

## SCIENTIST PROFILE



1. Name & Designation : Dr. Bipin Bihari Panda, Senior Scientist
2. Date of Birth : 4<sup>th</sup> May, 1973
3. Date of joining ICAR : 27<sup>th</sup> February, 2003
4. Date of joining the present post : 1<sup>st</sup> September, 2008
5. Qualification ( highest degree) : Ph.D (Agronomy)
6. Post Doctoral Research Experience/Training:
  - Visited UC Davis, California, USA for training on the area of Climate change modeling from 18 April to 08<sup>th</sup> May 2013
  - Attended IARI-ISRO XIV<sup>th</sup> Winter school on ‘Remote sensing applications in agriculture with special emphasis on linkage of remote sensing with simulation models for Agri–production estimates and land use planning’ at IARI, New Delhi
7. Area of Specialization/research interest: Agronomy
8. Significant Contribution including products and patents (Five bullets):
  - Development of sustainable production technology for promotion of groundnut cultivation in non-traditional areas of eastern and north eastern India: Identified suitable groundnut varieties for inter cropping with maize and confectionery/table purpose. Developed organic as well as integrated nutrient management practices for groundnut in hill regions of Manipur
  - Development of sustainable production technology for rice based cropping system under rainfed foothills condition: Identified the rice + groundnut - rapeseed (Torja) cropping system as the most remunerative system for foothills of Manipur. Optimized the phosphorus dose for Rice + Legumes – Rapeseed (Torja) cropping system.
  - Characterized the quality of water from various sources in Manipur for its efficient use.
  - Analyzed the weather condition and assessed the accuracy and validity of medium range weather forecasting at the sub-tropical plain zones of Manipur. Analysed the socio –economic condition and livelihood options of farming community under flood prone areas.
  - Characterize the impact of moisture regimes on aerobic rice and standardize the irrigation schedule for aerobic rice based on IW/CPE ratio
9. Awards/Honours:
  - Received the Best poster award for the paper entitled “Effect of Spatio-temporal variability in meteorological drought at block level rice productivity in eastern state of Odisha.” authored by Raja, R, Nayak, AK, Panda, BB, Lal, B. Tripathi, R, Shahid, M, Thilagam, VK, Mohanty, S, Samal, P, Gautam, P and Rao, KS. Presented in the International Symposium on “Sustainable rice production and livelihood security: challenges & opportunities” held at CRRI, Cuttack, Odisha, 02-05 March, 2013.
  - Received Best paper presentation Award for the paper entitled “Adaptation strategies for sustainable livelihoods in terminal flood situations” authored by Panda, BB, Raja R, Rao KS, Bandyopadhyay SK, Mohanty S, Nayak AK, Kumar A, Tripathi R and Shahid M. presented in International Conference on ‘Bio-resource and stress management’ held at Science city, Kolkata, India, 06 -09 January, 2013
  - Received the Best poster award for the paper entitled “Effect of IW/CPE ratio based irrigation scheduling on growth and yield of aerobic rice” authored by Panda, BB, Rao, KS, Raja, R, Tripathy, R and Pandit A in the National Symposium on

“Sustainable rice production system under changed climate” held at CRRI, Cuttack from 27-29 November, 2010

- Received Best paper presentation Award for the paper entitled “Effect of biofertilisers and phosphorus levels on phosphorus utilization in wheat (*Triticum aestivum*)” authored by Panda, BB, Rai, RK and Ngachan, SV presented in National Seminar on Resource management for Sustainable agriculture, Department of Agronomy, Faculty of Agriculture, Annamalai University, Annamalainagar, Tamilnadu, 17-18 March, 2005

10. Publications (10 best):

- i. Shahid Md, Shukla AK, Nayak, AK, Tripathi R, Kumar A, Mohanty S, Bhattacharyya P, Raja R and **Panda BB** (2013). Long-term effects of fertilizer and manure applications on soil quality and yields in a sub-humid tropical rice-rice system. **Soil Use and Management** (DOI: 10.1111/sum.12050).
- ii. Nayak AK, Lal B, Shahid Md, **Panda BB**, Tripathi R, Raja R and Mohapatra T (2013). Fertiliser Best Management Practices in Rice for Higher Productivity. **Indian Journal of Fertilisers** 9(4): 54-69.
- iii. Bhattacharyya P, Nayak AK, Mohanty S, Tripathi R, Shahid M, Kumar A, Raja R, **Panda BB**, Roy KS, Neogi S, Dash PK and Shukla AK (2013). Greenhouse gas emission in relation to labile soil C, N pools and functional microbial diversity as influenced by 39 years long-term fertilizer management in tropical rice. **Soil and Tillage Research** 129: 93–105.
- iv. Mahapatra IC, Rao KS, **Panda BB** and Shivay YS (2012). Agronomic research on rice (*Oryza sativa*) in India. **Indian Journal of Agronomy** 57: 9–31
- v. Kumar A, Nayak,AK, Shukla AK, **Panda BB**, Raja R, Shahid M, Tripathi R, Mohanty S and Rath PC (2012). Microbial Biomass and Carbon Mineralization in Agricultural Soils as Affected by Pesticide Addition. **Bull Environ Contam Toxicol** 88: 538–542
- vi. **Panda BB**, Ngachan SV, Sharma PT and Islam M (2008). An assessment of the validity of medium range weather forecasting at the sub-tropical plain zones of Manipur. **International Journal of Tropical Agriculture** 26(1-2): 143-145.
- vii. **Panda BB**, Raychaudhuri M and Islam M (2008). Integrated nutrient management in rapeseed (*Brassica campestris* var. *toria*) under rainfed foothills terraced ecosystem. **International Journal of Tropical Agriculture** 26(1-2): 177-179.
- viii. Munda GC, Islam M and **Panda BB** (2008). Effect of organics and inorganics on productivity and uptake of nutrients in rice (*Oryza sativa*)-toria (*Brassica campestris*) cropping system. **Indian Journal of Agronomy** 53(2): 107–111.
- ix. Munda GC, Islam M, **Panda BB** and Patel DP (2008). Performance of rice (*Oryza sativa*)-rapeseed (*Brassica campestris*) cropping sequence under system based nutrient management. **Oryza** 45(1):36–39.
- x. Behera BK, **Panda BB**, Das P and Sahu AK (2007). Effect of stocking density on growth and survival of Common carp, *Cyprinus carpio* in paddy cum fish culture system of Manipur. **Journal of Aquaculture** 15: 17–21.