1.	Record Nr.	UNINA9910876668603321
	Titolo	Plant breeding reviews . Volume 37 / / edited by Jules Janick
	Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Blackwell, c2013
	ISBN	1-118-49786-4
		1-299-31384-1
		1-118-49792-9
		1-118-49795-3
	Descrizione fisica	1 online resource (393 p.)
	Collana	Plant breeding reviews, , 0730-2207 ; ; v. 37
	Altri autori (Persone)	JanickJules
	Disciplina	631.52
	Soggetti	Plant breeding
	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 indexes.
	Nota di contenuto	 Plant Breeding Reviews; Contents; Contributors; 1. Bikram Gill: Cytogeneticist and Wheat Man; I. Early Life: Emergence of a Cytogeneticist; II. Research; A. Tomato Cytogenetics in California; B. Chromosome Banding Research in Missouri; C. Wild Wheat Studies at UC Riverside; D. Sugarcane Breeding in Florida; E. Germplasm Evaluation and Enhancement in Kansas; F. Establishing the Wheat Karyotype; G. Birth of the Chinese Spring Deletion Stocks; H. FISHing in the Wheat Gene Pool; I. Gene-Rich, High-Recombination Regions; J. The Q Gene Story; K. Cloning Lr21; L. Hybrid Centromeres M. Chromosome Bin MappingN. Comparative Genomics and Wheat Evolution; O. Sequencing the Wheat Genome; III. International Collaborations; IV. Educator; V. Champion of WheatWorkers; VI. The Man; VII. Epilogue; Acknowledgments; Literature Cited; 2. Synthetic Hexaploids: Harnessing Species of the Primary Gene Pool for Wheat Improvement; I. Introduction; A. The Importance of Wheat; B. Wheat Genetic Resources; II. Production and Utilization of Synthetic Hexaploid Wheat; A. Diversity of Ae. tauschii and SHW; B. Interspecific Crosses of Ae. tauschii and T. turgidum C. Direct Cross of Diploid Ae. tauschii to Common WheatD. Direct Cross of Tetraploid Wheat to Common Wheat; E. Factors for Consideration: Direct Versus Synthetic Approaches; 1. Threshability of the Grain; 2.

	Adaptation of the Durum Parents; 3. Rapid Recovery of Recurrent Parent Genotype; F. Available Genetic Resources in Synthetic Hexaploid Wheat; G. Current Strategies for Using Synthetic Hexaploid Wheat in Breeding; 1. Direct Phenotyping; 2. Genetic Analysis via Crosses and Backcrossing; 3. Advanced Backcross-Quantitative Trait Loci (AB-QTL) Analysis 4. Development and Use of Introgression Lines (ILs) or Substitutions LinesH. Expression of Ae. tauschii and T. turgidum Genes in Synthetic Hexaploid Wheat; III. Impact of Synthetic Hexaploid in Wheat Improvement; A. Disease and Pests Resistance; B. Enhancing Yield Productivity; C. Environmental Stress Tolerance; 1. Improving Salinity Tolerance; 2. Mineral/Nutrient Efficiency; 3. Boron Toxicity; D. Quality Improvement; 1. Bread Making Quality; 2. Preharvest Sprouting; IV. Conclusions and Future Prospects; Acknowledgments; Literature Cited 3. Breeding Early and Extra-Early Maize for Resistance to Biotic and Abiotic Stresses in Sub-Saharan Africa; I. Introduction; A. Importance of Maize in Sub-Saharan Africa; B. Constraints to Maize Production and Productivity in Sub-Saharan Africa; 1. Striga Parasitism; 2. Drought Stress; 3. Low Soil Nitrogen; 4. Combined Effects of Striga Parasitism, Drought, and Low Nitrogen Stresses; II. Development of Breeding Populations; A. Breeding Methodology; B. Development of Base Populations for Recurrent Selection; 1. Extra-Early Populations; 2. Early Populations; C. Screening Methodology; 1. Striga 2. Drought
Sommario/riassunto	Contents 1. Bikram Gill: Cytogeneticist and Wheat Man - 1 2. Synthetic Hexaploids: Harnessing Species of the Primary Gene Pool for Wheat Improvement - 35 3. Breeding Early and Extra-Early Maize for Resistance to Biotic and Abiotic Stresses in Sub-Saharan Africa - 123 4. Almond Breeding - 207 5. Breeding Loquat - 259 6. Prognostic Breeding: A New Paradigm for Crop Improvement - 297