

10. GENERAL

10.1 List of Publications

Research papers published by the Institute's scientists NAAS rating > 6

1. Abd El-Moghny M, Santosh HB, Raghavendra KP, Sheeba JA, Singh SB and Kranthi KR (2017). Microsatellite marker based genetic diversity analysis among cotton (*Gossypium hirsutum*) accessions differing for their response to drought stress, *Journal of Plant Biochemistry and Biotechnology*, 26 (3): 366-370. (NAAS rating: 6.95)
2. Ali S, Chandrashekar N, Rawat S, et al. (2017). Isolation and molecular characterization of pathogenesis related PR2 gene and its promoter from *Brassica juncea*. *Biologia Plantarum*, 61(4): 763-773. (NAAS rating 2017: 7.67)
3. Ali S, Mir ZA, Bhat JA, Tyagi A, Chandrashekar N, Yadav P, Rawat S, Sultana M and Grover A (2018). Isolation and characterization of systemic acquired resistance marker gene PR1 and its promoter from *Brassica juncea* 3 *Biotech*, 8: 10. (NAAS rating 2018: 7.36).
4. Ali S, Mir ZA, Tyagi A, Bhat JA, Chandrashekar N, Papolu PK, Rawat S and Grover A (2017). Identification and comparative analysis of *Brassica juncea* pathogenesis-related genes in response to hormonal, biotic and abiotic stresses. *Acta Physiologiae Plantarum*, 39: 268. (NAAS rating 2017: 7.56).
5. Arunkumar N, Gulsar Banu J, Gopalakrishnan N and Prakash AH (2018). The biochemical correlation between the epicuticular wax of upland cotton (*Gossypium hirsutum* L.) and the wax of different mealybug species. *Phytoparasitica*, doi:10.1007/s12600-018-0656-8. (NAAS rating 6.88).
6. Asha Bharti, Velmourougane K, Prasanna R (2017). Phototrophic biofilms: diversity, ecology and applications. *Journal of Applied Phycology*, 29(6): 2729-2744. (NAAS rating: 8.62).
7. Kranthi S, Satija U, Pusadkar P, Kumar Rishi, Shastri CS, Ansari S, Santosh HB, Monga D and Kranthi KR (2017). Non Bt seeds provided by seed companies in India- are they suitable as refuge for Bt-cotton? *Current Science*, 112 (10): 1992-1993. (NAAS rating: 6.84).
8. Kumari M, Wankhede DP, Verma M and Verma Pooja (2017). Genome wide identification of calcium dependent protein kinase and related kinase gene families in *Solanum melongena* L. *Indian Journal of Horticulture*, 74(4): 526-532. (NAAS rating: 6.15).
9. Kumawat RN, Misra AK, Mounir L, Mahajan SS and Venkatesan K (2017). Seed germination behaviour as influenced by physical and chemical treatments in *Grewia tenax* (Forssk.). *Range Management and Agroforestry*, 38 (1): 134-138. (NAAS rating: 6.39).
10. Naik Chinna Babu, Nagaharish Giri, Sujit Kumbare, Kranthi S and Nirmal Kumar (2017). New report of *Oxycetonia versicolor* Fabricius, as a pest on cotton from Central India. *National Academy Science Letters* (NAAS rating: 6.8).
11. Rawat S, Ali S, Nayankantha NNC, Chandrashekar N, Mitra B and Grover A (2017). Isolation and expression analysis of defensin gene and its promoter from *Brassica juncea*. *Journal of Plant Diseases and Protection*, 124:591-600. (NAAS rating 2017: 6.48).
12. Sharma AK, Gawande SP, De RK, Mitra S, Satya P, Saha D, Sinha MK, Mahapatra BS and Satpathy S (2017). Ramie Variety R 1411 (Hazarika): In Variety notification. *Indian Journal of Genetics and Plant Breeding*, 77(3). (NAAS rating: 6.32).
13. Thapa S, Ranjan K, Ramakrishnan B, Velmourougane K and Prasanna R (2017). Influence of fertilizers and rice cultivation methods on the abundance and diversity of phyllosphere microbiome. *Journal of Basic Microbiology*, doi:10.1002/jobm.201700402 (NAAS rating: 7.44).
14. Thapa S, Prasanna R, Ranjan K, Velmourougane K and Ramakrishnan B (2017). Nutrients and host attributes modulate the abundance and functional traits of phyllosphere microbiome in rice. *Microbiological Research*, 204: 55-64. (NAAS rating: 9.04).
15. Velmourougane K and Prasanna R (2017). Influence of L-amino acids on aggregation and biofilm formation in *Azotobacter chroococcum* and *Trichoderma viride*. *Journal of Applied Microbiology*, 123 (4): 977-991. (NAAS rating: 8.10).
16. Velmourougane K and Blaise D (2017). Impact of

