, Port Blair) (1994-2002)

- >Two tours conducted including Saddle Peak
- **>**Status:

Report submitted to Scientist – D & Head of Office for further action..

Development of Kalpong Botanic Garden (North Andaman)

(BSI, ANC, Port Blair) (1999-2000)

- > Deputed as an Officer on Duty to Develop Kalpong Botanic garden
- > Executed the development work of Kalpong Botanic garden
- > Developed Medicinal plant section
- ➤ Developed Palm section
- > Developed conservatory
- Developed Pomological garden

Plant Resource Survey of Jarawa Reserve

(BSI, ANC, Port Blair) (2001-2002)

- ➤ Plant resource survey study has been conducted in three phases with multi-disciplinary team and report submitted to Andaman & Nicobar Janjati Department.
- >Voucher specimens deposited to ANC, Port Blair.
- > Published number of papers on it in Books & Journals

At BSI, HQ, Kolkata CNH

(2002-2003)

Selected for the post of Scientist- B by direct recruitment and posted at HQ. Working place CNH.

- Taken computer training two times each of 15 days
- Collected the data from 1000 herbarium sheets of family Meliaceae and Sapindadeae; 500 for Annonaceae

Transferred to SRC, Coimbatore in May, 2003 in same capacity.

Identification & documentation of plants collected from Lakshadweep Islands by Mr. Bhargahavan, Botanist

(BSI, SC, Coimbatore) (2003-2008)

Identified 298 plants and list prepared. Data has been entered in fair Field note book and checklist submitted.

Documentation of state Flora. Flora of Kerala District: Families allotted Asclepiadaceae & Periplocaceae (BSI, SC, Coimbatore) (2004-2008)

Status of the Project:

Described 77 spp. & 2 sub spp. of 2 families (Asclepiadaceae (21 genus) & Periplocaceae (6 genus, 7 species).

Manuscript submitted to Joint Director, BSI, Southern circle, Coimbatore on 4th March 2008.

Mangroves of Tamil Nadu

(BSI, SC, Coimbatore) (2005-2008)

- ➤ 2 exploration tours have been conducted and covered the area from Cuddalore to Nagercoil.
- Ca 100 creeks & channel surveyed, recorded GPS readings & collected 320 F. Nos. and other relevant information.
- ➤ Identified all the plants, deposited in BSI, Southern circle (MH).

Status of the Project:

Checklist submitted to Joint Director, BSI, Southern circle, Coimbatore on May 2008.

Transferred to BGIR, Noida in same capacity.

B.G.I.R, Noida (May-2008-June 2010) Promoted as a Scientist- C

- ➤ Ex-situ Conservation: Introduction, Multiplication, inventorisation and display; Introduced: 2616 plant saplings/seedlings
- ➤ Maintenance of RET, Medicinal, Ornamental & economical plants housed in nurseries and net houses
- ➤ Plant procurement and collection; 3 tours conducted and procured 2300, 2749 and 23 plants seedlings and saplings for introduction
- ➤ Seed collection: 57 spp.
- ➤ Display of name plates, Woodland-4769 individuals 116 spp.
- ➤ Economic plant zone-676 individuals 81 spp.
- ➤ Developed Zingiber plot
- Herbarium development of introduced plants

