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Altri autori (Persone)	TuberosaR (Roberto) VarshneyR. K <1973-> (Rajeev K.)
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	Exploring the Genetic Control of Tolerance of Stagnant FloodingBeyond the SUB1Gene; References; Chapter 3 Genomics Applications to Salinity Tolerance Breeding in Rice; Introduction; Mapping of Loci Associated with Salinity Tolerance in Rice; Marker-assisted Backcrossing to Use Salt Tolerance QTLs for Breeding; Cloning of QTLs Associated with Salinity Tolerance in Rice; Next-generation Sequencing: Advances and Limitations; Application of Next-generation Sequencing Technologies to Salinity Tolerance Research; SNP Discovery and QTL Identification; Identification of Candidate Genes; Conclusions ReferencesChapter 4 Marker-Assisted Introgression of Major QTLs for Grain Yield Under Drought in Rice; Introduction; Rice and Drought; The Current Drought-Tolerance Improvement Strategy at the International Rice Research Institute (IRRI); Direct Selection for Grain Yield is Achieved with Proper Drought Treatments; Identification of Large-Effect QTLs for Grain Yield under Drought; Major Rice QTLs Reported for Grain Yield under Drought; QTL x Environment and QTL x Genotype Interactions; Effect of Drought Yield QTLs on Multiple Yield-Related Traits under Drought Candidate Gene Content and Comparative Genomics of Drought Yield QTLsPhysiology Studies to Characterize the Mechanisms by Which Major-Effect QTLs Confer Improved Yield under Drought; Perspectives; Novel Marker-Assisted Breeding Approaches; Collaborative Strategies of Breeding and Physiology for Improvement of Drought Tolerance in Rice; Summary; References; Chapter 5 Molecular Breeding for Phosphorus-efficient Rice; Introduction; Plant Responses to P Deficiency; Phosphorus in Rice Cropping Systems; Breeding Targets Related to P Efficiency in Rice The Pup1 QTL and Its Application in Molecular Breeding
Sommario/riassunto	Genomic Applications for Crop Breeding: Abiotic Stress, Quality and Yield Improvement is the second of two volumes looking at the latest advances in genomic applications to crop breeding. This volume focuses on advances improving crop resistance to abiotic stresses such as extreme heat, drought, flooding as well as advances made in quality and yield improvement. Chapters examine advances in such key crops as rice, maize, and sugarcane, among others. Genomic Applications for Crop Breeding: Abiotic Stress, Quality and Yield Improvement complements the earlier volume on biotic stre