

Gopal Krishna

Botanical Assistant

Central National Herbarium, Botanical Survey of India,
Howrah-711103

24.04.2006 - 29.02.2016

[Senior Preservation Assistant]

01.03.2016 - till date

[Botanical Assistant]

Title of thesis:

“Vascular Plant Diversity of Buxa
National Park with special reference to
its Conservation Strategies”

[under supervision of Dr. P. Venu, Rtd. Scientist ‘G’]

University of Calcutta

Year of award: 27th September, 2016



Engagement in Projects so far

➤ **Ethnobotany of Odisha**

[Sundergarh dist., Angul Dist., Mayurbhanj dist., Phulbani dist]

➤ ***Flora of Buxa National Park, Jalpaiguri Dist., West Bengal**

[under supervision of Dr. P. Venu, Scientist 'G' (Rtd.)]

➤ **Flora of Bihar volumes I & II**

[Families: Violaceae; Flacourtiaceae; Vitaceae; Cucurbitaceae*]

➤ **Flora of West Bengal Vol. III**

[Dipsacaceae; Caprifoliaceae]

➤ **Verification of deposition / availability of types at different herbaria of BSI based on names of new taxa published during 1990 – 2004 in some selected journals**

➤ **Flora of Neora Valley National Park, Darjeeling, West Bengal**

[*Dr. Vinay Ranjan; Anant Kumar and Gopal Krishna]

➤ **Flora of India vol. 20 [Gesneriaceae]**

[Updating of names and manuscript; editorial part]

Ethnobotany of Odisha [Sundargarh district] [2006-2007]



Excuting officials: Dr. H. Singh; Dr. S.C. Srivastava, Gopal Krishna, Arvind Kumar

Tour details:

04th February 2007-15th February, 2007

No. of specimen collected:

158 field no.

No. of ethnobotanical information collected: 242

Ethnobotany of Odisha [Myurbhanj district] [2007-2009]

Excuting officials: Dr. H. Singh; Sri P.K. Baske,
Gopal Krishna

Tour details: 10.09.2007-24.09.2007;
23.09.2008-08.10.2008

No. of specimen collected: 376

No. of Ethnobotanical information collected:
550



Ethnobotany of Odisha [Angul district] [2009-2010]



Excuting officials: Dr. H. Singh,
Gopal Krishna

Tour details: 24.06.2009-
9.07.2009; 23.09.2010-
8.01.2010

No. of specimen collected: 370

**No. of ethnobotanical
information collected:** 483

Flora of Buxa National Park, West Bengal

[under supervision of Dr. S.K. Srivastava (2009-2010) Dr.P. Venu, Scientist 'G' (Rtd.) 2010 onwards]

April, 2009-March, 2012

Year of establishment : 1992

Location: Jalpaiguri district, within the Buxa Tiger Reserve (BTR)

Coordinates : 26° 38' -26°44' N & 89° 34' -89°38' E

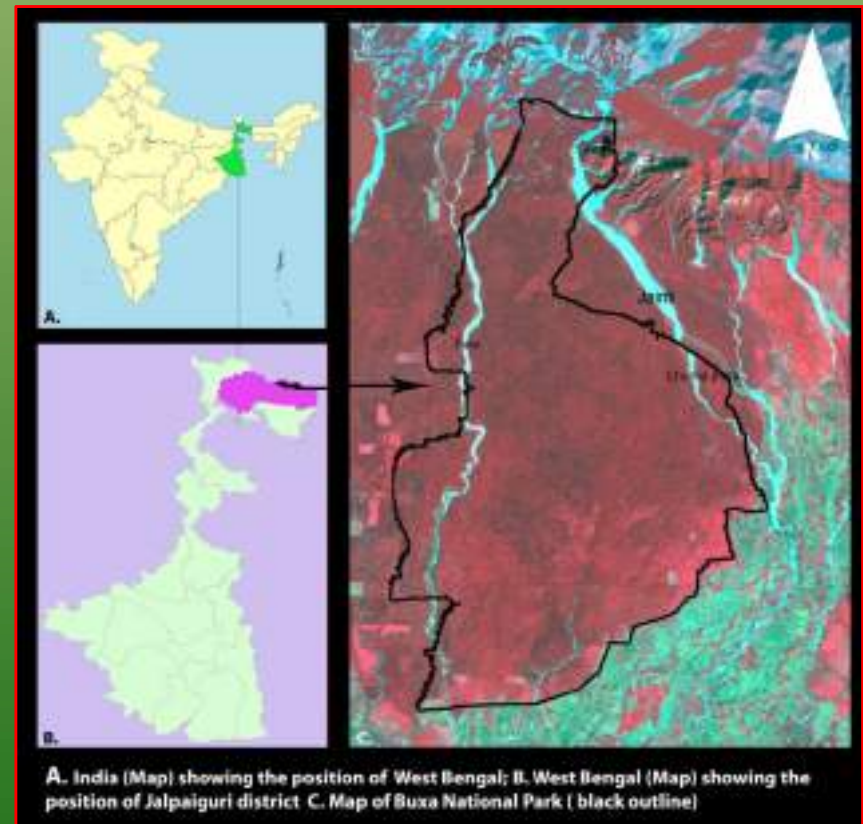
Area : 117.01 km² (core zone of BTR)

