

10.2 : List of ongoing projects (2017-18)

S.No.	Type	Project title, PIs and Co-PIs	Duration
Division of Crop Improvement			
1	Institute	Improvement of tetraploid and diploid cottons for fibre properties through population improvement approaches. V.N. Waghmare (PI) , Vinita Gotmare (PA), O. P. Tuteja (PA), S. K Verma (PA), D. V. Patil (PA)	2000-20
2	Institute	Breeding of upland cotton for improved fibre quality and resistance to biotic stress (Jassid). S.M. Palve (PI)	2005-21
3	Institute	Development of <i>G. hirsutum</i> genotypes with high yield and high GOT. S.L. Ahuja (PI) , R.A. Meena (PA), D. Monga (PA), Rishi Kumar (PA)	2012-18
4	Institute	MAS/MAB for Waterlogging in Cotton. Vinita Gotmare (PI) , S.E.S.A. Khader (PA), M. Saravanan (PA), J. H. Meshram (PA), J. Annie Sheeba (PA)	2012-20
5	Institute	Breeding for early maturity compact plant type and jassid tolerance in cotton. H.B. Santosh (PI) , S. Manickam (PA), Raghavendra KP (PA)	2014-19
6	Institute	Identification of male sterile plants in genetic male sterility (GMS) using molecular markers. O.P. Tuteja (PI) , S.B. Singh (PA), M. Sarvanan (PA)	2012-18
7	Institute	Development of Cotton leaf curl virus resistant genotypes using <i>G. arboreum</i> / <i>G. herbaceum</i> through introgression. S.K. Verma (PI) , O. P. Tuteja (PA), D. Monga (PA), Rishi Kumar (PA), Vinita Gotmare (PA), H. B. Santosh (PA), V.N. Waghmare (PA), S. M. Palve (PA), S. B Nandeshwar (PA), Rakesh Kumar (PA)	2015-21
8	Institute	Breeding to improve performance of <i>Gossypium herbaceum</i> for adaptation to climate change in central India. D.V. Patil (PI) , Punit Mohan (PA)	2015-20
9	Institute	Development of high yielding, early maturing Asiatic cotton (<i>Gossypium arboreum</i>) genotypes suitable to south Zone. A. Manivannan (PI) , Punit Mohan (PA), M. Saravanan (PA), V. N. Waghmare (PA)	2015-20
10	Institute	Development of high strength cotton genotypes by reducing the short fiber content. S. Manickam (PI) , A. H. Prakash (PA), B. Dharajothi (PA), J. Gulsar Banu (PA)	2017-20
11	Institute	Breeding for high yielding, early maturing sucking pest tolerant extra long staple <i>G. barbadense</i> genotypes with improved fibre properties. K.P.M. Dhamayanthi (PI) , A. Manivannan (PA), K. Rameash (PA)	2017-20
12	Institute	Development of varieties of upland cotton having better fibre traits and tolerance to CLCuD. O.P. Tuteja (PI) , V. N. Waghmare (PA), S. K. Verma (PA), D. Monga (PA), Rishi Kumar (PA)	2017-20
13	Institute	Development of compact plant type with improved quality traits through selective mating system. Suman Bala Singh (PI) , T. R. Loknathan (PA), J. H. Meshram (PA)	2017-20
14	Institute	Collection, conservation, evaluation, documentation and maintenance of germplasm of cultivated species of <i>Gossypium</i> . Punit Mohan (PI) , S. Manickam (PA), R. A. Meena (PA), K. P. M. Damayannthi (PA), Sunil S. Mahajan (PA), M. Saravanan (PA)	2006-18
15	Institute	Conservation, characterization and utilization of wild species, races of cultivated species and synthetic polyploids of <i>Gossypium</i> . Vinita Gotmare (PI)	2008-18
16	Institute	Exploration, collection and conservation of land races of desi cotton and perennials and from different regions of India. M. Saravanan (PI)	2011-18
17	Institute	DUS characterization and DNA finger printing of public sector cotton varieties. V. Santhy (PI) , H. B. Santosh (PA)	2012-18



