



## Hybrid Breeding: Future Status and Future Prospects - Series II

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### Message from the Guest Editors

Dear Colleagues,

Hybrid breeding is a scientific approach based on the exploitation of heterosis for crop production. The discovery of cytoplasmic male sterility (CMS) facilitated the introgression of hybrid breeding in some cross-pollinated and self-pollinated crop species like wheat, rye, barley, tomato, etc., enabling the production of high yielding hybrids, whereas in other cases hybridization enabled the production of new cultivars (e.g. via transferring useful translocations like the 1BL.1RS and 1AL.1RS in bread wheat) or even crops (e.g. triticale, tritordeum, hordocale). Another important application of heterosis is the production of doubled haploid lines after crossing recalcitrant wheat cultivars to cultivars with good androgenic ability. New sources of CMS and restoration genes have to be discovered to ensure the conservation and broadening of the genetic background for crop plants. This new special issue aims to provide all current prospects regarding a safe and effective application of hybrid breeding for the benefit of farmers, consumers, and seed companies.





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## Message from the Editor-in-Chief

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