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## Bt Cotton, AICRP and FLD trial monitoring in North Zone

The team comprised of Dr R K Singh, ADG (CC), Dr A H Prakash, Project Coordinator(Cotton), Dr S Manickam (PI-AICRP) and Dr M Sabesh, Sr. Scientist have visited North Zone AICRP centers (Hisar, Sirsa, Sriganganagar, Faridkot, Bhatinda) to monitor the Bt Cotton, AICRP and FLD trials between 6<sup>th</sup> and 8<sup>th</sup> July 2017. The seed germination and crop stand was good in all the stations. Due to better price for cotton in the last year and expectations of good rainfall coupled with minimal infestation of whitefly in the entire North Zone, large scale cotton cultivation observed during the current year. This year the cotton crop area is expected to be around 6.5 lakh hectares in Haryana and expected around 5 lakh hectares in Punjab and Rajasthan. It is also observed that *desi* cotton between paddy and cotton cultivation in the entire belt of Punjab and Haryana. Overall the situation in North Zone appears to bring bumper cotton production on the expected onset of better rainfall and less to minimal infestation whitefly and associated CLCuD disease.



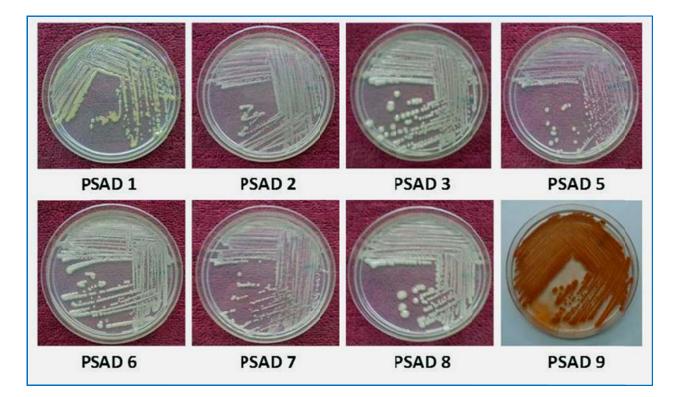


## Wax degrading microorganisms for control of Mealybugs of cotton

## Submitted by:

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Wax degrading bacteria (WDB) are a group of microorganisms capable of degrading wax through pseudosolubilization, adherence, biosurfactant production and enzyme secretion. Intensive research is under progress at ICAR-CICR, RS, Coimbatore through SERB (DST) funded project for the utilization of these WDB for control of cotton mealy bugs, since wax deposits on these pests protects them from desiccation, penetration of insecticides and bio control agents through their integument. A total of seventeen microorganisms (PSAD 1 to 17) were isolated from different live and dead mealy bug species. Among the 17 isolates from the mealy bug habitat, 8 isolates (PSAD 1, 2, 3, 5, 6, 7, 8, 9) were capable of degrading mealy bug wax through bio surfactant efficacy and lipase production. The wax degrading bacteria were tentatively identified through colony morphology, gram staining, spore staining, carbohydrate utilization and detailed biochemical characterization as organisms belonging to the genera *Bacillus, Pseudomonas, Aerobacter* and *Serratia*.



## Meetings attended/ Training imparted

- Dr. R. Raja, Principal Scientist (Agronomy), ICAR-CICR Regional Station, Coimbatore attended the 33rd Institute • Management Committee meeting of ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore, Kolkata on 6<sup>th</sup> July, 2017 at ICAR-CRIJAF, Kolkata.
- Dr. A. Manikandan, Scientist (Soil Science) and Dr. Savitha Santosh, Scientist (Ag. Microbiology) guided three M. Sc. students; Mr. Mahesh Vilasrao Thombare, Mr. Shrikant Pravinrao Tiwaskar and Mr. Abhishek Shrikrushna Ghanwat, from Sam Higginbottom University of Agriculture Technology and Sciences, Allahabad, Uttar Pradesh-211007, by giving one month training on 'Basic Laboratory Techniques and Instrumentation in Microbiology' at Division of Crop Production, ICAR-Central Institute for Cotton Research (CICR), Nagpur, Maharashtra during 1<sup>st</sup> June 2017 to 30<sup>th</sup> June 2017.



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