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18	Institute	Studies to improve the seed and boll setting efficiency in cotton. R.A. Meena (PI) , Rishi Kumar (PA), K. Rathinavel (PA)	2012-18
19	Institute	Strategies to augment quality and storability of cotton seed under different environmental conditions. S.S. Mahajan (PI) , V. Santhy (PA), P. R. Vijayakumari (PA)	2017-18
20	Institute	Deployment of biotechnological tools for enhancing cotton seed by -product utilization: Reduction of gossypol content using CYP6AE14 gene. K.P. Raghavendra (PI) , Sandhya Kranthi (PA), G. Balasubramani (PA), K. Velmourougane (PA), Savita Santosh (PA)	2014-18
21	Institute	Basic Studies on Somatic embryogenesis of Cotton. Joy Das (PI) , Rakesh Kumar (PA), S.B. Nandeshwar (PA), Chandrashekar N (PA)	2015-18
22	Institute	Development of novel methods for gene delivery into cotton. Rakesh Kumar (PI) , Joy Das (PA)	2015-18
23	Institute	An efficient regeneration system for transformation studies with <i>CICRcry2Ab1Ac</i> and fiber strength genes in Cotton (<i>G. hirsutum</i>). G. Balasubramani (PI) , J. Amudha (PA), K. P Raghavendra (PA), Joy Das (PA), Rakesh Kumar (PA), Chandrashekar N (PA)	2017-20
24	Institute	Targeted mutagenesis of ghPHYA1 through CRISPR/Cas9 in Cotton. Chandrashekar N. (PI) , Raghavendra, K. P. (PA), Joy Das (PA), Rakesh Kumar (PA)	2017-20
25	DBT	Development of consensus genetic linkage map for <i>Gossypium</i> spp. with SNP markers and QTL analysis for fibre traits. V.N. Waghmare (PI) , T.R.Loknathan (CoPI)	2017-20
26	CRP	Natural Fiber. Development of tissue culture technology for cotton fibre initiation. S.B. Nandeshwar (PI) , Rakesh Kumar (PA), Joy Das (PA)	2015-18
27	NSP	National Seed Project (Crops). K. Rathinavel (PI)	1999-18
28	DUS	Implementation of PVP legislation 2001 and DUS testing of cotton under ICAR-SAU system. K. Rathinavel (PI)	2003-18
29	MSP	ICAR project on Seed Production in Agricultural Crops and Fisheries. P.R.Vijayakumari (Nd Offi) , V. Santhy (PA), K. Rathinavel (PA), R. A. Meena (PA)	2007-18
Division of Crop Production			
30	Institute	Allelopathy as an alternative weed management strategy in cotton. Blaise Desouza (PI) , P. Nalayini (PA), A. Manikandan (PA), Pooja Verma (PA)	2012-18
31	Institute	Alleviating soil compaction – a production constraint in cotton. Blaise Desouza (PI) , Gautam Majumdar (PA), A. Manikandan (PA), Savita Santosh (PA)	2017-20
32	Institute	Identification and characterization of water deficit period under various agro climatic regions with reference to cotton growing states of India. R.B. Singhandhupe (PI) , A. Manikandan (PA), S. Chattraaj (PA) (NBSS&LUP)	2017-20
33	Institute	Exploring the productivity potential of long-linted <i>G. arboreum</i> cotton. M.V. Venugopalan(PI) , K. Sankarnarayanan (PA), J.H. Meshram (PA), G.I. Ramakrushna (PA), Pooja Verma (PA), S.S. Mahajan (PA), Madhu T.N. (PA), Neelakanth Hiremani (PA), M Sabesh (PA)	2017-20
34	Institute	Participatory evaluation of technology for improving profitability in calcareous soils. A.R Raju (PI) , RB Singandhupe (PA), Anuradha Narala (PA) A. Manikandan (PA)	2016-20
35	Institute	Integrated farming system to double income of cotton farmer. G.I. Ramkrushna (PI) , R. B. Singandhupe (PA), A. Manikandan (PA), Rachna Pande (PA)	2017-20

