

## Summary/Report:

### **International Conference on Exploring Fungal Frontiers: A Multidisciplinary Approach to Advancing Fungal Biology (Dec 4-6, 2025, Kolhapur)**

This International Conference was organized by the Department of Botany, Government of Maharashtra, Rajaram College, Kolhapur, M.S., India. This International Conference, supported by Anusandhan National Research Foundation (ANRF), Dept of Science and Technology, Government of India, and Shivaji University, Kolhapur, Maharashtra, brought together over 230 participants to explore the diverse roles of fungi in sustainable development. The event covered **14 key themes, viz.,** Myco-diversity, Fungal conservation, medical and industrial Mycology, Biotechnology, Agriculture, Nanotechnology, Energy, and Lichenology.

**Inaugurated** by Vice Chancellor, Prof. Dr. D.T. Shirke, Warana State Public University, Warana Nagar, Kolhapur, Maharashtra, with a keynote by Prof. Priyani Paranagama, Senior Professor and Chair of Chemistry, University of Kelaniya, Kelaniya, Sri Lanka. Other dignitaries like Prof. Dr. A. J. Bodake, Principal, Government of Maharashtra, Rajaram College, Kolhapur, Dr. Manjiri Desai, President IWSA, Kolhapur Chapter, Dr. Dhanashri Patil, Editor, Fungiphiles, Shri. Ashish Ghevde, President, CFOI, Kolhapur & Member AFB Executive Council, was present. Dr. S.K. Deshmukh, President AFB, delivered presidential remarks. The conference featured over 25 expert talks by national and international speakers. The conference featured a rich lineup of distinguished speakers from India and abroad.

**On December 4, 2025**, Prof. D.J. Bhat (Goa University, Goa) opened the technical session with Professor Kamal Award Lecture with his talk on *Exploring Extremophilic Fungi in Less-Endowed Asian Regions and Habitats.* He was followed by Dr. Samir Damare, Senior Principal Scientist, CSIR-NIO, Goa, who presented *Are fungi present in deep-sea sediments?* A roundtable discussion was on the *Present Scenario of Fungal Taxonomy and Applications*, headed by Prof. D. J. Bhat. The day was concluded with a Cultural Event- “Gandh Maharashtracha.”

**On December 5, 2025**, Prof. Marc Stadler, Helmholtz Centre for Infection Research, Braunschweig, Germany, spoke online on *Chemical and Biological Diversity of the Xylariales, with emphasis on Polythetic Phylogenomic Studies of the Hypoxylaceae*, followed by Dr. Kandikere R. Sridhar, Mangalore University, Karnataka, on *Techniques*

to study *Aquatic Mitosporic Fungi in Streams*. Dr. Irina Druzhinina, Royal Botanical Gardens Kew, UK, delivered her thoughts on *Is Trichoderma Safe? A Postgenomic Perspective on Ecology and Fitness* and Prof. Colin Barrow, Deakin University, Australia, spoke on *High Value Bioproducts from Agricultural Waste and Fungal Biomass to Promote a Circular Economy*. Prof. Surajit Das, NIT, Rourkela, Odisha, presented on *Functional and Ecological Versatility of Marine Filamentous Fungi in Advancing Sustainable Ecosystem*, while Dr. V. Sabareesh, Vellore Institute of Technology, Vellore, Tamil Nadu discussed the *Computational identification of Defensin-Like Sequences in Fungi*.

**On December 6, 2025**, Dr. Sheshagiri Raghukumar, Avisia Myko, Inc. San Francisco, California, USA, delivered a lecture on *Living Dynamics of Fungi in dead organic matter in the sea: role in the detrital food web and Carbon Sequestration*, followed by Dr. Ashish A. Prabhu, NIT Warangal, who deliberated on *Metabolic Engineering of Yarrowia lipolytica for the efficient production of D-Lactic Acid using Food Waste Hydrolysate: A Biorefinery Approach*. Dr. Ashok Wali, Hon. Shri. Annasaheb Dange Ayurved Medical College, Astha, delivered a lecture on *Fungal infections of Skin and Ayurveda* and Dr. Samantha Chandranath Karunarathna, Qujing Normal University, Qujing 655099, China, spoke on *Deadly mushrooms: no more Mr. Funguy*.

