Genomics-Aided Breeding for Climate-Smart Traits in Faba Bean. In: Kole C. (eds) Genomic Designing of Climate-Smart Pulse Crops

Ahmed Sallam, Sami Ul-Allah

Abstract:

Faba bean (Vicia faba L.) is an important pulse crop, which provides useful source of protein for human and animal consumption. The faba bean cultivation area around world has been slightly decreased due to the lack of cultivars adaptable to various biotic and abiotic stresses effects of which tend to gradually increase as consequences of climate change. Breeding for improved faba bean with biotic and abiotic stress tolerance will maintain and increase the cultivation area of faba bean by producing new cultivars having high tolerance to these stresses combined with high yield. Climate-smart traits (CSTs) can be used to evaluate faba bean genotypes for stress tolerance and to select the true promising genotypes for target traits. Moreover, the advances in genetic research in faba bean should be exploited in accelerating breeding programs to genetically improve CSTs. Unfortunately, the progress of

Published In:

Springer Nature , Chapter 7 , pp. 359-395