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36	Institute	Efficient nitrogen fixing legumes for cotton based cropping systems. A. Manikandan (PI) , P. Nalayini (PA), V. S. Nagrare (PA)	2015-20
37	Institute	Evaluation of Structured water for cotton production. P. Nalayini (PI)	2014-19
38	Institute	Identifying edaphic & climatic factors influencing Fibre quality parameters in cotton and low micronaire management in ELS Cotton. K. Sankaranarayanan	2017-20
39	Institute	Development of remunerative cotton based cropping systems based on conservation agriculture principles. R. Raja (PI) , D. Kanjana (PA)	2015-19
40	Institute	Evaluation of nano-formulated micronutrients foliar spray for yield maximization in different cotton genotypes. D. Kanjana (PI)	2012-18
41	Institute	Effect of long-term application of organic and inorganic sources of nutrients on continuous cultivation of Bt and non-Bt cotton with maize cropping system under irrigated conditions. D. Kanjana (PI) , K. Sankaranarayanan (PA), Amarpreet Singh (PA)	2017-23
42	Institute	Phenotyping of root system architecture in cotton (<i>Gossypium hirsutum</i> L.) for adaption to Drought tolerance. J.H. Meshram (PI) , S. S. Mahajan (PA)	2017-19
43	Institute	Exploiting the epigenetic transgenerational inheritance of stress responsive traits for imparting abiotic stress tolerance to cotton. J. Annie Sheeba (PI)	2016-21
44	Institute	Metabolite exploration of drought stress in cotton. Pooja Verma (PI) , G.I. Ramkrushna (PA)	2017-19
45	Institute	Development of microbial biofilm formulations for cotton: effects on yield, pests, diseases and soil health". K. Velmourougane (PI) , Savitha Santosh (PA), Rachna Pande (PA), Dipak Nagrale (PA)	2017-20
46	Institute	Microbial interventions for potassium nutrition in cotton. Savitha Santosh (PI) , G. I. Ramkrushna (PA), A. Manikandan (PA)	2017-19
47	Institute	Dynamics of cropping pattern in cotton growing districts of Maharashtra. A.R. Reddy (PI)	2017-19
48	Institute	Impact analysis of shift in global cotton trade on Indian cotton scenario. Isabella Agarwal (PI)	2017-19
49	Institute	Impact of Institutional Credit on Cotton Farming in Vidarbha Region of Maharashtra. Anuradha Narala (PI) , S M Wasnik (PA), Nandini Gokte (PA), Vinita Gotmare (PA)	2016-18
50	Institute	e- Communication: Dissemination of Cotton Technology. S.M. Wasnik (PI) , S. Usha Rani (PA), O. P. Tuteja (PA)	2017-20
51	Institute	Development of transfer of technology innovations for bridging up the yield and knowledge gap in Cotton. S. Usha Rani (PI) , S. Manickam (PA), R. Raja (PA), M. Amutha (PA), S. M. Wasnik (PA)	2017-20
52	Institute	Socio-technological analysis of drip irrigation in cotton cultivation. C. Karpagam (PI) , K. Sankaranarayanan (PA), K Rameash (PA)	2017-20
53	Institute	Development of interactive decision support systems for cotton pest management with prerecorded voice modules. M. Sabesh (PI) , C. Karpagam (PA)	2016-19
54	Institute	Refining, up scaling and large-scale evaluation of Tractor mounted ICAR-Mahindra Brush type Cotton harvester vs. available cotton harvesting techniques. Gautam Majumdar (PI) , S. K. Shukla GTC (PA)	2017-19
55	NCP	Quantitative estimation of carbon and moisture fluxes over the cotton based agro-ecosystem: Integrating ground observations, satellite data and modelling. Director (ICAR-CICR), M.V. Venugopalan, (Project Manager) , A. Manikandan (PA)	2017-20



