Special Issue

Nutritional and Metabolic Regulation of Dairy Cow

Message from the Guest Editors

The result of breeding work is a significant improvement in the performance characteristics of dairy cows. However, the increase in their productive capacity results in higher demands on housing and feeding conditions, which farmers are unable to meet. Due to the difficulties in properly balancing feed rations, the incidence of metabolic disorders increases, especially during the drying-out period and early lactation. Metabolic disorders limit the physiological capacity of the animals, worsening the physicochemical characteristics of the colostrum and milk produced, which reduces the quality and technological suitability of raw milk and affects the efficiency of calf rearing. Climate change is leading to a potential reduction in the availability of feedstuffs, prompting a search for alternative plants and feed components that may be effective in the feeding of dairy cows. Rumen fermentation processes and their products guarantee the proper functioning of the animals, their metabolism, health, and productivity. A non-invasive way to observe rumen processes and verify the impact of new ration solutions for dairy cows is in vitro analysis.

Guest Editors

Dr. Ewa Pecka-Kielb

Prof. Dr. Andrzej Zachwieja

Dr. František Zigo

Deadline for manuscript submissions

closed (15 May 2023)

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/si/130080

Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriculture@mdpi.com

mdpi.com/journal/agriculture

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/journal/agriculture

MDPI

About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

Editor-in-Chief

Prof. Dr. Les Copeland
Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)