

1. Record Nr.	UNISALENTO991001894239707536
Autore	Convegno sul tema le Statistiche dello sviluppo <1980 ; Salerno>
Titolo	Atti del Convegno sul tema Le statistiche dello sviluppo : 15-16-17 ottobre 1980
Pubbl/distr/stampa	Napoli : Edizioni scientifiche italiane, 1982
Descrizione fisica	817 p. ; 24 cm.
Collana	Pubblicazioni dell'Università degli studi di Salerno. Sezione di atti, convegni, miscellanee ; 2
Disciplina	310
Soggetti	Statistica - Congressi
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	In cop.: AA.VV

2. Record Nr.	UNINA9910736979503321
Autore	Raina Aamir
Titolo	Advanced Crop Improvement, Volume 1 : Theory and Practice // edited by Aamir Raina, Mohammad Rafiq Wani, Rafiul Amin Laskar, Nasya Tomlekova, Samiullah Khan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-28146-2
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (546 pages)
Altri autori (Persone)	WaniMohammad Rafiq LaskarRafiul Amin TomlekovaNasya KhanSamiullah
Disciplina	631.523
Soggetti	Plant biotechnology Plant genetics Plant molecular biology Agriculture Genetics Plant Biotechnology Plant Genetics Plant Molecular Biology Genetics and Genomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Plant Breeding from Classical Genetics to Molecular Approaches for Food and Nutrition Security -- Nanotechnology in Agriculture -- Contribution and Impact of Mutant Varieties on Food Security -- Mutation Breeding: Protocol and Role in crop improvement -- Transgenic Techniques for Plant Improvement: A brief Overview -- Mutagenesis and Transgenesis in Plant Breeding -- Crop Biofortification: Plant Breeding and Biotechnological Interventions to Combat Malnutrition -- In Vitro Techniques in Plant Breeding -- Crop improvement for sustainable food and nutritional security: Applications

of mutagenesis and in vitro techniques -- Forward and Reverse Genetics in Crop Breeding -- Genetic mutations and molecular detection techniques in plant breeding -- RNA interference (RNAi) technology: an effective tool in plant breeding -- Doubled Haploid Production- Mechanism and Utilization in Plant Breeding -- TILLING and Eco-Tilling: Concept, Progress and its role in crop improvement -- Genome-Wide Association Study: A Powerful Approach to Map QTLs in Crop Plants -- Genome Editing - Mechanism and Utilization in Plant Breeding -- CRISPR/CAS: The Beginning of a New Era in Crop Improvement -- Next Generation Sequencing in Plant Breeding: Challenges and Possibilities.

---

## Sommario/riassunto

As per the reports of FAO, the human population will rise to 9 billion by the end of 2050 and 70% of more food must be produced over the next three decades to feed the additional population. The breeding approaches for crop improvement programs are dependent on the availability and accessibility of genetic variation, either spontaneous or induced by the mutagens. Plant breeders, agronomists, and geneticists are under constant pressure to expand food production by employing innovative breeding strategies to enhance yield, adaptability, nutrition, resistance to biotic and abiotic stresses. In conventional breeding approaches, introgression of genes in crop varieties is laborious and time-consuming. Nowadays, new innovative plant breeding techniques such as molecular breeding and plant biotechnology, supplement the traditional breeding approaches to achieve the desired goals of enhanced food production. With the advent of recent molecular tools like genomics, transgenics, molecular marker-assisted back-crossing, TILLING, Eco-TILLING, gene editing, CRISPR CAS, non-targeted protein abundant comparative proteomics, genome wide association studies have made possible mapping of important QTLs, insertion of transgenes, reduction of linkage drags, and manipulation of genome. In general, conventional and modern plant breeding approaches would be strategically ideal for developing new elite crop varieties to meet the feeding requirement of the increasing world population. This book highlights the latest progress in the field of plant breeding, and their applicability in crop improvement. The basic concept of this 2-volume work is to assess the use of modern breeding strategies in supplementing conventional breeding toward the development of elite crop varieties, for obtaining desired goals of food production.

---