

Special Issue

Plant Bioactives for Improving Health and Sustainability in Livestock Production Systems

Message from the Guest Editors

This Special Issue focuses on how plant-derived bioactives, such as polyphenols, terpenes, and saponins, can be harnessed through grazing management, forage diversity, and diet formulation to improve animal health and productivity while enhancing sustainability in livestock production systems. We welcome the submission of mechanistic and applied studies across species, with particular relevance to grazing ruminants, that clarify effects on diet selection and feeding behavior, rumen fermentation and microbiome function, nutrient-use efficiency, and immune, antioxidant, and metabolic responses. Submissions that connect plant bioactives to environmental performance are encouraged, including life-cycle assessment, greenhouse gas and nutrient loss outcomes, ecosystem services, and soil carbon dynamics. By integrating fundamental mechanisms with field-scale evidence and management-ready strategies, this issue aims to identify research gaps and priorities for future directions that can translate plant bioactives into practical programs to enhance animal health, welfare, and productivity while improving system sustainability and food quality, with potential benefits for consumer health.

Guest Editors

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Dr. Fred Provenza
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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2024, ranks 15/86 (Q1) in 'Agriculture, Dairy & Animal Science'; 21/170 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

Editor-in-Chief

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