Prof. Dr. Priyani Paranagama, Prof. K.R. Sridhar, Prof. D.J. Bhat, and Dr. Sheshagiri Raghukumar were presented with **Lifetime Achievement Awards**. Similarly, fellowships of the AFB were awarded to selected researchers who have made significant contributions in the field of mycological research: Dr S.K. Singh (FAFB2025001).

Numerous oral and poster sessions saw active participation, with several merit and special awards distributed.

The Annual General Body meeting of the Association of Fungal Biologists was convened on 5<sup>th</sup> December 2025, where several important matters were discussed, and other important recommendations of the executive council were ratified.

The conference concluded with a valedictory session on 6<sup>th</sup> December 2025 featuring an address by Dr. S.M. Reddy, Emeritus Professor, Kakatiya University, Warangal, Telangana, as a Guest of Honour. Dr. S. V. Pathare presented the **conference report**, summarizing the key highlights and outcomes that featured 16 technical sessions and invited talks, with **139 abstracts** submitted. Various awards were presented for outstanding research: the **Prof. M.S. Patil Merit Award** oral presentations; the **Prof. J.G. Vaidya Merit Award** poster presentations; the **Prof. K. R. Sridhar** Award for aquatic fungi poster presentation and

the **Prof. S.A. Parndekar Award for young researchers poster** presentations. In the general category, there were **35 oral** and **60 poster presentations**, highlighting the depth and diversity of fungal research showcased during the event. On this occasion, Principal Dr. A. J. Bodake, Convenor, also addressed the gathering, appreciating the collaborative efforts and emphasizing the importance of continued research in fungal science for sustainable development, and a Vote of Thanks by Dr. A. R. Patil, Organizing Secretary. The conference ended on an uplifting note, highlighting the vital importance of fungi in maintaining ecological balance, driving innovation, and promoting sustainable solutions across various sectors. During the valedictory session, citations and mementos were awarded to all recipients of the different honors, as detailed below:

|   | Category   | Name and Abstracts/ affiliation  |
|---|--|--|
| 1 | Professor. M.S. Patil<br>Merit Award for<br>Young Researchers<br>(Category-Oral<br>Presentation) | <p><b>Rank 1:</b> Dr. Koteswara Rao<br/>Biochemical Sciences Division, CSIR-National Chemical Laboratory, Pune-411008, India 2 Academy of Scientific and Innovative Research (AcSIR), Ghaziabad-201002, India<br/>Development of ssDNA Aptamer based biosensing platform for detection of Ochratoxin A in food and high-value agricultural products.</p> <p><b>Rank 1:</b> Dr. Ketaki P. Patil<br/>DKASC College of Ichalkaranji, Kolhapur<br/>Diversity of Xylariaceae from Kolhapur District.</p> <p><b>Rank 2:</b> Dr. Sunita N. Jadhav and Dr. Anjali R. Patil<br/>Department of Botany, Rajaram College, Kolhapur<br/>Orchid Mycorrhizae from the terrestrial orchid <i>Pectilis gigantea</i> (Sm.) Raf. (Family Orchidaceae).</p> <p><b>Rank 3:</b> Damare, Varada S.<br/>Marine Microbiology, School of Earth, Ocean &amp; Atmospheric Sciences, Goa University, Taleigao Plateau, Goa 403206<br/>Association of fungal-like Thraustochytrids with micro- and macro-Algae in the coastal habitats.</p> <p><b>Consolation prize:</b> Patel, Jigna H. and Vrinda S. Thaker<br/>Assisitant Professor, Department of Biosciences, Saurashtra University, Rajkot, Gujarat.<br/>Retired Professor of Department of Biosciences, Saurashtra University, Rajkot, Gujarat.<br/>Ecological effect of salt stress on Fungal-Bacterial-</p> |

