

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

SHANTI SWARUP BHATNAGAR MEMORIAL AWARD FOR SCIENTIFIC RESEARCH

Citation

DR. M.S. SWAMINATHAN

The Shanti Swarup Bhatnagar Memorial Award for the year 1961 in Biology has been given to Dr. M.S. Swaminathan for his original contribution in the field of radiation genetics and mutation research.

Dr. M.S. Swaminathan, Head of the Division of Botany, Indian Agricultural Research Institute, New Delhi has set up a well-known school of research in the field of radiation genetics and mutation research at the Indian Agricultural Research Institute, New Delhi. His original contribution (1948-58) include the elucidation of the origin of potato, dwarf coconut and bread wheat, the nuclear cytology of yeasts, the classification and genetics of polyploid plants, monosomic analysis in wheat, the role of infection in heredity, the relationship between chromosome associations and seed fertility in autopolyploids and standardization of techniques for overcoming interspecific incompatibility barriers. His recent contribution (1959-64) relate to the experimental manipulation of genes in a purposeful direction which has been the primary research interest in recent years. This work has involved the use of a wide array of mutagens, both physical (X-rays, gamma-rays, fast and thermal neutrons and  $\beta$ -particles) and chemical (alkylating agents and free radicals). He has published over 140 research papers. He is President of the Indian Society of Genetics and Plant Breeding, Fellow of the National Institute of Sciences of India and Indian Academy of Sciences, Vice-President of the XI International Genetics Congress held at the Hague in 1963, Editor, "Radiation Botany", Chief Editor of the I.A.R.I. Post-Graduate School Journal and member of the Editorial Board of the CSIR Journals.