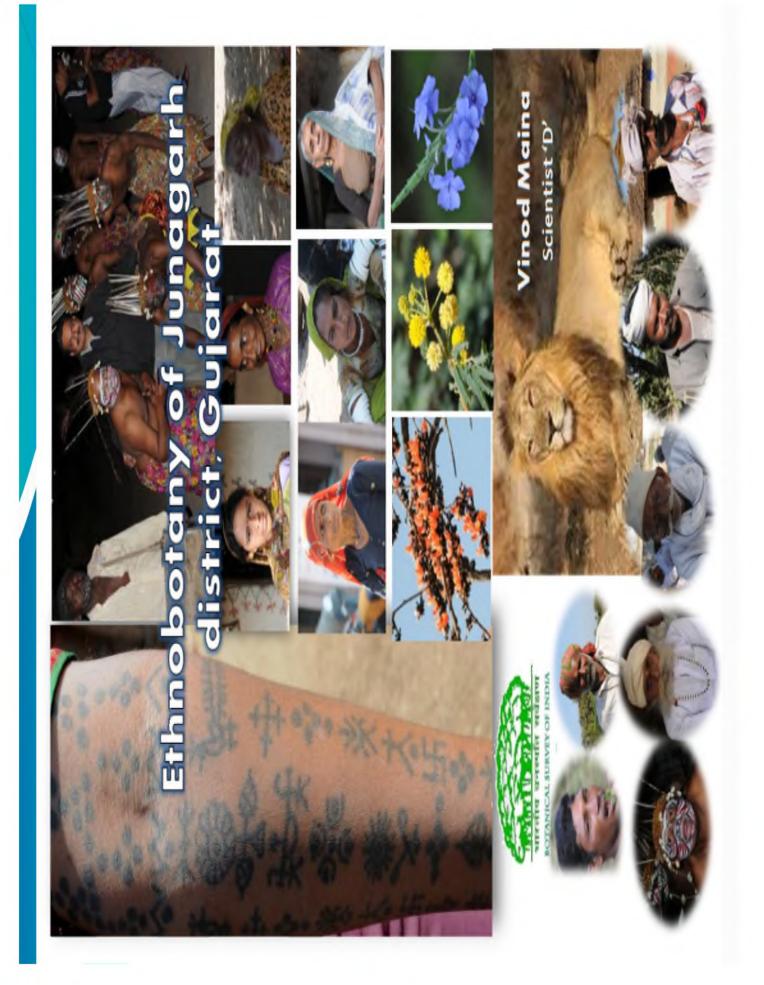
Ethno botany of Junagarh District:

(BSI/AZRC, Jodhpur) (2010-2012)

- > Four tours conducted
- Total plants 476 Field No. collected, among these 240 plant species reported as ethno botanical importance.

Status of the Project:

Manuscript submitted and edited for publication.



Ethnobotany of Dang District, Gujarat

Name of the Executing Scientist: Shri Vinod Maina, Scientist- D &

Shri Ravi Prasad, Bot. Asstt.

Tenure of the Project: 2012 – 2015 (*ca.* **1000** sq. km.)

Status of the Project:

- **≻Field tours conducted= 6**
- **►** Live plant species collected= 35
- ➤ Museum specimens collected= 54
- **➢ Documented and published 15 plants of ethno veterinary importance.**
- >Check list of 310 plant species has been prepared.

Flora of Navsari District, Gujarat (ca. 2211 sq. km) (2015 –2020):

Dr. Ramesh Kumar, Scientist C & Shri Vinod Maina, Scientist - D

Under taken two field tours:

1st tour: 28th July-14th August and collected 291

field numbers.

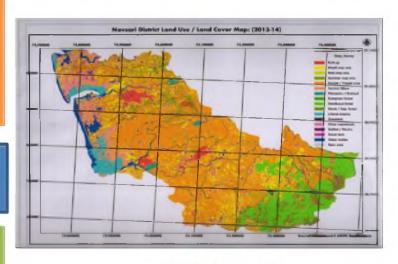
2nd tour: 06-23rd January 2017, collected 332 field

numbers.

Total field numbers collected till now: 1294

Total field numbers Identified till date: 202

Live plant collected for ex-situ conservation during plant exploration: 23



Study area map



Moringa concanensis Nimmo



Solanum trilobatum L.



Tinospora cordifolia (Willd.) Miers

•Floristic diversity of Aliya-bet, Bharuch, Gujarat: Shri Vinod Maina, Dr. Ramesh Kumar & Dr. C. S. Purohit.

Conducted one field tour: 04.10.2016 to 13.10.2016; collected 146 field numbers

Status: Report submitted to Director, Botanical Survey of India, Kolkata.

Note: This tour is not a part of AAP but conducted as per the instruction of Director, Botanical Survey of India, Kolkata (Letter no. BSI-288/7/2007-Tech).

