

Special Issue

Molecular Biology and Breeding of Sunflowers

Message from the Guest Editors

Sunflowers, a primary global oilseed crop, face increasing challenges caused by climate change and the emergence of pests and diseases. While conventional breeding has successfully increased sunflower yield potential and stability, an integrated approach is needed to include all available technologies and accelerate genetic progress and crop adaptability. Innovative molecular biology and breeding research is essential in identifying additional tools for the precise and rapid development of new sunflower varieties. Recent advances in genomics and sequencing technologies have revolutionized this research area. The sequencing of the sunflower genome has bridged the gap between traditional and molecular approaches to breeding strategies, enabling innovative research into genetics, genomics, and breeding. We welcome submissions on topics covering the broad spectrum of sunflower research, including mapping, molecular breeding, genome editing, functional genomics, innovative breeding technologies, in vitro culture, and cutting-edge technologies that contribute to sustainable sunflower agriculture.

Guest Editors

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Editor-in-Chief

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