

Achievements since 12th August, 2010



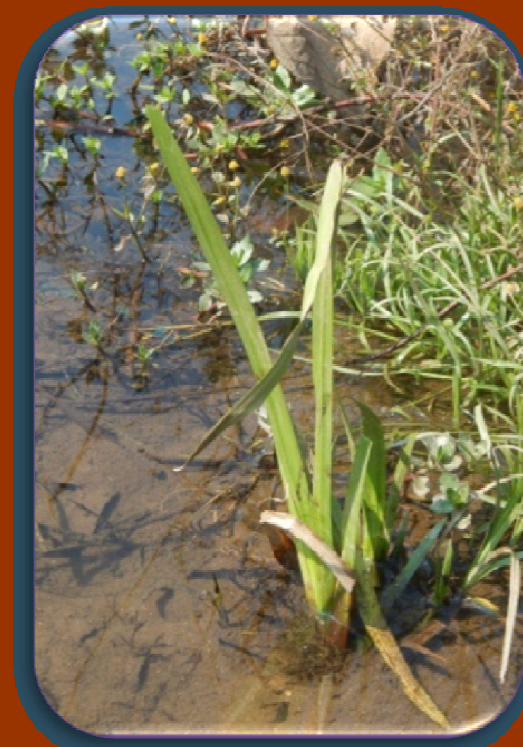
Anand Kumar
Botanical Assistant
Central National Herbarium, Botanical Survey of India,
Howrah– 711 103

**Title of Thesis: FLORAL
DIVERSITY OF GAUTAM
BUDDHA WILDLIFE
SANCTUARY,
BIHAR & JHARKHAND,
INDIA**

[under supervision of Dr. P.
Venu, Rtd. Scientist 'G']
Andhra University,
Vishakhapatnam
Position: Botanical Assistant



***Butomopsis latifolia*
(D.Don) Kunth**

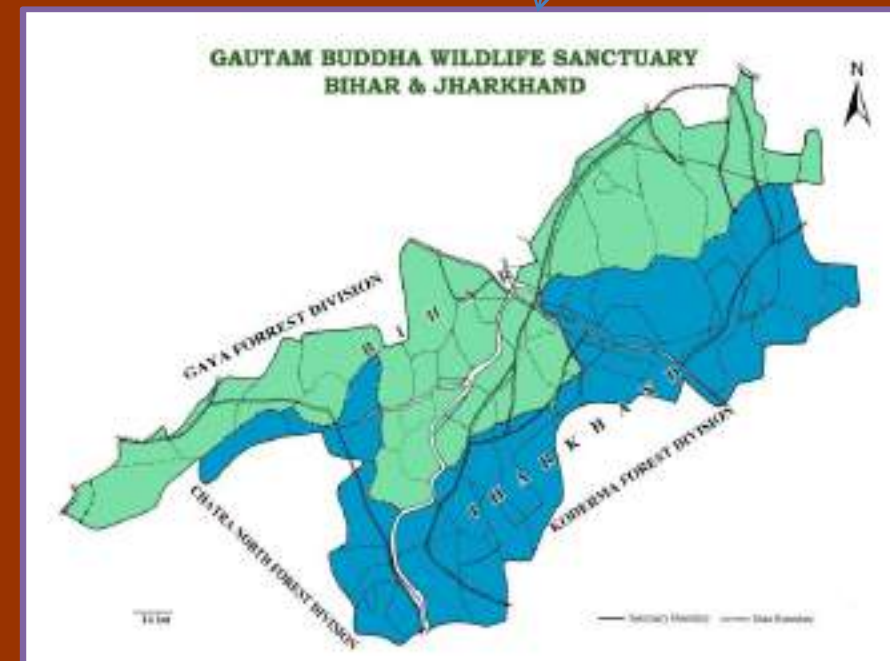
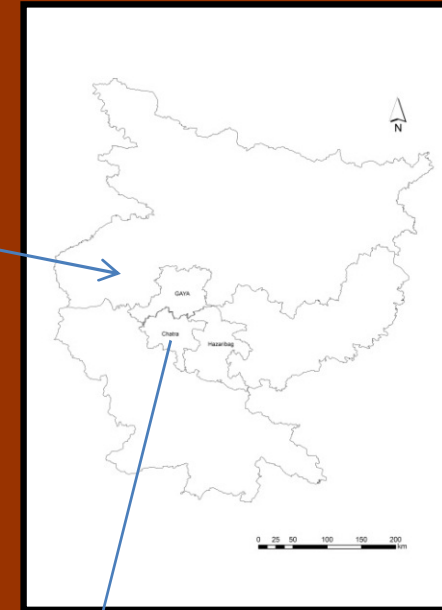


***Acorus calamus* L.**

Flora of Gautam Buddha Wildlife Sanctuary, Bihar & Jharkhand

Tenure: April, 2012- March, 2016
Field tours undertaken: 7

- **Established:** 1976.
- **Area:** 259.5 sq.km (138.33 sq. km in Bihar & 121.14 sq. km in Jharkhand).
- **Co-ordinates:** 24^o19'N-24^o31'N and 84^o59' E-85^o17' E.
- **Location:** Gaya district (Bihar) and Hazaribagh & Chatra districts (Jharkhand)
- **Forest divisions:** Gaya forest division (Bihar) and Koderma and Chatra North forest divisions (Jharkhand)
- **Rivers:** Mohane, Guari, Sarne, Buker, Jamunia, Balwa and Kadru.
- **Tribes:** Birhor, Santhal and Munda.
- **Forests types:** Northern tropical dry deciduous forest



Floral Analysis

Sl. No.	Class	Subclass	Family	Genera	Species	Variety
1.	Dicots	Polypetalae	45	123	153	2
2.		Gamopetalae	25	121	149	0
3.		Monochlamydeae	9	32	47	0
4.	Monocots-		21	66	94	0
6.	Pteridophytes		3	5	7	0
TOTAL			103	347	450	2

Interesting plants



Ceropegia bulbosa Roxb.



