

Special Issue

Molecular Breeding and Genetics of Plant Drought Resistance

Message from the Guest Editors

We would like to invite you to contribute to this Special Issue of the journal *Genes*, entitled “Molecular Breeding and Genetics of Plant Drought Resistance”. Drought stress is one of the most critical the abiotic stress factors. It is predicted that by 2050, more than half of the world’s arable land will be affected by drought. The development of drought-resistant or drought-tolerant plants and cultivars with stable yields under drought and non-drought conditions is therefore becoming one of the most important goals of breeding worldwide. In addition to conventional breeding methods, breeders today have numerous biotechnological tools at their disposal that can assist them in characterizing drought-resistance traits in elite and non-elite crop germplasm. Biotechnological approaches such as the identification and introgression of trait-specific QTLs, marker-assisted selection and backcrossing, genomic selection, mutation breeding and, more recently, genetic improvement via genome editing techniques will play a crucial role in future plant breeding programs for drought resistance.

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Deadline for manuscript submissions

closed (15 February 2026)

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About the Journal

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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