

## VINSTROM Progress Report (April 2009 to March 2010)

### **Papers Published:**

T.S. Suryanarayanan, N. Thirunavukkarasu, M.B. Govindarajulu, F. Sasse, R. Jansen, T.S. Murali. 2009. Fungal endophytes and Bioprospecting. *Fungal Biology Reviews (England)* 23: 9-19.

V. Priti, B. T. Ramesha, Shweta Singh, G. Ravikanth, K. N. Ganeshaiyah, T. S. Suryanarayanan and R. Uma Shaanker. 2009. How promising are endophytic fungi as alternative sources of plant secondary metabolites? *Current Science (India)* 97: 477-478.

### **Poster Presented:**

Nagaraju, D., Govinda Rajulu M.B., El Gueddari, N. E., Suryanarayanan T.S., Moerschbacher, B. M. (2009). Identification and characterization of chitinolytic enzymes from endophytic fungi. '*Sugars in Norwich*' – *Royal Soc. Chemistry, Carbohydrate Meeting, London, UK.*

### **Indo-Brazilian collaborative research:**

The Brazilian research team led by Brazil's leading Professor, Dr. Joao Lucio Azevedo, was invited by the Government of India to visit various Institutions in India to explore research collaborations. The team visited VINSTROM in 2007 and signed an MOU with VINSTROM to collaborate with it in biodiversity research. As a part of this collaboration, the FAPESP/FAPEAM (São Paulo and Amazonas foundations) Brazil has applied for and obtained funds from the Brazilian Government that will help the visit of Suryanarayanan to Brazilian Amazon University to conduct Research for three months from October 2010 to December 2010. *This is one of the only three projects to be approved.*

## **Invited Talks by T. S. Suryanarayanan:**

**Lead Talk by T.S. Suryanarayanan** - *Fungal endophytes as a focal group for estimating global fungal diversity*, UGC sponsored National Seminar on Fungal Biotechnology, University of Mumbai, 7<sup>th</sup> January, 2010.

*Fungal diversity in tropical forests: Lessons from the forests of the Western Ghats*, International conference on Mountain Biodiversity conservation and sustainable utilization, 13<sup>th</sup> -15<sup>th</sup> March, 2010. Doon University, Dehradun, Uttarakhand.

T.S. Suryanarayanan was invited by the Institute of Genomics & Integrative Biology, CSIR, New Delhi to discuss collaboration. He delivered a lecture on *Secondary metabolites from endophytic fungi* – 15<sup>th</sup> November 2009.

## **Academic Recognition for T.S. Suryanarayanan :**

Invited to contribute a chapter for book titled "ENDOPHYTES OF FOREST TREES: BIOLOGY AND APPLICATIONS", to be published by Springer Forestry series in 2011.

Reviewing a research proposal submitted to the Dutch Ministry of Economic Affairs Member, *The Netherlands*.

Member, General Test Committee, MS Scholars, Department of Biotechnology, IIT Madras.

Invited by the Mycological Society of *China* to be an Associate Editor of its International Journal, Mycology.

Co-guide for a M.Sc. research project of a student of Forest Research Institute, Dehradun done in IISc, Bangalore. Title : *A test of Janzen-Connell hypothesis on Syzygium cumini seedlings infected by fungal pathogens in the dry deciduous forest of Mudumalai Tiger Reserve.*

## **Research Proposals sent to Govt. of India for funding**

“Synthesis of Nanoparticles/Nanofibres from fungal melanin for radioprotection” submitted to the Vice Chancellor, University of Madras on 11<sup>th</sup> March, 2010. (Rs. 4 Lakhs).

DST-DAAD (Indo-German) Exchange of Scientists collaborative research proposal on pharmaceutical from Marine fungi along with Prof. Peter Proksch, Dusseldorf University, Germany.

Indo – German Research project proposal entitled “The potential of fungal endophytes as biocontrol organisms” in collaboration with Prof. Stefan Vidal, University Goettingen, Germany submitted to Department of Biotechnology, New Delhi on 16.02.2010. (Rs. 36, 93,000).

Dr. N. Thirunavukkarasu, Asst. Professor, Dept. of Plant Biology & Plant Biotechnology, RKM Vivekananda College, has submitted a minor research project “Extracellular proteases from endophytic fungi” to the UGC in collaboration with VINSTROM.

## **Visitors to VINSTROM**

- Florenz Sasse, Scientist and Co-Investgator, Helmholtz’s Centre for Infection research, Braunschweig, **Germany** visited on 19.01.2010.
- Ms. Chandra Karthik, Department of Biochemsitry & Molecular Biology, IUPU, Iandianapolis, **USA** visited on 29.05.10 and gave a lecture on Glycogen phosphorylating enzyme.
- Dr. Dan Farrell, Dept. of Philosophy, Ohio State University, Columbus, Ohio, **USA** visited on 15.12.09.
- Dr. S.N. Gajanan, Department of Economics, University of Pittsburgh, PA, **USA** visited on 15.12.09.
- Swami Atmapriyananda, Vice Chancellor, RKM Vivekananda University, **Kolkatta**, visited on 03.08.09.

- Dr. G. Suresh, Lips Pharmaceuticals, New South Wales, **Australia** visited on 14.07.09
- Dr. Dinkar Sahal, International Center for Genetic Engineering & Biotechnology, **New Delhi** visited on 11.07.10 to discuss collaboration regarding anti malarial chemicals from fungi.
- Dr. M. Sastry, Director, Tata Chemicals, **Pune**, visited on 10.07.09.

**Seminar conducted by VINSTROM:**

**Research Ethics – A Discussion** was conducted by VINSTROM on 15.12.09. The Chairman, Swami Atmaghanananda, inaugurated it. The main speakers were Prof. D. Farrell, Ohio State University, Columbus, **USA** and Dr. S. Gajanan, University of Pittsburg, Pennsylvania, **USA**.