

The Genetics and Exploitation of Heterosis in Crops

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CIMMYT 주관 국제 Heterosis 심포지움이 멕시코 멕시코시에서 1997년 8월 17일부터 22일까지 멕시코, 미국, 인도, 한국 등 65국 500여명이 참석하여 195주요 연구결과가 발표되었다. 주요 연구 발표 제목을 소개함으로써 작물 육종사업 연구, 농작물 생산에 혁신적인 도움이 되기를 바랍니다.

Food Security; Poverty Alleviation; Natural Resource Protection

- Addressing Global Inequities through Agricultural Research Partnerships

Inbreeding and Outbreeding in the Development of a Modern Heterosis Concept

Heterosis; Feeding People and Protecting Natural Resources

The Quantitative Genetics of Heterosis

Dominance and Overdominance

Inbreeding and Heterosis

Genotype-by-Environment Interactions and Selection Response

Genetic Diversity and Heterosis

Effect of Hybrid Breeding on Genetic Diversity in Maize

Population Genetics of Increased Hybrid Performance Between Two Maize Populations Under Reciprocal Recurrent Selection

Broadening the Genetic Diversity in Breeding by Use of Exotic Germplasm

Mechanisms Contributing to Genetic Diversity in Maize Populations

Transgressive Variability of Productivity Characters of Triticale Plants Developed in Vitro from Heterotic F₁ Hybrids

The Biology and Physiology of Heterosis

Towards Understanding and Manipulating Heterosis in Crops-Can Molecular Genetics Help?

Epigenetic Changes in Maize DNA and Heterosis

Potential Heterosis Associated with Developmental and Metabolic Processes

Recurrent Selection and Heterosis

Molecular Markers and Heterosis

Best Linear Unbiased Predictor Analysis

Prediction of Single-Cross Performance

Commercial Strategies for Exploiting Heterosis

Heterosis for Development and Promotion of the Seed Industry

Logistics of Seed Production and Commercialization

Exploitation of Heterosis: Uniformity and Stability Considerations

Apomixis and Heterosis
 Temperate Maize and Heterosis
 Tropical Maize and Heterosis
 Heterosis in Important US Vegetable Crops
 Oilseeds and Heterosis
 Wheat and Heterosis
 Exploitation of Heterosis for Shifting the Yield Frontier in Rice
 Hybrid Rye and Heterosis
 Cotton and Heterosis
 Trees and Heterosis
 Heterosis: What Have We Learned, What Have We Done, Where are We Headed?
 The Role of Heterosis in Meeting World Cereal Demand in the 21st Century
 Research Needs in Heterosis
 Advances in Thermo-Photoperiod Sensitive Genic Male Sterility Wheat in China
 Utilization of Heterotic Patterns to Develop Maize Hybrids for El Bajío
 Incorporación de androesterilidad e identificación de restauradores de la
 fertilidad masculina en germoplasma de maíz de CIMMYT y la UNAM
 Development of Narrow-Base Synthetics from Early-Maturing Heterotic Pools
 and Their Use in Developing Non-Conventional Hybrids of Maize in India
 Heterosis and Combining Ability Studies for Oil Content in Maize
 Heterosis and Yield in 4 Maize Populations in the Subtropical Zone of Tarija, Bolivia
 Heterosis in Two white Maize Populations with Different Grain Hardness
 Environmental Influence on Phenology of Parental Lines of Sunflower Hybrids
 and Seed Production Planning
 Strategies to Use CIMMYT's Hybrid Schemes in the Bajío Maize Program
 Heterosis and the Genetic Structure of Productivity Components in Giber Flax
 Heterosis in Drought-tolerant Lines Derived from a Direct Cross of
 Wheat (*Triticum aestivum* L.) with *Triticum tauschii*
 Commercial Hybrid Wheat in Argentina
 Present Progress of Maize Breeding for Sustainable Agriculture and Cropping
 Systems for the Paddy Lowland and Upland in South Korea
 Is Heterosis a Form of Stress Tolerance?
 Heterochromatic Knob DNA in Relation to Heterosis in Maize
 Origin of Northwestern Dent, Persistent Variety of U.S. Corn
 Diversification of Male Sterile Cytoplasm with the Aid of Embryo Rescue
 Technique in Inter-Specific Hybridization for Rice

References

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 Heterosis in Crops - An International Symposium : 1 ~ 354.
 CIMMYT, 1997. Supplement to the Book of Abstracts and Author Index
 : 355 ~ 400.