JOURNAL OF APPLIED **BIOLOGY & BIOTECHNOLOGY**

Special Issue on Role of Agriculture Biotechnology for Sustainable Development Goals (SDGs)

Indexed in Scopus, Embase, Scimago [Q3]

Guest Editor: Prof.Umesh Goutam (Professor & Head), Department of Molecular Biology and Genetic Engineering

Address: School of Bioengineering and Biosciences, Lovely Professional University, Phagwara, Punjab (India)



Guest Editors:

- Dr. Sarvjeet Kukreja, Associate Professor, Department of Agronomy, School of Agriculture, Lovely Professional University, Phagwara, Punjab (India)
- Dr Neha Salaria, Postdoc, Department of Plant Breeding, Swedish University of Agricultural Sciences, Box 190, SE-234 22 Lomma, Sweden.

Submit Your **Article Now**



Submission Start Date: 15-10-2024 Submission End Date: 31-12-2024





https://jabonline.in

Articles invited for the special issue on "Role of Agriculture Biotechnology for Sustainable Development Goals (SDGs)"

Background and Rationale:

The global challenges of food security, climate change, and environmental sustainability have underscored the urgent need for innovative approaches to agriculture. Biotechnology plays a pivotal role in addressing these challenges by offering sustainable solutions that align with the United Nations Sustainable Development Goals (SDGs), particularly those related to zero hunger (SDG 2), climate action (SDG 13), and life on land (SDG 15).

The proposed special issue on "Agriculture Biotechnology for Sustainable Development Goals (SDGs)" aims to bring together cutting-edge research that explores the intersection of biotechnology and sustainable agricultural practices. This issue will serve as a platform for researchers to share their advancements in utilizing biotechnological tools to achieve sustainability in agriculture while addressing global challenges.

Themes and Scope: This special issue will focus on, but is not limited to, the following themes:

1. Biotechnology in Crop Improvement for Climate Resilience:

- o Genetic modification and gene editing for stress tolerance (drought, salinity, heat)
- Development of climate-smart crops
- 2. Sustainable Pest and Disease Management:
 - o Biotechnological approaches for integrated pest management
 - Bio-based pesticides and disease resistance
- 3. Enhancing Soil Health and Fertility:
 - o Microbial biotechnology for sustainable soil fertility
 - o Biofertilizers and their role in sustainable agriculture
- 4. Biotechnology in Sustainable Water Use:
 - o Genetic approaches to improving water-use efficiency in crops
 - o Innovations in water-saving agricultural practices
- 5. Agri-biotechnology for Food Security:
 - Biotechnological innovations to increase crop yield and nutritional quality
 - Genomic approaches to improving food security in developing regions

6. Biotechnology and Agroecology:

- Integration of biotechnology into agroecological practices
- Sustainable farming systems and biodiversity conservation
- 7. Biotechnology for Circular Bioeconomy:
 - Agricultural waste management and bioenergy production
 - Biorefineries and value-added products from agricultural residues
- 8. Policy, Ethics, and Public Engagement in Agri-biotechnology:
 - Governance, regulatory frameworks, and ethical considerations in agricultural biotechnology e.tc.

Target Audience:

This special issue will appeal to scientists, researchers, and practitioners working in the fields of agricultural biotechnology, sustainable development, environmental science, and related disciplines. It will also be of interest to policymakers and stakeholders involved in advancing sustainable agriculture and biotechnological innovation.

Submission and Review Process:

All submissions will undergo a rigorous peer-review process to ensure the highest quality of published research.

Manuscript submission:

Manuscripts should be submitted online through the journal's online submission system. Please visit this link for further details:

https://jabonline.in/submitmanuscript.php