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56	IFFCO	Validation of impact of input on economics of Bt -hybrid cotton+ pigeon pea strip cropping. A.R. Raju (PI)	2017-20
Division of Crop Protection			
57	Institute	Gene discovery for useful traits. K.P. Raghavendra (PI) , Sandhya Kranthi (PA), K. Velmourougane (PA), J. Annie Sheeba (PA), A. Sampathkumar (PA), Rakesh Kumar (PA), S. P. Gawande (PA)	2014-19
58	Institute	Development of Bt cotton varieties for bollworm management by introgression of indigenous events including Tg2E13 event through backcross breeding. Sandhya Kranthi (PI) , H. B. Santosh (PA), S. Manickam (PA), B. Dhara jyoti (PA), Shah Vivek (PA), K. P. Raghavendra (PA)	2017-20
59	Institute	Elucidating eco-toxicity and resistance development in sucking pests against newer insecticides used in cotton. V.S. Nagrare (PI) , V. Chinna Babu Naik (PA)	2017-20
60	Institute	Push-pull strategy for management of pink bollworm in cotton. Vivek Shah (PI) , Pooja Verma (PA)	2016-19
61	Institute	Diversity analysis of Whitefly (<i>Bemisia tabaci</i>), predators and parasitoids. Prabhulinga T. (PI) , Sandhya Kranthi (PA), Rishi Kumar (PA), M. Amutha (PA), V. Chinna Babu Naik (PA)	2016-18
62	Institute	Studies on chemical cues mediating sucking pests and natural enemy interactions in cotton eco-system. Madhu. T.N. (PI) , Rishi Kumar (PA), Shankarganesh (PA), K. Rameash (PA)	2016-18
63	Institute	Enhancing the efficacy of yellow sticky traps using essential oils against sucking pests in cotton. Madhu T.N. (PI) , Rishi Kumar (PA), Shankarganesh (PA)	2016-18
64	Institute	Investigations into exacerbation of pest status of cotton pink bollworm <i>Pectinophora gossypiella</i> (Saunders) in the context of climate change through development of phenology model. B.B. Fand (PI) , V.S. Nagrare (PA), V. Chinna Babu Naik (PA)	2017-20
65	Institute	Identification of oviposition deterrent for ethological management of Cotton Boll worm <i>Helicoverpa armigera</i> Hübner. Rachna Pande (PI) , Vivek Shah (PA)	2017-20
66	Institute	Identification of resistant genetic sources with mechanism of resistance against cotton leafhopper (<i>Amrasca biguttula biguttula</i>) (Ishida). B. Dhara jothi (PI) , A. Manivannan (PA), D. Kanjana (PA)	2017-20
67	Institute	Exploring novel dispensers to enhance the trapping efficacy of gossypure in managing pink bollworm in cotton. K. Rameash (PI) , B. Dharajothi (PA)	2016-19
68	Institute	Isolation and characterization of endophytes in cotton and endo-symbionts in bollworms. M. Amutha (PI)	2012-18
69	Institute	Diversity, Ecology and Improvement of eco-compatible management of Thrips in cotton ecosystem. M. Amutha (PI) , K. Sankaranarayanan (PA), S. P. Gawande (PA)	2017-20
70	Institute	Molecular characterization, virulence and genetic diversity analysis of <i>Alternaria</i> leaf spot disease of cotton. A. Sampath Kumar (PI)	2017-20
71	Institute	Development of reverse transcription loop mediated isothermal amplification (RT- LAMP) for early detection of cotton leaf curl and tobacco streak viruses of cotton (<i>G. hirsutum</i>). S.P. Gawande (PI) , Dilip Monga (PA), K.P. Raghvendra (PA)	2015-18
72	Institute	Evaluation of cotton PGPR for broad-spectrum resistance against insect pests and diseases. Dipak T Nagrale (PI) , T. Prabhulinga (PA)	2016-19

