VINSTROM - ANNUAL REPORT 2015

Lectures delivered by T. S. Suryanarayanan:

- Delivered a lecture on **'Fungal endophytes: a promising source of industrial enzymes'** at A National seminar on 'New frontiers in plant sciences and biotechnology' organised by Department of Botany , Goa university on 29th Januany 2015.

- Delivered the Dr. Agnihothrudu Memorial Award lecture on **'VINSTROM'S two decades of research on endophytes results in more questions than answers'** at the 40th annual Meeting at Mycological Society of India, 23rd -24th February, 2015.

- Delivered a lecture on **'An overview of endophyte biology'** at the SAP Conference of Bangalore University, 5th March, 2015.

- Delivered a lecture on **'Studies on fungi from Mudumalai underscore the need for a 'Project Fungi' programme'** at International conference on forest ecology & climate change conducted by Centre for Ecological Sciences, Indian Institute of Science, Bangalore, 8th -10th April 2015.

- Delivered a Keynote lecture on "**Environment rather than host specificity determines endophyte diversity in a seasonally dry and fire-prone tropical forest**" organised by Asian Mycological Congress, Goa University, 7th –10th October, 2015.

Guest Editor

Edited a Special section on Fungal Endophytes in *Current Science* -10th July 2015.

Completed project

DBT Visiting Research Professor, Rajiv Gandhi Universiry, Itanagar, Arunachal Pradesh (Sept-Dec 2015).

International Seminar conducted by VINSTROM:

A One day seminar on "**The need for a national genetic resources of technologically important fungi**" was conducted on 20th February 2015. It was inaugurated by Swami Shukadevananda, Secretary, RKM Vidyapith and the following invited speakers delivered lectures.

Prof. Venkat Gopalan, Centre for RNA Biology at the Ohio State University, USA.
Prof. Uma Shaanker, Department of Crop Physiology, University of Agricultural Sciences, Bengaluru.
Dr. Dinkar Sahal, International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi.
Dr. Kaustav Sanyal, Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru.

Papers published:

Suryanarayanan TS, Govinda Rajulu MB, Thirunavukkarasu N (2015). The need to explore the fungal facet of biodiversity of Arunachal Pradesh. *Journal of Bioresources* **2**: 9-17.

Suryanarayanan TS (2015). Two decades of endophyte research in VINSTROM results in more questions than answers. *Kavaka* **44**: 6-12.

Prakash CP, Thirumalai E, Govinda Rajulu MB, Thirunavukkarasu N and Suryanarayanan TS. (2015). Ecology and diversity of leaf litter fungi during early-stage decomposition in a seasonally dry tropical forest. *Fungal Ecology* **17**:103-113.

Suryanarayanan TS, Gopalan V, Sahal D, and Sanyal, K. (2015) Establishing a national fungal genetic resource to enhance the bioeconomy. *Current Science* **109**: 1033-1037.

Thirunavukkarasu N, Jahnes B, Broadstock A, Govinda Rajulu MB, Murali TS, Gopalan Vand Suryanarayanan TS. (2015). Screening marine-derived endophytic fungi for xylan-degrading enzymes. *Current Science* **109**:112-120.

Venkatachalam A, Govinda Rajulu MB, Thirunavukkarasu N and Suryanarayanan TS. (2015). Endophytic fungi of marine algae and seagrasses: a novel source of chitin modifying enzymes. *Mycosphere* **6**: 345–355.

Malathi N, Govinda Rajulu MB, Gillet D, Suryanarayanan TS and Moerschbacher BM. (2015). A high diversity in chitinolytic and chitosanolytic species and enzymes as well as their oligomeric products exist in soil with a history of chitin and chitosan exposure. *Biomed Research International*, 1-9.

Venkatachalam A, Thirunavukkarasu N and Suryanarayanan TS, 2015. Distribution and diversity of endophytes in seagrasses. *Fungal Ecology* **13**: 60-65

Ongoing projects:

Title	**Funded by**	**Amount**
Estimation of the diversity of endophytes in subtropical forest of Arunachal Pradesh and creation of a genetic resource	Department of Biotechnology (April 2015-March 2018)	Rs.**28.91** lakhs
A study of the biodiversity and bioactive natural products of non-sporulating fungi associated with mangroves and sponges of Andaman Islands (PI)	Department of Biotechnology (November 2015- October 2018)	Rs.**20.06** lakhs