FIELD EXPLORATIONS

(Each of ca 10 - 30 days)

- 1. Exploration in Great Nicobar Islands during April 1995 (Places covered Galathia National Park, East-West Road, Laxman beach etc.).
- 2. Exploration in Great Nicobar during January 1996 (Places covered East-West Road 10 48 km, Shompen Hut, Galathia National Park, Indira Point).
- 3. Exploration in North Andaman during July 1997 (Places Saddle peak and Kalpong river left and right fork and Kalpong Hydroelectric project site).
- 4. Exploration in Jarawa Reserve with multidisciplinary team during May 1998 (Places Lakra lungta, kadamtala area covered).
- 5. Explorations in Barren Islands during December 1999.
- 6. Explorations in Great Nicobar Island during June 2001 (Navy Dera, Eastwest road, Laxman beach, Mount Thulliar).
- 7. Exploration in North Andaman during August 2001 (Places covered Kalpong Dam site, Power house, Navagram; Kalipur, Lamia bay, Pan tekari, 5 families area, Ram Nagar Forest and Beach site and Kalighat etc.) To study the effects on Flora of Kalpong Hydroelectric project.
- 8. Exploration, survey and planning of the allotted site of Kalpong Botanic Garden during February 2002. Deputed as an officer-incharge of KBG, North Andamans for exploring the center.
- 9. Plant Resource Survey of Jarawa Reserve (I phase) with multidisciplinary team during October 2001.
- 10. Plant Resource Survey of Jarawa Reserve (II phase) with multidisciplinary team during April 2002.

- 11. Plant Resource Survey of Jarawa Reserve (III phase) with multidisciplinary team during August 2002.
- 12. Kalpong Botanic Gardens and Dam site survey during Sept. 2002.
- 13. Regular excursion of Dhanikari experimental garden and arboretum (plant collection and photography for Pictorial flora was conducted).
- 14. Preliminary survey in TSUNAMI affected areas of Tamil Nadu Coast to study the post-TSUNAMI effect on vegetation, Feb.2005.
- 15. Exploration tour for extensive survey of Mangroves of Tamil Nadu (North & Northeastern coastal regions) 15 days in January 2007.
- 16. Exploration tour for extensive survey of Mangroves of vegetation, Tamil Nadu (South & Southeastern coastal regions) February 2007.
- 17. Plant Procurement/ Collection Tour Tarai Region (UK). 15.07.2008 to 28.07.2008 (14 Days).
- 18. Plant Procurement/ Collection Tour Bhuvaneshwar (Orissa). 30.09.2008 to 15.10.2008 (15 Days).
- 19. Seed and Live Plant Collection to Coimbatore Division Tamil Nadu. 13. 03.2009 to 23. 03. 2009 (11 Days).
- 20. Ethanobotanical Exploration Tour to Junagarh District Gujarat. 03.02.2011 to 21.02.2011 (19 Days).

- 21. Ethanobotanical Exploration Tour to Junagarh District Gujarat. 12.05.2011 to 31.05.2011 (20 Days).
- 22. Ethanobotanical Exploration Tour to Junagarh District Gujarat. 24.11.2011 to 12.12.2011 (19 Days).
- 23. Ethanobotanical Exploration Tour to Dangs District Gujarat. 24.08.2012 to 11.09.2012 (19 Days).
- 24. Ethanobotanical Exploration Tour to Dangs District Gujarat. 08.02.2013 to 22.02.2013 (14 Days).
- 25. Ethanobotanical Exploration Tour to Dangs District Gujarat. 27.06.2013 to 11.06.2013 (15 Days).
- 26. Ethanobotanical Exploration Tour to Dangs District Gujarat. 19.01.2014 to 30.01.14 (11 Days).
- 27. Ethnobotanical Exploration Tour to Dangs District Gujarat 30.09.2014 to 19.10.14
- 28 to 30. 3tours conducted for ongoing Flora of Navsari District, Gujarat during 2015-2016
- 31. Conducted one field tour Aliya-bet, Bharuch, Gujarat: **04.10.2016** to **13.10.2016**;

Administrative work

- ❖Head of Office, BSI, AZRC, Jodhpur since 01.08.2012
- Also performed the duties of
- **✓** DDO
- √ Garden In-charge
- ✓ Store Officer
- Library Officer during the service period

Number of projects carried out

a. Individually : 07

b. Jointly : 06 (2 = ongoing)

Number of books written/compiled/edited:

a. Individually : 01

b. Jointly :Book chapters = 06

Number of papers published: 56 papers

a. Individually : 05

b. First author : 22

c. Co- author : 29 papers

No. of new Taxa, new combinations/names: 03

New reports: India = 04; States = 08

Future Research plan

Ethnobotanical study of the Panch Mahal District, Gujarat

Digitization of Herbarium-BSJO



Thank you