



# Study of Bamboos

Journey from March 2002 to  
February 2017

2002-2007

2008-2011

2011-2016

**Pushpa Kumari**  
**CNH, BSI**

# AICOPTAX – Bamboos & Grasses of NE India

March 11, 2002- JRF

BSI, Sikkim Himalayan Regional Circle, Gangtok

## **Bamboos of Meghalaya (2002 – 2007)**

Herbaria – ASSAM, BSHC, BSD, CAL & DD,

Extensive **periodic** field surveys (ca 150 field nos  
collected in 7 tours)



**TAXONOMIC STUDIES ON BAMBOOS OF  
MEGHALAYA**

**Thesis submitted for degree of Ph.D**

**Guidance: Dr. Paramjit Singh**

**University of Kalyani, Kalyani, Nadia Dist.**

**W.B.**

**2007**

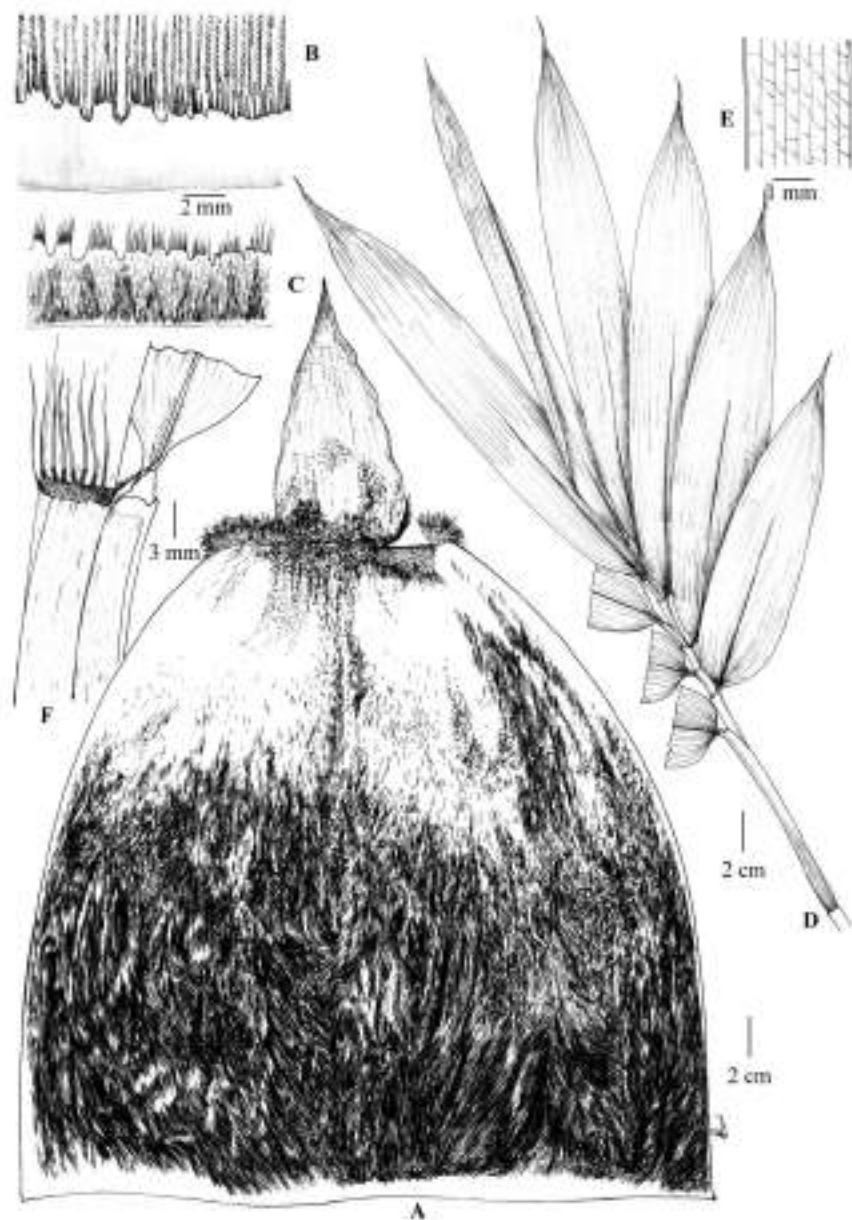


Fig. 40. *Dendrocalamus sikkimensis* Gamble: A. culm-sheath; B. culm-sheath ligule with basal portion of imperfect blade; C. ligule underneath imperfect blade; D. leafy twig; E. leaf abaxial surface; F. leaf-sheath. [P. Kumari 25192 (CAL)].