Altitude: 55 m to 319 m(± 5m)

Forest ranges: 04

- i. Jainty;
- ii. West Rajabhatkhawa;
- iii. Gadadhar ;
- iv. East Damanpur

No. of compartments in all ranges: 34



No of field tour undertaken: 5

Outcome:

Floral Diversity of Buxa National Park

Sl. No.	Class	Subclass	Family	Genera	Species	Variety
1.	Dicots	Polypetalae	54	131	172	9
2.		Gamopetalae	23	120	158	0
3.		Monochlamydeae	16	65	99	4
4.	Monocots-		17	62	75	1
5.	Gymnosperm		2	2	2	0
6.	Pteridophyte		11	16	19	0
TOTAL			123	396	525	14

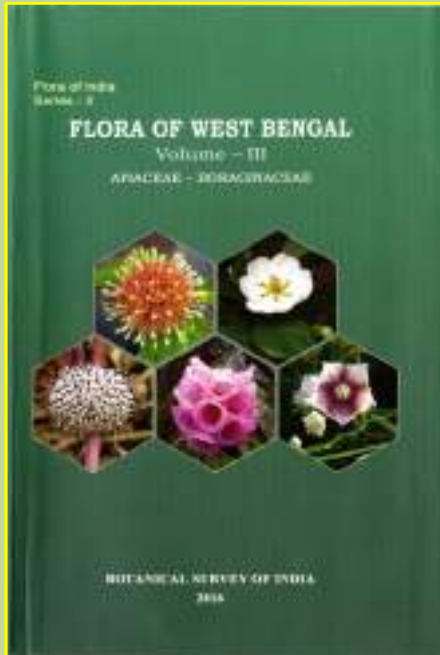
- *Broussonetia kurzii* (Hook.f.) Corner [Moraceae] collected after a long gap of 80 years
- *Eranthemum erythrochilum* J.R.I. Wood collected after more than 100 years



- 3 species [IUCN red list]
- 3 species are Endemic to West Bengal and its adjoining area
- 62 spp. addition to Jalpaiguri district
- 6 spp. addition to West Bengal State

42 species [ethnomedicine], 17 species [edible plants]
2 species [snake repellents],
8 species [fish poison]
14 species [fodder].
12 decorative purposes medicinal (3 spp.),
incense (2 spp.),
dye (2 spp.)
1 species each as adulterant and in broom/mat making.

Flora of West Bengal Vol. III [(Apiaceae-Boraginaceae)] [2014-2015]



Name of family	No. of genera	No. of species	No. of infraspecific taxon
Dipsacaceae [Ajay Ghosh & Gopal Krishna]	2	3	0
Caprifoliaceae [Gopal Krishna & Ajay Ghosh]	4	19	0

Flora of Bihar vol. I

[Families: Violaceae; Flacourtiaceae; Cochlospermaceae; Bixaceae;
Vitaceae]

[2012-2013]

Name of family	No. of genera	No. of species	No. of infraspecific taxa
Violaceae	2	2	0
Flacourtiaceae	3	5	0
Cochlospermaceae	1	1	0
Bixaceae	1	1	0
Vitaceae	5	13	0

