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Rumen Microbiota: Higher Efficiency through a Balanced Ecosystem

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Message from the Guest Editors

The rumen microbiota plays a crucial role in feed degradation and fermentation, driving productivity in dairy of meat producing ruminants. From early microbiology studies to recent research using omics approaches, the scientific community has gained some knowledge on the diversity, composition and functions of rumen microbiota, and on the biotic and abiotic factors which may affect rumen microbial efficiency. Precision farming has to take into account animal specificities in terms of rumen efficiency in order to define strategies to improve production objectives and in this context, it is of primary importance to better understand relationships within rumen microbial communities and between microbiota and the host animal, in a context where climate change, food safety and nutritional quality, or animal welfare, are of great concern for both producers and consumers. The aim of this Special Issue is to present recent research and reviews focused on the role of rumen microbiota as a driver of efficiency, health and welfare, and on strategies to improve rumen function with the aim of stimulating interest, understanding and exploration of this important subject.



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Special Issue



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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 (2023, ranks 10/80 (Q1) in 'Agriculture, Dairy & Animal Science'; 16/167 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.0.

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