

Significance of Cytoplasmic DNA in Plant Breeding

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- I. INTRODUCTION
- II. SOME BASIC INFORMATION ON DNA IN THE CYTOPLASM OF PLANTS
- III. AGRONOMIC TRAITS INFLUENCED BY CYTOPLASMIC FACTORS
 - A. Cytoplasmic Male Sterility (CMS)
 - B. Yield and Quality Parameters
 - C. Disease Resistance
 - D. Tissue Culture Responses and Regeneration
 - E. Combining Ability
- IV. BREEDING USING CYTOPLASMIC FACTORS
 - A. Characterization of Plant Material
 - 1. Potato
 - 2. Maize
 - 3. Rice
 - 4. Wheat
 - 5. Amaranth
 - B. Creating New Variability
 - 1. Undirected Processes
 - 2. Directed Alterations by Plasmone Transformations
 - C. Selection
 - 1. Correlation of Phenotype and Cytoplasm
 - 2. Somatic Recombination
- V. CONCLUSION
- LITERATURE CITED