

## CURRICULUM VITAE

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Dr. K. HARINATH BABU

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Date of Birth : 05-06-1962

Sex : Male

Nationality : Indian

### **Educational Qualifications: M. Sc., Ph. D.**

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|----|--------------|--------------------------------|-------------------------|
| 1. | Ph.D. (1989) | Botany                         | Gulbarga Univ. Gulbarga |
| 2. | M.Sc. (1985) | Botany                         | Gulbarga Univ. Gulbarga |
| 3. | B.Sc. (1983) | Botany, Zoology &<br>Chemistry | Osmania Univ. Hyderabad |

**Title of the Ph.D. Thesis:** "Studies in selection and characterization of salt tolerant line Through Sugarcane Cell and Tissue Culture"

**Area of Interest:** Genetic Transformation in Plants

**Research/Professional Experience : Over 18 years (after Ph. D. )**

**1. Senior Scientist ( May, 2001 – till todote), MB&GE Lab, Vasantdada Sugar Institute, Pune**

- Group leader in Genetic Transformation – Development of transgenic sugarcane for Pest resistance.

**2. Research Scientist (1995 – May 2001), R&D, Mahyco, Kallakal**

- Tissue Culture lab incharge
- Developed homozygous di-haploid rice plants through anther culture
- Genetic transformation in rice and developed insect resistance (Yellow Stem Borer) and Bacterial leaf Blight (BLB) resistance rice lines
- Worked as visiting scientist at John Innes Centre, Norwich, UK

**3. Research Associate (1993-95), Biotechnology Lab, CCRI, Mysore:**

- Worked as group leader in DBT sponsored research project
  - Developed protocols for somatic embryogenesis and *in vitro* multiplication of robusta coffee.
4. **Research Associate (1990-92), Central Coffee Research Institute, Karnataka:**
    - Worked as Senior Research Associate in TCL
    - Development of somatic embryogenesis and whole plant regeneration
    - Interclonal hybridization and rescue of hybrid embryos and whole plant development
    - Integument culture of coffee
  5. **Senior Research Fellow (1988-90), Gulbarga University, Gulbarga:**
    - Worked as SRF in Dept. of Biotechnology, Govt. of India sponsored project
    - Isolation of cell lines and development of Iron efficient sugarcane lines
    - Characterization and field evaluation of selected plants
  6. **Technical Assistant (1985-88), Gulbarga University, Gulbarga:**
    - Isolation and characterization of salinity tolerant lines in sugarcane

**Overseas Experience/ Visits:**

1. **October 1997 to June 1998:** Worked at Mol. Biotechnology Lab., John Innes Center, (JIC), Norwich, UK .
2. **Nov, 12<sup>th</sup> to Dec, 2<sup>nd</sup> 2001:** Trained at Syngenta Biotechnology Inc., RTP, Raleigh, North Carolina State, US
3. **July 15-16, 2003:** Visited CIRAD, **Montpellier, France**
4. **Nov, 13 to 24<sup>th</sup> 2005:** Visited Key Laboratory of Eco-Physiology & Genetic improvement for sugarcane, Fujian Agriculture and Forestry University, **Fuzhou R.P. China And**  
  
State Key Laboratory of Tropical Crop Biotechnology, Institute of Tropical Biotechnology, **Haikou. R. P. China**
5. **August 13-20 2006:** Attended ICSB annual meeting and Inter-national conference on 'Tropical Crop Biotechnology' at Cairns, Australia

**Membership :** Member Secretary of Institutional Bio-Safety Committee (IBSC) of Vasantdada Sugar Institute, Manjari, Pune. recognized by Department of Biotechnology, Govt. of India.

## Research Publications

Kalunke Raviraj, Archana Kolge, **Kassa Harinath Babu**, D. Theertha Prasad. Comparison Of Transformation Efficiency In Different Explants Of Sugarcane. Plant & Animal Genomes XVI Conference, January 12-16, 2008, San Diego, USA, P675.

**K. Harinath Babu**, G. Jayashree, M. Madhava Naidu, D. Ganesh and H.L. Sreenath (1997) Effect of TIBA and BAP on Integument cultures of CxR cultivar of Robusta Coffee (*Coffea canephora*). In. Recent Advances in Biotechnological Applications of Plant Tissue and Cell Culture. Eds> G.A Ravishankar and L.V. Venkatraman. Published by Oxford & IBH Publishing Co. Pvt. Ltd.

H. L. Sreenath, H. M. Shanta, **K. H. Babu** and M. M. Naidu (1995). Somatic Embryogenesis from integument cultures of coffee. **Plant Cell Reports**. 14: 670-673

G. R. Naik, **K. Harinath Babu** and G. Lingappa (1990). Studies on *in vitro* selection of Fe-efficient lines in sugarcane. **Plant and Soil**. 124: 183-186

**K. Harinath Babu**, H. M. Shanta, D. Samuel Ganesh and H. L. Sreenath (1993). Plant regeneration through high frequency somatic embryogenesis from leaf tissues in two cultivars of coffee. **J. Plantations Crops** 21: 307-312

**K. Harinath Babu** (2003). Prospects of genetic transformation in sugarcane for alternate uses. Proc. of International Seminar on 'Sugarcane Genomics & Genetic Transformation' 88-90.

G. R. Naik and **K. Harinath Babu** (1988). Redifferentiation of NaCl tolerant sugarcane plants from callus derived resistant lines . **Curr. Sci.** 5(8) : 432-434

**K. Harinath Babu** and G. R. Naik (1989). Studies in enzyme activities of salt stress adopted sugarcane callus and their significance in salt tolerance. **DSTA** 39: 349-357

G. R. Naik and **K. Harinath Babu** (1987). *In vitro* response of sugarcane cultivars to salinity tolerance. **DSTA** 37 : 187-194

## No. of students for M. Sc. Summer/ winter training from Pune/ other Universities

Two students completed summer training under my guidance

1. 'Transient expression of gus gene in tobacco and sugarcane plants' by Mr. Gunjan R. Bajaj submitted to Badrinarayan Barwale Mahavidyalaya, Jalna
2. Callus induction, Agrobacterium mediated gene transfer and transient gus expression studies in different varieties of sugarcane by Mr. Abhay Rp. Bhise submitted to Vidhya Prathishtan's School of Biotechnology (VSBT), Baramati

**Recognition** : Recognized as PG teacher and Guide for Ph. D. students in Department of Botany by Shivaji University, Kolhapur.

**International Conference/Seminars attended**

1. International conference on ‘Tropical Crop Biotechnology Conference 2006’ 16-19<sup>th</sup> August 2006 at Cairns, Australia
2. International Seminar on “Sugarcane Genomics & Genetic Transformation” during 28-29<sup>th</sup> August, 2003 organized by Vasantdada Sugar Institute, Pune