- transgenic Bt cotton on soil health. *CAB Reviews*, 12(046), doi: 10.1079/PAVSNNR201712046. (NAASrating:6.73).
17. Velmourougane K, Prasanna R, Saxena AK, Shashi Bala Singh, Gautam Chawla, Kaushik R, Ramakrishnan B and Nain L (2017). Modulation of growth media influences aggregation and biofilm formation between *Azotobacter chroococcum* and *Trichoderma viride*. *Applied Biochemistry and Microbiology*, 53 (5): 546-556. (NAASrating: 6.66).
 18. Velmourougane K, Radha Prasanna, Shashi Bala Singh, Rajesh Kumar and Supradip Saha (2017). Sequence of inoculation influences the nature of extracellular polymeric substances and biofilm formation in *Azotobacter chroococcum* and *Trichoderma viride*. *FEMS Microbiology Ecology*, 93 (7): doi: 10.1093/femsec/fix066. (NAAS rating: 9.72).
 19. Velmourougane K, Radha Prasanna, Surender Singh, Gautam Chawla, Arun Kumar and Anil Kumar Saxena (2017). Modulating rhizosphere colonisation, plant growth, soil nutrient availability and plant defense enzyme activity through *Trichoderma viride*-*Azotobacter chroococcum* biofilm inoculation in chickpea. *Plant and Soil*, 421: 157-174. (NAASrating:9.05).
 20. Velmourougane K, Prasanna R and Saxena AK (2017). Agriculturally important microbial biofilms: Present status and future prospects. *Journal of Basic Microbiology*, 57(7): 548-573. (NAAS rating:7.44).
 21. Amutha M (2017). Establishment of *Beauveria bassiana* (Balsamo) Vuillemin as an Endophyte in Cotton. *International Journal of Current Microbiology and Applied Sciences*, 6(6): 2506-2513. (NAAS rating: 5.38).
 22. Awatade SC, Ghosh S and Singandhupe RB (2017). Agricultural information needs and their fulfillment as perceived by the farmers in changing agricultural scenario in Maharashtra. *Indian Journal of Agricultural Extension*, 53(2): 11-17. (NAAS rating:5.32).
 23. Awatade SC, Shah A, Ghosh S and Singandhupe RB (2018). Agricultural information sources used by Onion farmers in Akola district of Maharashtra, India. *International Journal Current Microbiological Application Science*, 7(03): 1-5. (NAASrating: 5.38).
 24. Das J, Raghavendra KP, Santosh HB, Sabesh M and Kranthi KR (2017). Cotton DNA Traceability Technologies, *ICAC Recorder*, 35(3): 5-15.
 25. Dhamayanthi KPM and Rathinavel K (2017). Heterosis and combining ability studies in extra-long staple inter-specific (*G. hirsutum* x *G. barbadense*) hybrids of cotton. *Electronic Journal of Plant Breeding* 8(2): 494-500. (NAAS rating 4.97).
 26. Kumar M, Kumar RR, Goswami S, Verma P, Rai RD, Chinnusamy V and Praveen S (2017). miR430: the novel heat-responsive microRNA identified from miRNome analysis in wheat (*Triticum aestivum* L.) *Indian Journal of Plant Physiology*, 22(4): 566-576. (NAASrating: 5.18).
 27. Saravanan M, Das J, Misra RC, Mohan P, Waghmare VN and Kranthi KR (2016). Genetic diversity analysis using SSR markers for *desi* cotton (*G. arboreum*) landraces collected from Arunachal Pradesh. *Cotton Research Journal*, 7(2):91-96. (NAAS rating: 3.45).
 28. Mandhyan PK, Patil PG, Sankaranarayanan K, Gurjur RM, Ghadge SV and Nachane RP (2017). Cotton Value Chain. *Cotton Research Journal*. 7(1):1-17 (NAASrating 3.45).
 29. Manikandan A and Subramanian KS (2017). Sorption characteristics of nitrogen forms on microporous adsorbents for novel fertilizer. *Journal of the Indian Society of Soil Science*, 65(2): 130- 137. (NAASrating: 5.23).
 30. Manikandan A and Subramanian KS (2017). Study on mitigation of ammonia volatilization loss in urea through adsorbents. *Journal of Applied and Natural Science*, 9 (2): 688-692. (NAAS rating: 4.84).
 31. Nalayini P, Sankaranarayanan K, Velmourougane K and Suveetha M (2017). Biodegradable mulching for moisture conservation, weed control and enhanced productivity of winter irrigated cotton maize system. *Journal of Cotton Research and Development*, 31 (2): 205-212. (NAASrating 4.69).
 32. Pandagale AD, Baig KS, Venugopalan MV and Rathod SS (2018). Moisture conservation measures and nutrient requirement for cotton under HDPS for changing climatic conditions. *Journal of Agricultural Research and Technology* (accepted).
 33. Prabhulinga T, Rameash K, Madhu TN, Shah Vivek and Ruchika Suke (2017). Maximum entropy modelling for predicting the potential distribution of cotton whitefly *Bemisia tabaci* (Gennadius) in North India. *Journal of Entomology and Zoology Studies*. 5(4):1002-1006. (NAASrating : 5.53).

