1. Record Nr. UNINA9911019931103321

Titolo	Plant Breeding Reviews . Volume 3
Pubbl/distr/stampa	Hoboken, : John Wiley & Sons, 1985
ISBN	1-118-06100-4
Descrizione fisica	1 online resource (457 p.)
Collana	Plant Breeding Reviews ; ; v. 3
Altri autori (Persone)	JanickJules <1931->
Disciplina	631.5305
Soggetti	Plant breeding -- Periodicals Plant breeding Agriculture Earth & Environmental Sciences Plant Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Plant Breeding Reviews, Volume 3; Contents; Contributors; 1 Dedication: Glenn W. Burton A Maker of Green Pastures; I. The Productions; II. Methodology; III. Service and Honors; Publications of Glenn W. Burton; 2 Physiological Genetics of Plant Maturity, Adaptation, and Yield; I. Introduction; II. Relationships of Maturity and Photoperiod-Temperature to Genetics, Development, Yield, and Adaptation; III. Opportunities in Breeding for Maturity; IV. The Complex Character of Maturity; V. The Flowering Tendency and Its Genetic Direction VI. The Photoperiod Response-1Its Environmental Modulations and Genetic DirectionVII. Photoperiod X Temperature Interactions; VIII. The Vernalization Response and Its Genetic Direction; IX. Developmental Stages That Are Influenced by the Physiological Components of Maturity; X. Photoperiod-Temperature Modulations of Source-Sink Capacities and Assimilate Partitioning; XI. Photoperiod-Temperature Modulations of Endogenous Hormonal Relationships; XII. Features of the Genetic Direction and Environmental Modulation of Maturity That Are Common Across Plant Species XIII. Range of Maturity PhenotypesXIV. Procedures for Breeding for Maturity; XV. Contrasting Conclusions and Further Needed Physiological-Genetic Interpretations; Glossary; Literature Cited; 3

Advances in Chemical Hybridization; I. Introduction; II. Terminology; III. CHA Technology; IV. Historical Perspective; V. Hybridizing Chemicals; VI. Optimum Growth Stage for CHA Applications; VII. Site and Mode of Action; VIII. Hybrid Vigor; IX. CHAs as Breeding Tools; X. Alternative Chemical Hybridizing Method; Literature Cited; 4 Protoplast Fusion for Crop Improvement; I. Introduction
II. Methods for Isolation and Fusion of Plant ProtoplastsIII. Selection of Fusion Products and Verification of Hybridity; IV. Barriers to Applicaiton of Protoplast Fusion for Crop Improvement; V. Cytoplasmic Hybrids (Cybrids); VI. Potentials for Crop Improvement Literature Cited; 5 Use of Haploids in Breeding Barley; I. Introduction; II. Advantages and Limitations; III. Haploid-Production Systems; IV. Chromosome Doubling; V. Evaluation of Doubled Haploids for Breeding; VI. Evaluation and Development of Breeding Methods; VII. Special Breeding Applications
VIII. Current Breeding Programs and ResultsIX. Haploid Quantitative Genetics; X. Summary and Conclusions; Literature Cited; 6 Diploid and Polyploid Gametes in Crop Plants: Mechanisms of Formation and Utilization in Plant Breeding; I. Introduction; II. Mechanisms; III. Utilization; IV. Conclusions; Literature Cited; 7 Breeding Semidwarf Soybeans; I. Introduction; II. History; III. Research Approach; IV. Cultivar Releases; V. Future Impact; Literature Cited; 8 Breeding Tall Fescue; I. Introduction; II. Reproduction; III. Cytogenetics; IV. Breeding; V. Summary and Conclusions; Literature Cited
9 The Genetics and Breeding of Coleus

Sommario/riassunto

Plant Breeding Reviews is an ongoing series presenting state-of-the art review articles on research in plant genetics, especially the breeding of commercially important crops. Articles perform the valuable function of collecting, comparing, and contrasting the primary journal literature in order to form an overview of the topic. This detailed analysis bridges the gap between the specialized researcher and the broader community of plant scientists.