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73	Institute	Identification of endophytes from cotton with special reference to <i>desi</i> cotton and evaluation of biocontrol activity against major diseases. Neelakanth Hiremani (PI) , S. P. Gawande (PA), S.K. Sain (PA), Pooja Verma (PA)	2017-19
74	Institute	Role of plant defence activators for management of cotton leaf spot diseases. Vanita N. Salunkhe (PI) , S. P. Gawande (PA), J. H. Meshram (PA), Pooja Verma (PA)	2017-20
75	Institute	Studies on symptom expression, host range, transmission and spread of <i>Tobacco Streak Virus</i> infecting Cotton. P. Valarmathi (PI) , M. Amutha (PA), S. P. Gawande (PA), S. K. Sain (PA)	2017-20
76	Institute	Studies to identify the most virulent strains of entomopathogenic fungi for whitefly control. S.K. Sain (PI) , D. Monga (PA), Sandhya Kranthi (PA), Rishi Kumar (PA), Prabhulinga T. (PA), Dipak Nagrale (PA)	2016-19
77	Institute	Studies to understand occurrence of parawilt, root rot and the effect of rhizosphere microorganism, biological control agents and chemicals on their management in North India. S.K Sain (PI) , D. Monga (PA), Pooja Verma (PA), S. K. Bishnoi (PA), Amarpreet Singh	2017-19
78	Institute	Standardization and integration of strategies for sustainable nematode management. Nandini Narkhedkar (PI)	2017-20
79	Institute	Inventorying potential fungal metabolites for the management of sucking pests and nematodes of cotton. J. Gulsar Banu (PI) , A. H. Prakash (PA), M. Amutha (PA)	2017-20
80	NICRA	Development of IPM strategies to combat whitefly and other emerging pests of cotton. Sandhya Kranthi (PI) , V.S. Nagrare (PA), Prabhulinga T (PA), D. Monga (PA), Rishi Kumar (PA), M. Sabesh (PA)	2016-19
81	Mahyco	Monitoring changes in baseline susceptibility to Cry toxins in the cotton bollworm, <i>H. armigera</i> , pink bollworm and <i>Spodoptera litura</i> . Sandhya Kranthi (PI) , V. Chinna Babu Naik (CoPI)	2012-18
82	GEAC	Event based approval mechanism. Sandhya Kranthi (PI)	2010-18
83	CROPSAP	Maha. Govt: Crop pest surveillance and advisory project (CROPSAP) in Maharashtra. V.S. Nagrare (PI)	2010-18
84	DST SERB	Pink bollworm, <i>Pectinophora gossypiella</i> (Saunders): Resistance Monitoring, Fitness Costs, Inheritance of Resistance to Cry toxins expressed in Bt cotton. V. Chinna Babu Naik (PI) , Sandhya Kranthi (CoPI)	2017-20
85	DST SERB	Genetic diversity in geographical Population of Pink bollworm <i>Pectinophora gossypiella</i> (Saunders) in India. V. Chinna Babu Naik (PI)	2017-21
86	DST	Entomopathogenic-endophytes mediated plant defense as a novel approach for the management of bollworms in cotton. M. Amutha (PI)	2013-18
87	DST-SERB	Evaluation of selectivity of insecticides against different mealy bug species and their major natural enemies associated with cotton, tomato, brinjal and papaya. K. Shankarganesh (PI)	2016-18
88	DST-SEED	Exploration and development of thermal tolerant strain of biocontrol agent, <i>Acerophagus papayae</i> for sustainable management of papaya mealybug, <i>Paracoccus marginatus</i> in crops. K. Shankarganesh (PI) , C. Karpagam	2016-19
89	DST-SERB	Effect of thermal stress on fitness traits of two mealybug pests, <i>Phenacoccus solenopsis</i> , and <i>Paracoccus marginatus</i> and their parasitoids <i>Aenasius bambawalei</i> and <i>Acerophagus papaya</i> . K. Shankarganesh (PI) , Sandhya Kranthi (CoPI), K. Rameash (CoPI)	2016-19