|   |  |   |
|---|--|---|
|   |  | <p>interactions</p> <p><b>Consolation prize:</b> Dr. Anjali Pandurang Patil</p> <p>Department of Botany, R. B. Madkholkar Mahavidyalaya, Chandgad, 416509, Maharashtra, India</p> <p>Assessment of mineral sources and nutritional status of the <i>Citrus sinensis</i> (L.) Osbeck. fruits.</p>  |
| 2 | <p>Professor J.G. Vaidya</p> <p>Merit Award for Young Researchers (Category-Poster Presentation)</p> | <p><b>Rank 1:</b> Patil, Anjali R., Mrunalini A. Vedpathak and Yogesh S. Patil</p> <p>Department of Botany, Rajaram College, Kolhapur</p> <p>Mycopigments: the future of sustainable and eco-friendly textile dyeing.</p> <p><b>Rank 2:</b> Jash Sayantan &amp; Rashmi Dubey</p> <p>Botanical Survey of India, Western Regional Centre, 7 Koregaon Road, Pune – 411001, Maharashtra, India</p> <p>Faculty of Science &amp; Technology, Savitribai Phule Pune University, Pune – 411007, Maharashtra, India</p> <p>Encountering anamorphic Ascomycetes of Central Western Ghats: some novel and interesting findings</p> <p><b>Rank 3:</b> Prakriti Chanda, Dr. V. Venkateswara Sarma</p> <p>Department of Biotechnology, Pondicherry University, Pondicherry-605014</p> <p>Novel biodiversity and molecular analysis of filamentous fungi from mangroves of Tamil Nadu coast:</p> <p><i>Pseudoastrosphaeriollopsis mangrovei</i> sp. nov.,</p> <p><i>Nigrograna</i> sp. nov., <i>Devriesia</i> sp. nov.</p> <p><b>Consolation:</b> Gore, Ganesh E., Deepak Shelke, Hiralal Sonawane, Rameshwar Avchar, Dhiraj Dhotre</p> <p>Research Centre in Botany, Prof. Ramakrishna More Arts, Commerce and Science College, Akurdi, Pune-411044. Affiliated to S.P.P University Pune.</p> <p>Department of Botany, Amruteshwar Arts Commerce and Science College, Vinzar, Pune, Affiliated to S.P.P University Pune, National Centre for Microbial Resource-National Centre for Cell Science Pune- 411007</p> <p>Culturable gut fungal diversity of <i>Platynotus excavatus</i> (Tenebrionidae): unveiling an underexplored Mycobiome.</p> <p><b>Consolation:</b> Kumar Yogesh, Lokesh Gambhir, &amp; Neha Kapoor</p> <p>School of Applied Sciences, Suresh Gyan Vihar University, Jaipur, Rajasthan</p> <p>School of Basic &amp; Applied Sciences, Shri Guru Ram Rai University,</p> |

|   |  |   |
|---|--|---|
|   |  | <p>Dehradun, Uttarakhand</p> <p>Mountain microbes, major medicines: Exploring high-altitude fungal Endophytes for therapeutics.</p>   |
| 3 | <p>Professor K.R. Sridhar</p> <p>Awards for Young Researchers<br/>(Aquatic/Marine Fungi)<br/>(Category-Oral/Poster Presentation)</p> | <p><b>Rank 1:</b> Shovan Rakshit and V. Venkateswara Sarma<br/>Fungal Biotechnology Lab, Department of Biotechnology, Pondicherry University, Kalapet, Pondicherry-605014.<br/>Unveiling diversity of marine mycobiota: two new <i>Paraquintaria</i> spp. from the mangrove host, <i>Rhizophora</i> spp. in Andaman Islands, India</p> <p><b>Rank 2:</b> Kataria Jahanavi, Prabhugaonkar Ashish, Jayarama D. Bhat &amp; J. Pratibha<br/>DCT's Dhempe College of Arts and Science, Miramar, Panaji, Goa 403001, India<br/>Department of Botany and Microbiology, College of Science, King Saud University, P.O. Box 22452, Riyadh 11495, Saudi Arabia<br/>Formerly, Department of Botany, Goa University, Goa 403206, India<br/>Study of fungal diversity from coastal sand dunes of Goa, India</p> <p><b>Rank 3:</b> Athishri A. N., Raju Krishna Chalannavar<br/>Department of Applied Botany, Mangalore University, Karnataka 574199<br/>Antimicrobial and Antioxidant activities of the Mangrove Endophytic Fungus <i>Nodulisporium indicum</i> isolated From <i>Bruguiera cylindrica</i>.</p> <p><b>Consolation:</b> Naik Rakshanda, Prabhugaonkar Ashish, Jayarama D. Bhat &amp; J. Pratibha<br/>DCT's Dhempe College of Arts and Science, Miramar, Panaji, Goa 403001 India<br/>Department of Botany and Microbiology, College of Science, King Saud University, P.O. Box 22452, Riyadh 11495, Saudi Arabia<br/>Formerly, Department of Botany, Goa University, Goa 403206, India<br/>Study of fungal diversity from mudflats of Goa, India</p> |
| 4 | <p>Professor S. A. Parndekar</p> <p>Award for Young Researchers<br/>(Category-Poster Presentation)</p>                               | <p><b>Rank 1:</b> Rushikesh Nimse, Pavan G. Saraskar<br/>Dept of Plant Pathology, College of Agriculture, Latur<br/>Efficacy of fungicides against Phomopsis blight of Brinjal (<i>Phomopsis vexans</i>).</p> <p><b>Rank 2:</b> Miss Juweriya Murad and Dr. Dhanshree Patil<br/>Br. Balasaheb Khardekar College, Vengurla</p>   |

