

Special Issue

Evolutionary Mechanisms and Molecular Regulatory Networks of Plant Breeding Systems

Message from the Guest Editor

Plant breeding systems governing sexual reproduction and asexual reproduction are pivotal for plant evolution and crop yields, and their evolutionary and ecological importance has been studied since Darwin. This Special Issue aims to link evolutionary mechanisms with the genetic regulatory networks controlling reproduction processes such as floral development (morphological traits, patterns, and longevity of various floral parts), flower–pollinator interactions, mating strategies, self-incompatibility, sex determination, and so forth. We seek to highlight cutting-edge studies using multi-omics, molecular technologies, and genetics to decode the evolution and regulations of such processes. We solicit papers, including original research and reviews, on the molecular basis of reproductive traits, the genomic signatures of mating and breeding system evolution, and the evolutionary genomics of plant reproduction and evolutionary dynamics. This Special Issue will provide therefore a platform for interdisciplinary research, advancing both plant fundamental knowledge and applied crop breeding strategies.

Guest Editor

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