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# **Genetics, Profiling and Breeding of Triticale**

Guest Editor:

#### Dr. Gabriela Gołębiowska

Pedagogical University of Krakow, Institute of Biology, Chair of Genetics, ul. Podchorążych 2, 30-084 Kraków, Poland

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#### Message from the Guest Editor

Triticale (x Triticosecale Wittmack) is a synthetic hybrid derived by crossing between wheat (Triticum aestivum L., AABBDD) and rye (Secale cereale L., RR). Presently cultivated hexaploid (AABBRR) triticale is well-adapted to the adverse environmental conditions of high elevation, acid soil, salinity and aluminum toxicity, low temperature, drought, and waterlogged soils. The challenge for triticale breeding is various types of abiotic and biotic stresses, primarily common drought and new races of pathogens. Therefore, it is essential to find tolerant genotypes and dissect the mechanisms of tolerance in order to introduce the trait into the wide range of new cultivars. The employment of modern molecular techniques can provide information as to which biochemical, physiological, or anatomical features could serve as a cogent and easily measurable marker for the selection of the tolerant genotypes. Tolerance is usually a complex quantitative trait, which is likely dependent on many genes and influenced by environmental factors. The advancement of genetic maps and QTL regions could serve in the MAS and breeding of new varieties.









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**Prof. Dr. Dilantha Fernando** Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

#### Message from the Editor-in-Chief

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