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Nota di contenuto	Chapter 1 Potential of genetic and genomic resources for genetic improvement of food crops -- Chapter 2 Untapped genetic diversity of wild relatives for crop improvement -- Chapter 3 Molecular approaches for harvesting natural diversity for crop improvement -- Chapter 4 Omics and plant genetic resources: Towards mining potential genes -- Chapter 5 Genetic and genomic resources and their exploitation for unlocking genetic potential from the wild relatives.-Chapter 6 Role of gene banks in maintaining crop genetic resources -- Chapter 7 Exploring genetic resources for identification of potential novel genes for crop improvement -- Chapter 8 Next-generation sequencing technologies and their implications for efficiently utilization of genetic resources -- Chapter 9 Comparative genomics for exploring new genes and traits for crop improvement -- Chapter 10 Potential of wild species in the scenario of climate change -- Chapter 11 Role of wild relatives for development of climate-resilient varieties -- Chapter 12 Strategies for conservation of genetic resources -- Chapter 13 Crop landraces: Present threats and opportunities for conservation -- Chapter 14

Future threats and opportunities facing crop wild relatives and landrace diversity.

Sommario/riassunto

This book describes how the latest genomic resources techniques can be efficiently used in plant breeding programmes to achieve food security in the future. It also shares insights on how to utilize the untapped and unexplored genetic diversity of wild species, wild relatives and landraces for crop improvement. Moreover, the book offers an impressive array of balanced analyses, fresh ideas and perspectives, and thoughtful and realistic proposals regarding the sustainable utilization of plant genetic resources with modern biotechnological techniques. The first book to address the importance of plant genetics and genomic resources for food security, it brings together a group of plant breeders and biotechnologists to investigate the use of genomic resources techniques in plant breeding programmes. Providing essential information on the efficient utilization of genomic resources in precision breeding, it offers a valuable asset for undergraduate and graduate students, teachers and professionals engaged in related fields.
