

10.2 List of On-going Projects (2012-13)

No.	Name of project
1.	Collection, conservation, evaluation, documentation and maintenance of germplasm of cultivated species of <i>Gossypium</i> (Dr.Punit Mohan (PL), Dr.S.Manickam, Dr.RA.Meena , Mrs.M.Chakrabarti, Dr. (Mrs.) KPM.Damayanthi)
2.	Improvement of tetraploid and diploid cottons for fibre properties through population improvement approaches (Dr.VN Waghmare (PL), Dr. (Mrs.) Vinita Gotmare , Dr.OP.Tuteja)
3.	Fine mapping and advance backcross QTL analysis of fiber quality and economic traits in diploid cotton (Dr.VN Waghmare (PL))
4.	Fine mapping of fiber quality and economic traits using RILs in diploid cotton (DBT) (Dr.VN Waghmare (PL), Dr. TR. Loknathan)
5.	Development of saturated genetic linkage map for <i>Gossypium hirsutum</i> L. using SSR and SNP markers (DBT) (Dr.VN. Waghmare (PI), Dr.Punit Mohan)
6.	Conservation, characterization and utilization of wild species, races of cultivated species and synthetic polyploids of <i>Gossypium</i> (Dr.(Mrs) Vinita Gotmare (PL), Dr. G. Balasubramani)
7.	MAS/MAB for Water-logging in Cotton (Dr. (Mrs) Vinita Gotmare (PL), Dr. SESA.Khader, Dr.M.Saravanan)
8.	Breeding of upland cotton for improved fibre quality and resistance to biotic stress (bollworms and jassid) (Dr.S.M. Palve (PL), Dr. (Mrs) Vinita Gotmare)
9.	Development of heterotic pool for superior medium staple in tetraploid cotton (<i>G. hirsutum</i>) (Dr.S.M. Palve (PL))
10.	Development of drought tolerant genotypes with good fibre quality in <i>G. hirsutum</i> (Dr. (Mrs) Suman Bala Singh (PL), Dr. A.H. Prakash)
11.	Exploration, collection and conservation of perennials and land races of <i>desi</i> cotton from different regions of India (Dr. M. Saravanan (PL))
12.	Development of long staple <i>G. hirsutum</i> variety with improved fibre strength (Dr. S.Manickam (PL), Dr. VN.Waghmare, Dr. SL.Ahuja)
13.	Development of high yielding, early maturing extra long staple <i>G. barbadense</i> genotypes with high GOT (Dr. (Mrs) KPM. Dhamayanthi (PL))
14.	Development of early maturing, medium staple varieties and hybrids Resistant to CLCuV (Dr. O.P.Tuteja (PL), Dr. D. Monga, Dr. Rishi Kumar, Dr. S.M.Palve)
15.	Identification of male sterile plants in genetic male sterility (GMS) using molecular markers (Dr.O.P. Tuteja (PL), Dr. (Mrs) S.B. Singh, Dr. M. Sarvanan)
16.	Development of <i>G. hirsutum</i> genotypes with high yield and high GOT Dr. S.L. Ahuja (PL), Dr. RA.Meena, Dr. D.Monga Dr. Rishi Kumar
17.	Seed Production in Agricultural Crops and Fisheries (MSP) (Dr. (Mrs) P.R.Vijayakumari (Nodal Officer), Dr. (Mrs) V. Santhy, Dr. K. Rathinavel, Dr. R.A. Meen a)
18.	Characterization of public sector released genotypes of cotton (<i>Gossypium</i> spp) based on molecular markers to serve as Special test for Varietal Protection (Dr. (Mrs) V.Santhy (PL))