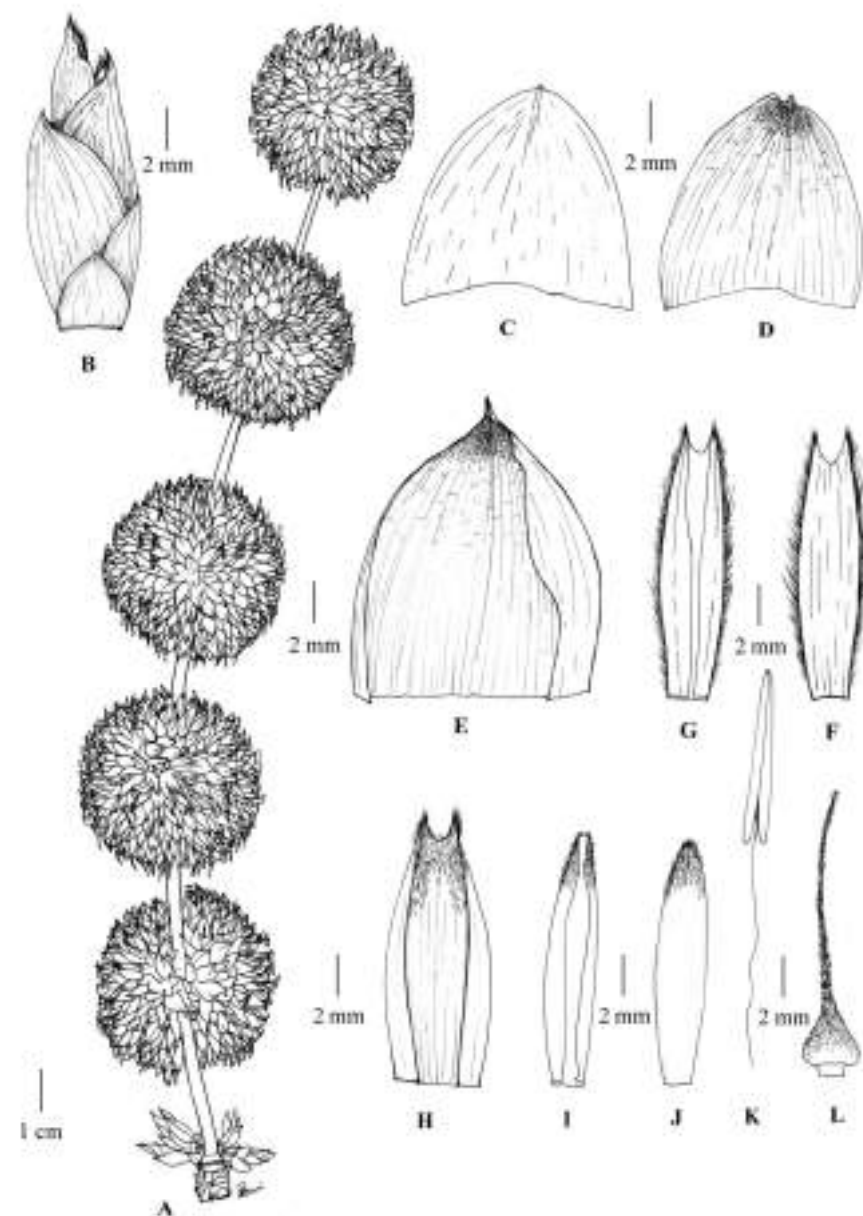
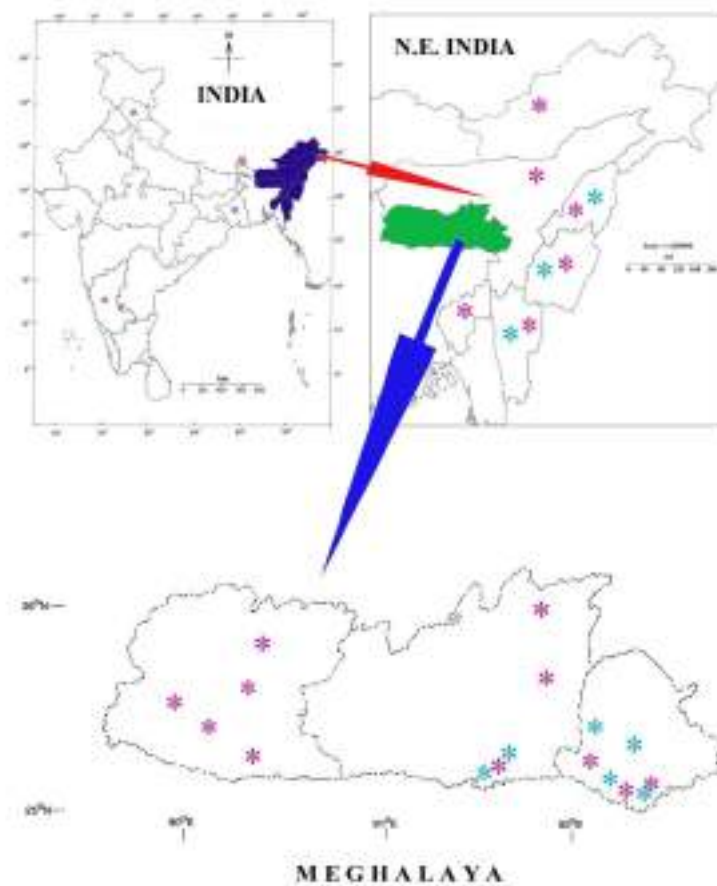


Fig. 41. *Dendrocalamus sikkimensis* Gamble: A. inflorescence; B. spikelet; C & D. empty glume; E. lemma; F - J. palea; K. stamen; L. pistil. [R. Pantling, s.n. (CAL)].



