

## PREFACE

*Cotton production in the country has touched a new record of 244 lakh bales during the year 2005-06 with a productivity of 467 kg lint/ha. The attainment and maintenance of higher production and productivity profile during the last few years inspite of climatic aberrations in certain cotton growing regions of the country is primarily due to the adoption of improved production and protection technologies including highly productive and quality cottons. The area under transgenic cotton hybrids showed a phenomenal increase during the year.*

*The cultures CfNA 316 (G. arboreum), CfSA 310 (G. arboreum) and CSHH 238 (intra-hirsutum) hybrid have been identified by the AfCCIP. In the transgenic research, four genotypes viz. LRA 5166, LRK 516, RG8 and PA 255 have been transformed. In the male sterility programme, hybrid CfNHH 127 has been identified for AICCfP trial. The TGMS system in G. arboreum is being promoted as an alternative source of male sterility system. Considerable progress has been made in the development of multi-tier cropping system under irrigated condition and refinement of the micro-irrigation system and integrated nutrient management for enhancing water and nutrient use efficiency respectively. Rapid molecular diagnostic kit has been developed for detection of Xanthomonas axonopodis pv. malvacearum (Xam) a pathogen of quarantine significance on cotton. fRM technology for the management of pests was effectively demonstrated in 28 major cotton growing districts of the country with good success. The Bt Referral Lab played a pivotal role in analyzing the samples received from different parts of the country and in identifying spurious lots. Development of new diagnostic kits has enhanced the precision screening for major pests and diseases. Research programmes with major emphasis on new frontiers of cotton biotechnology are being conceptualized for targeting higher productivity and better fibre quality. Renovation activity executed in the institute has brought in enhanced and modern infrastructural facilities. All these were successfully accomplished due to the systematic and concerted efforts of my colleagues and support from Indian Council of Agricultural Research, New Delhi.*

*[I acknowledge with gratitude, the guidance and leadership provided by Dr. Mangala Rai, Secretary DARE and Director General, ICAR and Dr. Gautam Kalloo, Deputy Director General (Crop Sciences), ICAR, New Delhi in encouraging new research programmes backed up with excellent infrastructural facilities.]*

*I am placing the Annual Report (2005-06) with a sense of satisfaction for public scrutiny.*



( B.M. Khadi )

Director.