19.	National Seed Project (Crops) (NSP) (Dr. K.Rathinavel (PI))
20.	Testing & Documentation of Extant Varieties, hybrids and their Parents for Distinctness, Uniformity & Stability (PVP & FR ACT, 2001) (DUS) (Dr. K Rathinavel (Nodal Officer))
21.	Studies to improve the seed setting efficiency in cotton (Dr. R.A. Meena (PL), Dr. Rishi Kumar, Dr. K. Rathinavel)
22.	Transgenics in Crops – Cotton (NPTC) (Dr. G. Balasubramani (PI), Dr. K.P. Raghvendra, Dr. (Mrs) J. Amudha, Dr. (Mrs) S.B. Singh, Dr. S.B. Nandeshwar)
23.	Genomics of cotton boll and fibre development (NAIP) (Dr. G. Balasubramani (PI), Dr. K.P. Raghvendra, Dr. (Mrs) J. Amudha, Dr. S.B. Nandeshwar)
24.	Molecular characterization and validation of fiber strength genes with fiber specific promoter for improvement in cotton (NFBSFARA) (Dr. G. Balasubramani (PI), Dr. K.P. Raghvendra, Dr. (Mrs) J. Amudha, Dr. S.B. Nandeshwar)
25.	Development of drought resistant transgenic cotton and identification of new genes for high water use efficiency (Dr. (Mrs) J. Amudha (PI), Dr. A.H. Prakash, Dr. G. Balasubramani, Dr. R.B. Singandhupe)
26.	Isolation and identification of seed specific promoter and gossypol synthesis genes for silencing through RNA interference (DBT) (Dr. K.P. Raghavendra (PI), Dr. (Mrs) J. Amudha)
27.	Allelopathy as an alternative weed management strategy in cotton (Dr. Blaise Desouza (PI), Dr. (Mrs) P. Nalayini, Mrs. M. Chakrabarty)
28.	Identification of 'crop-cycle' for Extra Long Staple (ELS) Cotton in non-conventional regions (Dr.R.B.Singandhupe (PI), Dr. Blaise Desouza)
29.	Herbicide resistance weeds and their management strategies (Dr. A.R. Raju (PI), Dr. K. Sankamarayanan)
30.	Screening of Cotton Varieties for Organic Cultivation under Rainfed Condition (Dr. Jagvir Singh (PI), Mr. K. Velmourougane, Dr. (Mrs) P.R. Vijayakumar)
31.	Georeferenced soil information system for land use planning and monitoring soil and land quality for agriculture (NAIP) (Dr. M.V. Venugopalan (CCPI), Mr. K.Velmourougane)
32.	Synthesis and characterisation of nano-formulated micronutrient foliar spray for yield maximisation in different cotton genotypes (Dr. (Mrs) D.Kanjana (PL))
33.	An accelerated process for preparation of bio enriched compost from cotton plant residues (CIRCOT project) (Dr.P.Nalayini (PA), Dr.D.Monga (PA), Mr. K.Velmourougane (PA))
34.	A Value Chain for Cotton Fibre, Seed and Stalks: An innovation for higher economic returns to farmers and allied stakeholders (NAIP) (Dr. K. Sankarnarayanan (CoPI))
35.	Studies on mechanism and enhancement of cuticular absorption of nutrients and hormones in Bt cotton (Dr.S.E.S.A Khader (PI))
36.	Role of Leaf Phytochemicals in cotton leaf reddening and plant responses to management through growth chemicals, nutrients and insecticides (Mrs. M. Chakrabarty (PI))

37.	Performance of white leghorn layers under feeding of Bt and non-Bt cotton seed (Dr.S.N.Rokde (PI))
38.	Assessment of cotton based intercropping system and its popularization through farmer to farmer's participatory learning approach (Dr. S.M. Wasnik (PI), Dr. (Mrs) S. Usha Rani, Dr. A.R. Raju)
39.	Technological Need Assessment for Sustainability and Stability of Cotton Production (Dr.S.M. Wasnik (PI), Dr. (Mrs) Anuradha Narala)
40.	Gender and Labour Issues in Hybrid Cotton Seed Production Sector in India (Dr. (Mrs) Usha Rani (PI))
41.	Impact evaluation of Bt cotton in Maharashtra (Govt. of Maharashtra) (Dr. A.R. Reddy (PI), Dr. R.B. Singandhupe, Dr. S.N. Rokde)
42.	Design & Development of a cotton picking head (DST) (Er.Gautam Majumdar (PI))
43.	Identification of species specific dsRNA or siRNA or miRNA in cotton insect pest to explore their use in pest management through RNAi based technologies (DBT) (Dr. K.R. Kranthi (PL), Dr. S. Kranthi, Dr. K.P. Raghavendra)
44.	Dissemination of IRM strategies in India (TMC MM II) (Dr. K.R. Kranthi (PI), Dr. (Mrs) S. Kranthi, Dr. D. Monga, Dr. (Mrs) B. Dharajothi, Dr. Rishi Kumar)
45.	Novel approaches for production of hybrid seeds with characteristics of improved insect resistance and higher yield (CSIR-NIMITLI) (Dr. K.R. Kranthi (CCPI), Dr. (Mrs) S. Kranthi)
46.	Evaluation of built in refuge for insect resistance management requirements for Bollgard II cotton (Contract) (Dr. S. Kranthi (PI), Dr. (Mrs) B. Dharajothi, Dr. Rishi Kumar)
47.	Event based approval mechanism (GEAC) (Dr. S. Kranthi (PI), Dr. K.R. Kranthi)
48.	Monitoring changes in baseline susceptibility to Cry toxins in the cotton bollworm, <i>H. Armigera</i> . (Contract) (Dr. (Mrs) S. Kranthi (PI), Dr. K.R. Kranthi, Dr. Chinna Babu Naik)
49.	Research into development of decision support systems for management of insect pests of major rice and cotton based cropping systems (NAIP) (Dr.VS Nagrare (CCPI), Er. G. Majumdar, Dr.Rishi Kumar, Dr. (Mrs) B. Dharajothi, Mr.M. Sabesh, Dr. (Mrs) M. Amutha)
50.	Crop pest surveillance and advisory project (CROPSAP) in Maharashtra (Govt. of Maharashtra) (Dr. V.S. Nagrare (PI))
51.	Establishment of <i>Beauveria bassiana</i> as symbiotic insecticide against major insect pests and diseases of cotton (Dr. (Mrs) M. Amutha (PI), Dr. M. Gunasekaran)
52.	Isolation and characterisation of endophytes in cotton and endosymbionts in boll worms (Dr. (Mrs) M. Amutha (PI))
53.	Bt resistance in pink bollworm, <i>Pectinophora gossypiella</i> (Saunders) - Monitoring mechanism and Management (Dr. Chinna Babu Naik (PL), Dr. (Mrs) S. Kranthi)
54.	Isolation, characterization and formulation of a novel <i>Trichoderma</i> strain (Dr.P.K. Mukherjee (PI), Dr. A.K. Mukherjee, Mr. A.Sampath Kumar, Dr. (Mrs) S. Kranthi)
55.	Use of innovative methods for management of cotton leaf curls virus disease (Dr.D. Monga (PL), Dr. Rishi Kumar)

