

Special Issue

Genetic Diversity Assessment and Marker-Assisted Selection in Ruminants Livestock

Message from the Guest Editor

There are more than 1500 breeds of ruminants worldwide, representing a huge amount of phenotype diversity in growth, fertility, and the production of meat, milk, and wools. This provided us with ideal animal models to assess the genetic diversity and identify the functional genes or genetic markers correlated with these traits of economic value. Theoretical and simulation studies show that the advantage of using marker-assisted selection can be substantial, particularly when marker information is used, because normal selection is less effective, for example, for sex-limited or carcass traits. Emerging genomic technologies could allow large numbers of polymorphic sites to be identified. This type of approach, combined with cheap and high density markers, could largely facilitate the breeding process in ruminants livestock. Therefore, this Special Issue aims to report on recent studies in genetic/genomic diversity assessment, functional genes/markers identification and marker-assisted selection in ruminant livestock, including cow, cattle, yak, buffalo, sheep, goat, camel and so on.

Guest Editor

Dr. Lin Jiang

The Key Laboratory for Farm Animal Genetic Resources and Utilization, Ministry of Agriculture and Rural Affairs, Institute of Animal Science Chinese Academy of Agricultural Sciences (CAAS), Beijing 100193, China

Deadline for manuscript submissions

closed (20 March 2022)



Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



mdpi.com/si/97458

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

[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)





Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

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)