BMC Genomic Data

Call for Papers

Omics of crops

Image credit: © SimonSkafar / Getty Images / iStock

BMC Genomic Data is calling for submissions to our collection, Omics of crops.

Advancements in genomics and omics technologies have revolutionized the study of crops, including maize, wheat, and other essential food supply crops. These technologies have enabled comprehensive analyses of crop genomes, transcriptomes, proteomes, and metabolomes, providing insights into crop optimization, disease resistance, and synthetic biology approaches for enhancing crop traits.

Future research in this field holds the potential for leveraging omics data to develop precision breeding techniques, engineer crops with enhanced nutritional value, and improve resilience to climate change and emerging pathogens. Additionally, ongoing research efforts may lead to the development of innovative synthetic biology approaches for sustainable crop production and food security.

We invite submissions encompassing a wide array of topics, including but not limited to:

- Genomic and omics studies of specific crop species
- Molecular breeding strategies for crop improvement
- Crop responses to environmental stressors
- Identification of key genes and pathways involved in crop development and adaptation
- Precision breeding techniques using omics data
- Engineering crops for enhanced nutritional value
- Synthetic biology approaches for sustainable crop production
- Resilience to climate change and emerging pathogens

Guest Editors

- **Umesh K Reddy, PhD, West Virginia State University, United States**
- **Margaret R Woodhouse, PhD, United States Department of Agriculture Agricultural Research Service, United States**
- **Daoquan Xiang, PhD, National Research Council, Canada**

www.biomedcentral.com/collections/ooc

Submission Deadline: 30 May 2025

BMC Part of Springer Nature