

## Special Issue

# Quantitative Genetics of Livestock Populations

### Message from the Guest Editors

Quantitative genetic methods investigate the effect of genetic and environmental factors simultaneously, and help improve the efficiency and sustainability of livestock breeding by focusing on traits that are influenced by multiple genes. Statistical models and breeding values help predict the genetic potential of an animal. By understanding the genetic correlation between different traits, breeders can optimise their selection strategies. Genetic diversity is vital to prevent inbreeding in the population and to a successful breeding plan to obtain healthy and productive animals in the herd or population.

We welcome original research papers that address various aspects of quantitative genetics, including, but not limited to, the following:

Quantitative genetic approaches to improve productivity and fertility in livestock; the estimation of genetic parameters and the prediction of animal breeding values using different tools and information; genetic diversity and inbreeding in animal populations; impact of crossbreeding on quantitative traits in animal populations; design of breeding programmes and key issues in breeding programme design.

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### Guest Editors

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### Deadline for manuscript submissions

10 October 2025



## Agriculture

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## 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.

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### Editor-in-Chief

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