Plate 33. *Melocanna clarkei* (Gamble ex Brandis) P. Kumari & P. Singh: A. flowering; B. inflorescence, inset stamen; C. fruits; D. seedlings.



Map 11. Distribution: *Melocanna baccifera* (Roxb.) Kurz ( \* ); *Melocanna clarkei* (Gamble ex Brandis) P. Kumari & P. Singh ( \* ).



2008 – 2011  
SRF and RA (AICOPTAX)

Bamboos of Indian Botanic Garden (25 species)

Bamboos of Manipur (35 species with IBSD, Imphal)

Preliminary field surveys:

West Bengal

Sikkim

Arunachal Pradesh

Bihar

Herbarium study: CAL



20<sup>th</sup> October 2011

Scientist – C

AJC Bose Indian Botanic Garden

Bamboos of India: Ex-situ Conservation (2012-2017)-

Germplasm collected: 2012-13 (10 spp); 2013-14 (17 spp); 2014-15 (25 spp); 2015-16 (10 spp) – Andaman & Nicobar, AP, Assam, Kerala, Sikkim

Successfully introduced: 12

Maintained in Nursery: ca 20

Development of Nursery – Rose; Palm; Croton;  
Foliage; Ferns; Bougainvillea;

Ex-situ conservation and multiplication of RET plants

Revival of Seed section

Taxonomic Revision of *Poaceae: Bambusoideae* in  
India (2014-2017)



1<sup>st</sup> May 2015

## Central National Herbarium

### Taxonomic Revision of *Poaceae: Bambusoideae* in India (2014-2017)

Checklist (ca 140 sps)

Distribution mapping (140 sps)

Description (ca 95 sps)

Illustrations (ca 80 sps)

**SEM** leaf under surface (ca 45 sps)

Flowering/fruitleting reports: 25 sps

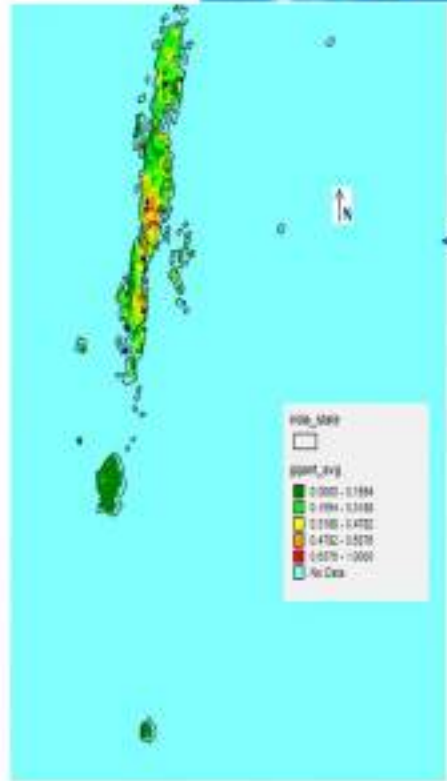


### *Bignoniaceae* for Flora of Bihar and Flora of Jharkhand III

- Studied the 5 specimens from Bihar (Aurangabad, Nawada and Kaimur) brought by Sri Gopal Krishna
- Description (2)

## Additional Projects

- Preventing Extinction and Improvement of Conservation Status of Threatened Species – developed macro-propagation protocols for threatened species *Bentinckia nicobarica*, *Dinochloa andamanica* and *Schizostachyum kurzii* for mass production (work being carried on by the Research fellow at BSI ANI Portblair)
- Survey and Assessment of growing stock of economic bamboos of West Bengal (in collaboration with DST WB and RKMV University Narendrapur, Kolkata) – 24 Parganas



- 
- No. of Projects: 5 (3 individual & 1 in collaboration; 1 jointly)
  - New taxa: 1 Genus; 3 species; 1 variety
  - New reports: 1 for India/ 5 for states
  - Field Tours: 23 – NE region, Andaman & Nicobar, Western Ghats
  - Workshops/ Seminars: 17 National/International
  - Lectures delivered: 11 invited
  - Trainings: Conservation Biology (Kew Garden), Foundation/Administration (IIPA)
  - Scientific/ Awareness Programmes
  - Administrative works: Scholars attendance, Work reports, Committee member, Editing of Vanaspati Vaani

# FUTURE PLAN

- Conservation Status & Red Listing
- SEM atlas
- DNA finger printing
- Phylogeny
- Flora



..... Long way to go

The background features a soft-focus photograph of green leaves and stems. A circular inset in the lower right corner provides a magnified view of a plant's inflorescence, showing small, yellowish-brown flowers on thin stalks. The text is centered in the upper half of the image.

**MY SINCERE THANKS TO ALL  
FOR  
HELP AND SUGGESTIONS**