Special Issue

Molecular Mechanisms and Breeding Techniques of Forage Crops

Message from the Guest Editors

In these years, global change induces extreme environmental stresses that inhibit the growth and yield of forage crops. Availability of varieties of forage crops that have high qualities and yields under different environmental conditions is rather necessary. Previously, the qualities of many forage species had been improved by traditional hybrid breeding methods, but due to the long breeding cycles, the complex nature of traits, and the polyploidy of the forage crops, rapid and precision breeding were hindered. Recently, with the development of genetics and molecular breeding techniques, many functional genes and quantitative trait loci (QTLs) have been identified, which will accelerate the breeding work in forage crops. This Special Issue focuses on the molecular mechanisms of the genes in growth and development regulation, environmental stress response, and yield improvement. This Special Issue will fully embrace the studies related to molecular breeding of forage crops, including gene function identification, QTL mapping, and genome-wide association studies (GWASs) that relate to certain traits of the forage crops, as well as the breeding technologies of the forage crops.

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Deadline for manuscript submissions

15 October 2025



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/238476

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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

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