|   |   |  |
|---|---|--|
|   |   | <p>Fungal Diversity in Vagheri Dongar and Ansur Dongar</p> <p><b>Rank 3:</b> Trupti Pandit Chavan, Anjali Patil, Yogesh Patil and Sushant Bornak</p> <p>Department of Botany, Rajaram College, Kolhapur</p> <p>Diversity of edible mushrooms from Kolhapur District (MS)India.</p> <p><b>Consolation:</b> Patil, Anjali R., Aman A. Kamble and Yogesh S. Patil</p> <p>Department of Botany, Rajaram College, Kolhapur</p> <p>Contribution of wood rotting Aphyllophorales fungi to the Indian mycobiota from Kolhapur district (M.S.), India</p> <p><b>Consolation:</b> Nalanda More, Snehal Lokhande, Anjali Patil, Yogesh Patil</p> <p>Department of Botany, Rajaram College, Kolhapur</p> <p>Diversity of Macromycetes from Rajaram College campus, Kolhapur, MS, India.</p>  |
| 5 | <p><b>Oral Presentation</b><br/><b>(Category-General)</b></p> | <p><b>Rank 1:</b> Dr. D. S. Patil and Dr. N.S. Chavan</p> <p>Br. Balasaheb Khardekar College, Vengurla and Shivaji University, Kolhapur</p> <p>Antifungal Efficacy of <i>Acorus calamus</i> : A sustainable, fragrant solution.</p> <p><b>Rank 2:</b> J. Pratibha, Jayarama D. Bhat &amp; Prabhugaonkar Ashish</p> <p>Diversity and phylogeny of litter-degrading anamorphic fungi from Goa, India</p> <p>DCT's Dhempe College of Arts and Science, Miramar, Panaji, Goa 403001 India</p> <p>Department of Botany and Microbiology, College of Science, King Saud University, P.O. Box 22452, Riyadh 11495, Saudi Arabia</p> <p>FORMERLY, DEPARTMENT OF BOTANY, GOA UNIVERSITY, GOA 403206, INDIA</p> <p><b>Rank 3:</b> Barad, Komal, Vijay R. Parmar and Rajesh Raviya</p> <p>Department of Life Sciences, Bhakta Kavi Narsinh Mehta University, Junagadh, Gujarat, India, 362263</p> <p>Nutraceutical properties, antioxidant activity, and enzyme activity with kinetic potential of edible and medicinal mushrooms</p> |

|   |   |   |
|---|---|---|
| 6 | <b>Poster Presentation</b><br><b>(Category-General)</b> | <p><b>Rank 1:</b> Sagar Jadhav and Patil, Anjali R.<br/> Department of Botany, Rajaram College, Kolhapur<br/> <i>Euphorbia antiquorum</i> latex-based 2.5% EC biopesticide for sustainable management of Cabbage Aphid (<i>Brevicoryne brassicae</i>).</p> <p><b>Rank 2:</b> Ms. Sakshi Raj Kumar and Bhavana Narula<br/> Department of Botany, Ramnarain Ruia Autonomous College, Matunga (E), Mumbai.<br/> Myco-Remediation Potential of Bark-Dwelling Fungi Against Propargite, A Common Acaricide.</p> <p><b>Rank 3:</b> Prabhugaonkar Ashish, Jayarama D. Bhat &amp; J. Pratibha<br/> DCT's Dhempe College of Arts and Science, Miramar, Panaji, Goa 403001 India<br/> Department of Botany and Microbiology, College of Science, King Saud University, P.O. Box 22452, Riyadh 11495, Saudi Arabia<br/> FORMERLY, DEPARTMENT OF BOTANY, GOA UNIVERSITY, GOA 403206, INDIA</p> <p>Diversity of litter degrading fungi from streams of Goa and North East India.</p> |
|---|---|---|