Flora of Bihar Vol. I [Family: Cucurbitaceae]

Name of family	No. of genera	No. of species	No. of infraspecific taxon
Cucurbitaceae Manuscript will be submitted in March, 17	18	32	0

Flora of Jharkhand vol. I

[Families: Violaceae; Flacourtiaceae; Cochlospermaceae; Bixaceae;
Vitaceae]

[2012-2013]

Name of family	No. of genera	No. of species	No. of infraspecific taxa
Violaceae	2	6	0
Flacourtiaceae	4	7	0
Cochlospermaceae	1	1	0
Bixaceae	1	1	0
Vitaceae	6	10	0

Flora of Jharkhand Vol. I

[Family: Cucurbitaceae]

Name of family	No. of genera	No. of species	No. of infraspecific taxon
Cucurbitaceae			

Verification of deposition / availability of types at different herbaria of BSI based on names of new taxa published during 1990 – 2004 in some selected journals

Executing officials: Dr Subir Bandyopadhyay & Gopal Krishna

Bulletin of Botanical Survey of India; Rheedia; Nordic Journal of Botany; Candollea; Indian Journal of Botany; Current Science; Journal of Economic and Taxonomic Botany; Indian Forester

Flora of India [Gesneriaceae]

2015-2016



25 Genera 120 species 5 varieties

Status: Ongoing

Angiospermic Flora of Neora Valley National Park, West Bengal

Executing officials: Dr Vinay Ranjan, Anant Kumar, Gopal Krishna

Approved duration of the project: April, 2016 to March, 2021 [5 Years]

Total area: c. 159 sq km

Area surveyed : North Range (c. 37 sq km)

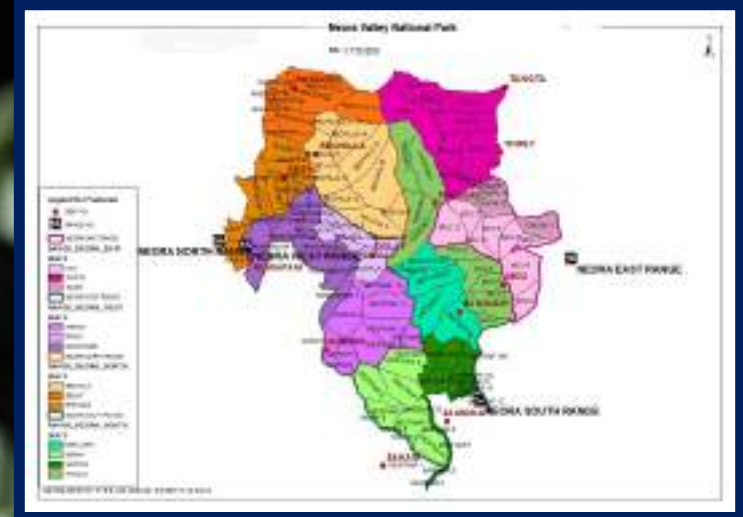
Duration of tour: 20.09.2016 to 05.10.2016 (15 days);
15.12.2016 to 24.12.2016 (10 Days)

Area surveyed: North range (c. 37 sq km)

Field numbers collected: 640

Photographs depicted: 1500

GPS data recorded: 628



Findings:

- 2 rare saprophytic species named *Balanophora polyandra* and *Rhopalocnemis phalloides* of family Balanophoraceae were collected.
- 6 rare orchids were collected from study area some of them are: *Goodyera recurva* and *Odontochilus crispus*.
- 4 new records listed for the state (*Aeschynanthes oblanceolata*; *Agapetes hookeri*; *Goodyera recurva* and *Odontochilus crispus*).
- A rare *Ceropegia pubescens* [yellow himalayan ceropegia] collected.

Future Plan

Completion of Angiospermic Flora of Neora Valley National Park, West Bengal on time [2016-2021]

Summary

- Number of projects carried out individually as well as jointly: 07
- Number of papers published individually/first author as well as jointly/co-author: 37 [including 5 popular articles in Vanaspati Vani (Hindi)]
- Number of new taxa published: 01
- New reports for India: 01
- New reports for States: 10



Thanks

Photo: Bala river [Buxa National Park, West Bengal]