34. Raju AR (2017). Leaf reddening in short duration rainfed Bt hybrid cotton-A review. *Cotton Research and Development*, 31 (2): 256-261. (NAAS rating: 4.69).
35. Rathinavel K, Priyadharshini C and Kavitha H (2018). Characterization, diversity studies and clustering of tetraploid Bt cotton hybrids using morphological markers. *Journal of Cotton Research and Development*, 32(1):13-22. (NAASrating :4.69).
36. Rathinavel K (2017). Exploration of genetic diversity for qualitative traits among the extant upland cotton (*Gossypium hirsutum* L.) varieties and parental lines. *International Journal Current Microbiological Application Science*, 6(8): 2407-2421. (NAASrating:5.38).
37. Rathinavel K, Priyadharshini C and Kavitha H (2017). Multivariate analysis on extant *desi* cotton genotypes (*G. arboreum* and *G. herbaceum* L.) employing qualitative characteristics. *International Journal Current Microbiological Application Science*, 6(11):724-734. (NAASrating:5.38).
38. Rathinavel K, Priyadharshini C and Kavitha H (2017). Assessment of genetic variability and correlation analysis of seed and seed cotton yield attributing traits of tetraploid cotton genotypes (*G. hirsutum* L.). *Electronic Journal of Plant Breeding*, 8(4): 1275-1283. (NAAS rating :4.97).
39. Rathinavel K (2017). Effect of seed treatments on viability and vigour of cotton seeds (*Gossypium hirsutum* L.) under ambient storage. *Journal of Cotton Research and Development*, 31(1):1-6. (NAAS rating 4.69).
40. Sankaranarayanan K, Prakash AH and Rajendran K (2018). Glyphosate selectivity by non-transgenic methods and efficacy of weed control in cotton (*Gossypium hirsutum* L.). *International Journal of Chemical Studies*, 6(1): 521-526. (NAAS rating :5.31).
41. Singandhupe R.B (2017). Sensitivity analysis of reference evapotranspiration (ET_o) models for irrigation requirement of crops and impact of irrigation on climate changes in semi-arid of India. *Advance in Research* 11(6): 1-16. (NAASrating :4.80).
42. Chinna Babu Naik V, Kranthi S and Rahul Viswakarma (2017). Impact of newer pesticides and botanicals on sucking pest management in cotton under high density planting system (HDPS) in India. *Journal of Entomology and Zoology Studies*, 5(6):1083-1087. (NAASrating :5.53).
43. Chinna Babu Naik V, Prasad NVVSD, Vani Sree K, Upendhar S (2017). Frequency of sucking pest complex on different transgenic events of cotton hybrids. *Journal of Entomology and Zoology Studies*, 5(6):1947-1953. (NAASrating :5.53).
44. Venugopalan MV, D Blaise, Shubhangi Lakade, Rathod N, Tandulkar NR (2017). Evaluation of agrotechniques to improve boll weight of cotton under HDPS. *Cotton Research Journal*, 7(1): 12-16. (NAASrating :3.45).
45. Venugopalan MV, Shaikh AJ and Kranthi KR (2017). Proceedings and Recommendations of the 7th Meeting of the Asian Cotton Research and Development Network - ACRDN. *ICAC Recorder*, 35 (4):33-38.
46. Verma SK, OP Tuteja and SL Ahuja (2017). Combining ability estimates for seed cotton yield and quality characters of parents and crosses based on genetic male sterility in Asiatic cotton (*Gossypium arboreum* L.) *Electronic Journal of Plant Breeding*, 8(4): 1046-1052. (NAAS rating :4.97).

