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Descrizione fisica	1 online resource (XVII, 430 p. 40 illus., 31 illus. in color.)
Disciplina	635.65
Soggetti	Legumes - Breeding Biochemistry - Research
Lingua di pubblicazione	Inglese
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Nota di contenuto	Foreword -- Preface -- Efficient Breeding of Pulse Crops -- Advances in Chickpea Breeding and Genomics for Varietal Development and Traits Improvement in India -- Conventional and Biotechnological Approaches for Trait Targeted Improvement in Lentil -- Updates Pigeonpea Breeding and Genomics for Yield Improvement in India -- "Genomics-Assisted Breeding Green Gram (Vigna radiata (L.) Wilczek) for Accelerating Genetic Gain" -- Breeding For High Yielding and Disease Resistant Urdbean Cultivars -- Lentil Breeding in Genomic Era: Present Status and Future Prospects -- Chickpea Breeding for Abiotic Stress: Breeding Tools and 'Omics' Approaches for Enhancing Genetic Gain -- Recent Advances in Mungbean Breeding – A Perspective -- Genetic Advancement in Dry Pea (Pisum Sativum L.): Retrospect and Prospect -- Translational Genomics and Breeding in Soybean -- Efficient Improvement in an Orphan Legume, Horsegram, Macrotyloma uniflorum (Lam.) Verdi, using Conventional and Molecular Approaches -- Molecular and Conventional Breeding Strategies for Improving Biotic Stress Resistance in Common Bean -- Index.
Sommario/riassunto	Plant improvement has shifted its focus from yield, quality and disease resistance to factors that will enhance commercial export, such as early maturity, shelf life and better processing quality. Conventional plant breeding methods aiming at the improvement of a self-pollinating crop, such as wheat, usually take 10-12 years to develop and release of

the new variety. During the past 10 years, significant advances have been made and accelerated methods have been developed for precision breeding and early release of crop varieties. The proposed volume work thus plans to summarize concepts dealing with germplasm enhancement and development of improved varieties based on innovative methodologies that include doubled haploidy, marker assisted selection, marker assisted background selection, genetic mapping, genomic selection, high-throughput genotyping, high-throughput phenotyping, mutation breeding, reverse breeding, transgenic breeding, shuttle breeding, speed breeding, low cost high-throughput field phenotyping, etc. It will be an important reference with special focus on accelerated development of improved crop varieties.

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