

1. Record Nr.	UNINA9910830294003321
Titolo	The handbook of plant mutation screening [[electronic resource]] : mining of natural and induced alleles // edited by Khalid Meksem, Gunter Kahl
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2010
ISBN	1-282-45668-7 9786612456688 3-527-62939-4 3-527-62940-8
Descrizione fisica	1 online resource (463 p.)
Collana	Molecular Plant Biology
Altri autori (Persone)	MeksemKhalid KahlGunter
Disciplina	631.53
Soggetti	Plant mutation breeding Allelomorphism
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	The Handbook of Plant Mutation Screening: Mining of Natural and Induced Alleles; Contents; Preface; List of Contributors; Abbreviations; Part I Induced Mutations; 1 Physically Induced Mutation: Ion Beam Mutagenesis; 2 Ds Transposon Mutant Lines for Saturation Mutagenesis of the Arabidopsis genome; 3 Use of Mutants from T-DNA Insertion Populations Generated by High-Throughput Screening; 4 Making Mutations is an Active Process: Methods to Examine DNA Polymerase Errors; 5 Tnt1 Induced Mutations in Medicago: Characterization and Applications; Part II Mutation Discovery 6 Mutation Discovery with the Illumina Genome Analyzer7 Chemical Methods for Mutation Detection: The Chemical Cleavage of Mismatch Method; 8 Mutation Detection in Plants by Enzymatic Mismatch Cleavage; 9 Mutation Scanning and Genotyping in Plants by High-Resolution DNA Melting; 10 In Silico Methods: Mutation Detection Software for Sanger Sequencing, Genome and Fragment Analysis; Part III High-Throughput Screening Methods; 11 Use of TILLING for Reverse and Forward Genetics of Rice; 12 Sequencing-Based Screening of

Mutations and Natural Variation using the KeyPoint™ Technology
Part IV Applications in Plant Breeding
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20 Emerging Technologies: Nanopore Sequencing for Mutation Detection
Glossary; Index

Sommario/riassunto

Induced mutagenesis is a common and promising method for screening for new crops with improved properties. This title introduces the different methods and then focuses on the screening, detection and analysis of the novel mutations. Written by a global team of authors the book is an indispensable tool for all scientists working on crop breeding in industry and academia.