Books/Book Chapters

1. Dhanashree Pable, Chatterji S, Sen TK, Venugopalan MV and Giri JD (2017). Land evaluation for rainfed cotton: A case study from Central India. In: *Sustainable Management of Land Resources: An Indian Perspective*, Eds. Obi Reddy GB, Patil NG and Arun Chaturvedi. Apple Academic Press, pp. 699-716.
2. Kanjana D (2017). Advancement of nanotechnology applications on plant nutrients management and soil improvement. In: *Book on Nanotechnology: Food and Environmental Paradigm*, Springer, pp. 209-234.
3. Velmourougane K and Blaise D (2017). Soil health, crop productivity and sustainability challenges. In: *Sustainability Challenges in the Agrofood Sector*. Eds. Rajeev Bhat. John Wiley & Sons Ltd. Sussex, UK. pp.509-531.
4. Velmourougane K, Garima Saxena and Radha Prasanna (2017). Plant-Microbe Interactions in the Rhizosphere: Mechanisms and Their Ecological Benefits. In: *Plant-Microbe Interactions in Agro-Ecological Perspectives Volume 2: Microbial Interactions and Agro-Ecological Impacts*. Eds. Singh DP, Bahadur H and Ratna P. Springer. pp.193-219.
5. Venugopalan MV, Reddy AR, Kranthi KR, Yadav MS, Vandana Satish and Dhanashree Pable (2017). A decade of Bt cotton in India: Land Use Changes and Other Socio-Economic Consequences. In:

Sustainable Management of Land Resources: An Indian Perspective, Eds. Obi Reddy GB, Patil NG and Arun Chaturvedi. Apple Academic Press, pp. 669-698.

Technical Bulletins:

1. Chinna Babu Naik V, Kranthi S, Kumbhare S, Nagrare VS, Narkhedkar NG and Waghmare VN (2018). *Pink bollworm Management (Hindi)*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010, p. 20.
2. Chinna Babu Naik V, Kranthi S, Nagrare VS, Shah V, Fand BB, Narkhedkar NG (2018). Practical Manual of ICAR Sponsored Winter School: *Insect resistance to Bt toxins and insecticides in Cotton*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010, p. 41.
3. Chinna Babu Naik V, Kranthi S, Nagrare VS, Shah V, Fand BB, Narkhedkar NG (2018). Lecture Notes of ICAR Sponsored Winter School: *Insect resistance to Bt toxins and insecticides in Cotton*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010, p. 210.
4. Monga D, Meena RA, Ahuja SL, Tuteja OP, Verma SK, Rishi Kumar and Sain SK (2017). Kendriya Kapas Anusandhan Sansthan Khestria Station Sirsa dwara viksit kapas utpadan prodogikiya. Published by Director, CICR Nagpur.
5. Monga D, Meena RA, Ahuja SL, Tuteja OP, Verma SK, Rishi Kumar and Sain SK (2017). *Cotton Production Techniques* developed by ICAR-CICR Regional Station, Sirsa. CICR Bulletin No.1. pp. 28.
6. Nagrare VS, Chinna Babu Naik V, Fand BB and Narkhedkar NG (2018). *Pink bollworm Management (Hindi)*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010.
7. Nagrare VS, Chinna Babu Naik V, Fand BB and Narkhedkar NG (2018). *Pink bollworm Management (English)*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010.
8. Nagrare VS, Chinna Babu Naik V, Fand BB and Narkhedkar NG (2018). *Pink bollworm Management (Marathi)*, ICAR-Central Institute for Cotton Research, Post Bag No.2, Shankar Nagar, Nagpur-440010.
9. Rishi Kumar, Sain SK, Monga D (2017). Pocket note on “*Kapas ki fasal safed makhi tatha patta marod rog ka samekit prabandhan*” Integrated management of whitefly and CLCuD in cotton pp. 4.