56.	Development of nanoparticles based bio-control formulation for the management of major cotton pests and diseases (Mr. A. Sampath Kumar (PL), Mr. K. Velmourougane)
57.	Compatibility studies of various plant protection inputs for HDPS Cotton (Mr. A. Sampath Kumar (PI), Mr. K. Velmourougane, Dr. V. Chinna Babu Naik, Dr. P.K. Mukherjee)
58.	Disease monitoring of Tobacco Streak Virus (TSV) on cotton for South zone consisting of Andhra Pradesh, Karnataka and Tamil Nadu (Dr. M. Gunasekaran (PI))
59.	Cloning and characterization of potent toxin gene from heat tolerant isolate of <i>Heterorhabdus indica</i> , an Entomopathogenic nematode (DBT) (Dr.(Mrs) Nandini G. Narkhedkar (PI), Dr. P.K. Charkrabarty)
60.	Isolation of novel insecticidal proteins from bacterial symbionts of native entomopathogenic nematodes (Dr. (Mrs) Gulsar Banu (PI))
61.	Production, stabilisation, formulation and validation of microbial agents and their natural products against insects and nematode pests of cotton (Dr. (Mrs) Gulsar Banu (PI), Dr. (Mrs) M. Amutha)
62.	Development of multi-gene constructs and Bt cotton varieties for sustainable pest management. (TMC MM 1.1) (Dr. K. R. Kranthi (PI), Dr. P. K. Chakrabarty, Dr. K. P. Raghavendra, Dr. S. B. Nandeshwar, Dr. G. Balasubramani, Mr. K. Velumourougane, Dr. (Mrs) S. Kranthi, Dr. (Mrs) S. B. Singh, Mrs Mukta Chakrabarty)
63.	Development of cotton varieties resistant to cotton leaf curl disease (CICuD), bacterial leaf blight (BLB) and Nematodes through marker assisted breeding. (TMC MM 1.2) (Dr. V. N. Waghmare (PI), Dr. P. K. Chakrabarty, Mr. Sampath Kumar, Mr. (Mrs) Nandini Nar khedkar , Dr. S. Manickam, Dr. (Mrs) Gulsar Banu, Dr. Dilip Monga, Dr. S.K.Verma)
64.	Consolidation of repository of high strength cotton genotypes and evaluation for quality traits and yield in specific agro-eco zones. (TMC MM 1.3) (Dr. S. Manickam (PI), Dr. (Mrs) P. Nalayini, Dr. S. M. Palve, Dr. T.R. Lokanathan, Dr. (Mrs) Vinita Gotmare)
65.	Agrotechniques for high density planting system and surgical cotton varieties. (TMC MM 1.4) (Dr. M.V.Venugopalan (PI) , Dr. Blaise Desouza, Dr. V. Chinna Babu Naik, Dr. A. R. Reddy, Dr. Punit Mohan, Dr. T.R. Lokanathan , Dr. A.R. Raju, Dr. K. Sankaranarayanan, Dr. S. L. Ahuja, Dr. R. A. Meena)
66.	Simulation models/electronic gadgets to predict insect infestation, bollworm resistance to Bt cotton, area, production and price of cotton. (TMC MM 1.5) (Dr. (Mrs) S. Kranthi (PI), Dr. V. S. Nagrare , Dr. K.R. Kranthi, Dr. V Chinna Babu Naik, Dr. A. R. Reddy, Dr. (Mrs) N. Anuradha, Mrs. Mukta Chakrabarty, Dr. A.H. Prakash, Dr. (Mrs) M. Amutha , Dr. K. Sankaranarayanan, Dr. (Mrs) Isabella Agarwal, Dr. (Mrs) B. Dharajothi, Dr. Rishi Kumar)
67.	E- kapas network and technology documentation. (TMC MM 1.6) (Dr. S. M.Wasnik (PI), Mrs Mukta Chakrabarty, Dr. (Mrs) Usharani, Dr. A. H. Prakash, Dr. O. P. Tuteja)
68.	Development of cotton picking machinery for small scale cotton production systems. (TMC MM 1.7) (Er. G. Majumdar (PI))