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From the Editor's desk

Dear readers

Greetings from KAVAKA

We are delighted to present the third issue of the 60th volume of KAVAKA, where the richness and diversity of mycological research across India capture the spotlight. This issue presents an array of studies that expand the dimension of the understanding of fungi in various ecological contexts. As fungal studies continue to unlock potential in translational research, we hope this collection of articles will contribute to advancing knowledge and propelling further research within the mycological community.

This issue opens with an article on the cultivation of Oyster Mushroom (*Pleurotus djamor*), which examines how different substrates impact mushroom yield under *in-vitro* conditions, offering insights into sustainable food production. Given the increasing demand for low-cost protein sources, the article also highlights potential ways to optimize mushroom production. Another significant contribution explores the distribution and diversity of arbuscular mycorrhizal fungi in tree species in Gujarat's semi-arid forests, shedding light on how these symbiotic fungi support ecosystem resilience. Following this is an article that presents a comprehensive review of leaf and fruit diseases affecting *Musa* spp., focusing on fungal pathogens that pose challenges to banana cultivation. The study lays a foundation for developing targeted disease management strategies, an essential step for sustaining banana yield and quality in regions heavily reliant on this staple crop.

Additionally, the journal features the first report on *Puccinia noccae* Arth. on *Lagascea mollis*, commonly known as silk leaf, from Eastern India, documenting a novel pathogen-host interaction in the region. Enhancing the mycological discourse within this edition, the journal further presents a study on *Astraeus asiaticus*, an ectomycorrhiza, in the Sal forests of Chhattisgarh, unveiling a lesser-known yet ecologically significant fungus. The journal also features research from Himachal Pradesh on new additions to the family Thelephoraceae, the leathery earthfan mushrooms, emphasizing the wealth of fungal diversity within India's unique ecosystems.

Our contributors also address practical applications in agricultural health with an assessment of *Andrographis paniculata* plant extracts to mitigate mycotoxin contamination in maize seeds, which has implications for food safety. By exploring natural antifungal agents, this study suggests a sustainable approach to managing mycotoxin risks in stored grains, which could mitigate health risks and financial losses for farmers.

Additionally, this issue includes a new record of *Ganoderma ramosissimum* from Kerala, expanding our knowledge of fungal species in South India. These findings not only enrich our taxonomic understanding but also alert us to potential shifts in fungal distribution, which may have ecological and agricultural implications. Another study presents a morphological characterization of pumpkin powdery mildew in two geographical regions of Arunachal Pradesh, Ziro and Medo, offering valuable insights for crop protection strategies in different agro-climatic conditions. Finally, a study on 133 isolates of 13 different genera of keratinophilic fungi from the soils of Nagaur, Rajasthan uncovers species that could prospectively play a role in bioremediation and bear potential health impacts on humans and animals.

Together, these articles highlight the vast potential of fungal studies in India. By addressing agricultural challenges, ecological conservation, and fungal biodiversity, these studies bring forth valuable insights with both local and global implications. As fungal research continues to unfold, it is evident that fungi, far from being mere decomposers, are pivotal to the health of our ecosystems and economies.

As we reflect the advancements in the field of mycology, we note with sorrow the demise of Prof. Chiranji Lal Jandai, a visionary mushroom scientist and mentor to many. May his legacy continue to guide us and inspire future breakthroughs.

We conclude this issue with a sense of gratitude, thanking all the contributors and reviewers for their efforts in enriching this issue of KAVAKA. We hope the diversity and depth of studies featured here will inspire further research in mycology and broaden the scope of knowledge in fungal biology and its applications.

30 September 2024

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