Ceropegia hirsuta
Wight & Arn.



Marsdenia tenacissima
(Roxb.) Moon



Utricularia aurea Lour.



Eulophia explanata Lindl.



Zeuxine strateumatica
(L.) Schltr.

IUCN Red Listed Plants



Jatropha nana Dalzell & A. Gibson



Pterocarpus marsupium Roxb.



New report to the State



Merremia aegyptia (L.) Urb.



Typhonium inopinatum Prain

LOCAL MARKET SURVEY



Flora of Bihar and Flora of Jharkhand

Flora of Bihar				Flora of Jharkhand		
Family	No. of Genera	No. of Species	No. of Cultivated species	No. of Genera	No. of Species	No. of Cultivated species
Papaveraceae	1	2	3	1	2	3
Fumariaceae	1	2	....	1	1	....
Celastraceae	5	8	....	7	9	....
Aizoaceae	1	1	....	1	1	....
Molluginaceae	2	5	....	2	4	....
Begoniaceae	1	1	....	1	2	....
Cactaceae	3	7	2	2	3	2
Total	14	26	5	15	22	5

- Undertaken two herbarium consultation tours to NBRI, Lucknow and Magadh University, Gaya (Bihar).
- Prepared "**List of Threatened Plants of Jharkhand**".
- Prepared "**List of Threatened and Rare Plants of Bihar & Jharkhand**" for introduction in Botanic Garden, T.M. Bhagalpur University, Bhagalpur.

- Undertaken one extensive field tour to Aurangabad and Nawada districts of Bihar from 16-27th December, 2014 in Q₃ along with Sri Shyam Biswa and collected a total of 224 field nos.
- Undertaken one extensive field tour with Sri Gopal Krishna to Kaimur, Rohtas and Nalanda districts of Bihar from 16th December, 2015 to 2nd January, 2016 and collected a total of 222 field nos.



Acmella radicans
(Jacq.) R.K.Jansen



Drosera burmanni Vahl



Hardwickia binata Roxb.



Digitization

- Barcoded, scanned and edited **1656 herbarium sheets** for digitization.
- Data entered of **5209 herbarium sheets** .
- Converted Digital herbarium data of 14 families in Excel Sheet and entered manually of 2531 Author names of 28 families from IPNI/Plant list in Excel Sheet.
- Verified 923 data of type specimens and added 95 images.
- Verified and edited monocot data of 91 specimens.
- Converted data of 3093 species (Ochnaceae to Zingiberaceae) in excel sheet from Digital herbarium server and provided to Sri P.P. Ghoshal, Botanist for compilation of type specimens at CAL.
- Extracted data of 230 sheets from Digital Herbarium server and created data in excel sheet.

Plant Diversity Assessment

A preliminary report
on
Plant Diversity Assessment in selected forest villages
of
Gaya & Hazaribagh districts, Bihar & Jharkhand
For
Dedicated Freight Corridor Corporation of India Ltd.
A Govt. of India (Ministry of Railways) Enterprise



By
Government of India
Botanical Survey of India
Ministry of Environment, Forest & Climate Change
CGO Complex, Salt Lake City
Kolkata - 700 064, West Bengal, India



Acted as expert member for Plant diversity assessment of 13 forest blocks of Gaya district, Bihar and 4 forest blocks of Hazaribagh district, Jharkhand for Dedicated Freight Corridor Corporation of India Ltd., A Govt. of India (Ministry of Railways) Enterprise

Miscellaneous

- Undertaken 4 extensive botanical exploration tour to Betla National Park, Jharkhand with Sri P. P. Ghoshal, CNH.
- Acted as expert member for identification of plant species of T.N.B. College Campus, T.M. Bhagalpur University, Bhagalpur, Bihar for Green auditing for NAAC accreditation of College.
- Attended meeting with Sri Rajiv Ranjan, Member Secretary, Jharkhand Biodiversity Board in Ranchi for finalization of project proposal on “Plant Diversity Assessment of Dalma Wildlife Sanctuary and Saranda Forest Division, Jharkhand” on 20th July, 2016.
- Attended 2 National Conferences, 2 National Workshops, one Botanical Nomenclature Course and delivered one oral and one poster presentation.

Summary

Number of Projects carried out: 4
[Flora of Gautam Buddha Wildlife Sanctuary, Bihar & Jharkhand; Flora of Bihar; Flora of Jharkhand and Digitization of type specimens]

Number of papers published: 11
including 2 popular articles in Vanaspati Vani

New report to India published: 1
[*Bromelia pinguin* L.]

New report to state published: 5
[*Fernandoa adenophylla* (Wall. ex G.Don) Steenis; *Grewia villosa* Willdenow; *Trigonella occulta* Delile; *Typhonium inopinatum* Prain and *Wrightia coccinea* (Roxb. ex Hornem.) Sims]



Bromelia pinguin L.

Future Work Plan

**TAXONOMIC REVISION OF *IMPATIENS* L. (BALSAMINACEAE)
OF SIKKIM & DARJEELING HIMALAYA**

**Executing officials: RAJIB GOGOI, Scientist-D, CNH & ANAND
KUMAR, Bot. Aast., BSI, HQ**

Tenure: April, 2017- March, 2021



TTTTTT