Dr. RUDRAKSH SHOVAN PANDA

PERSONAL

Address: C/O B.N. Bhuyan,
131/M Shastrinagar, Nayabazaar
Cuttack-753004, Odisha, India
E-Mail: rudrakshpanda@gmail.com
Mobile: 08018570641, 7978940626

Nationality: Indian
Date of Birth: 14th November, 1985

QUALIFICATIONS

2014	Ph.D. (Biotechnology), CRRI/Utkal University, Vani Vihar, Bhubaneswar Thesis title: "Molecular Phylogeny of stem borers in rice" under Dr.S.C.Sahu.
2007	M.Sc. (Biotechnology-First class), Utkal University, Vani Vihar, Bhubaneswar.
2005	B.Sc. (Botany-First class), Utkal University, Vani Vihar, Bhubaneswar.

RESEARCH INTEREST

Rice biotic and abiotic stresses, Plant Biotechnology, IPM Strategies, Molecular marker development, QTL Mapping, Functional genomics, Molecular Phylogenetics, DNA barcoding, Bioinformatics and NGS technology.

RESEARCH PUBLICATIONS (Cumulative Impact Factor (JCR): 9.032

1. Sekhar S, Kumar J, Mohanty S, Mohanty N, **Panda RS**, Das S, Shaw BP and Behera L (2021) Identification of novel QTLs for grain fertility and associated traits to decipher poor grain filling of basal spikelets in dense panicle rice. **Scientific Reports** 11, 13617. **IF: 5.2**. Citation: 01. https://doi.org/10.1038/s41598-021-93134-7.
2. Gouda G , Parida M , Donde R , Gupta MK , Kumar J , Mohanty S , **Panda RS**, Dash SK , Pradhan SK , Mohapatra T and Behera L (2019)Identification of high grain number genes and assessment of genetic diversity in high and low grain number rice genotypes useful for marker-assisted selection breeding programs. **Annals of Plant and Soil Research** 21(4): 301-311. **IF: 0**.00. Citation: 00.
3. **Panda RS**, Behera L and Sahu SC (2018). Genetic Diversity among Rice Yellow Stem Borer, Scirpophaga incertulas Revealed Using ISSR Markers. **Int.J.Curr.Microbiol.App.Sci** 7(4): 123-131. **IF: 0**.00. Citation: 00. DOI: 10.20546/ijcmas.2018.704.014.
4. Mohanty SK, **Panda RS**, Mohapatra SL, Nanda A, Behera L, Jena M, Sahu RK, Sahu SC and Mohapatra T (2017). Identification of novel quantitative trait loci associated with brown planthopper resistance in the rice landrace Salkathi. **Euphytica**: 213-38. **IF: 1.618**. Citation: 00. DOI: 10.1007/s10681-017-1835-2.
5. Jena M, **Panda RS**, Sahu RK, Mukherjee AK and Dhua U (2015). Evaluation of rice genotypes for rice brown plant hopper resistance through phenotypic reaction and genotypic analysis. **Crop Protection** 78:119-126. **IF: 1.652**. Citation: 01. doi.org/10.1016/j.cropro.2015.08.020.
6. Mohapatra S, **Panda RS**, Mohanty SK, Behera L, Sahu SC and Prakash A (2014). *In silico* analysis of gall midge resistance gene *Gm4* in rice cultivar PTB10. **Oryza** 51(1):34-42. IF:0.00, citation:00.

7. Mohapatra S, Jena Mamta, **Panda RS**, Mohanty SK, Behera L and Sahu SC (2013). DNA fingerprinting of root-knot nematode resistant rice genotypes. **Oryza** 50 (3):222-230. IF:0.00, citation:00.
8. Jena M, Mohapatra SL, **Panda RS**, Mohanty S K, Thatoi H N and Sahu SC (2013). Genetic loci associated with root-knot nematode resistance in rice cv.Ramakrishna. **Oryza**. 50 (2):132-139. IF:0.00, citation:00.

9. **Panda RS**, Mohanty SK, Behera L, Sasmal S and Sahu SC (2012). Diversity analysis of rice yellow stem borer populations of Orissa using RAPD markers. **Journal of Insect Science** 25 (4): 373-379. IF:0.00, citation:00.
10. Jena M, Mohanty SK, **Panda RS**, Bose LK, Behera L and Sahu SC (2012). Two Breeding Lines of rice resistant to the rice root-knot nematode. **Nematologia Mediterranea**. 40:207-208. IF:0.00, Citation:0.00.
11. Mohanty SK, **Panda RS**, Nanda A, Das G, Behera L, Jena M and Sahu SC (2011). Assessment of genetic diversity of rice brown plant hopper populations using molecular markers. **Oryza** 48(1):347-352. IF:0.00, citation:00.
12. Nanda A, Kausal L, Jena M, Mohanty SK, **Panda RS**, Behera L, Sahu SC (2011). Host reaction and molecular genotyping to identify pathotype variability in rice root-knot nematode (*Meloidogyne graminicola*) populations. **Oryza** 48(2): 154-159. IF:0.00, citation:00.
13. Nanda A, Mohanty SK, **Panda RS**, Behera L, Prakash A, Sahu SC (2010). Flanking microsatellite markers for breeding varieties against Asian rice gall midge. **Tropical Plant Biology** 3(4):219-226. **IF:0.562, citation:06**. DOI: 10.1007/s12042-010-9059-9.

RESEARCH PROJECTS ACCOMPLISHED

1. Project on "**plant tissue culture**" at Sarat Biotech from 1.7.06-31.7.06.
2. Project at Central Rice Research Institute on the topic: "**Parental Polymorphism and bulk segregation analysis of genetic loci-associated with Root-knot nematode resistance in rice**" in the Molecular Entomology Laboratory from 10.1.07-10.5.07.
3. Worked as JRF on the ongoing project at Central Rice Research Institute on the topic "**Mapping and functional analysis of genetic loci associated with resistance to BPH (DBT project)** EAP-84 for a period from 05.08.2008-17.01.10.
4. Worked as Senior Research Fellow in the Department of Biotechnology sponsored project on **Functional Genomics of Brown Plant Hopper resistance in rice** at Central Rice Research Institute for a period from 10.02.2010 – 30.06.2014.
5. Worked as Research Associate (RA) in the BIRAC (DBT) funded project (EAP202) entitled '**Genome wide association mapping of genes/QTLs for yield under reproductive stage drought stress in rice (*Oryza sativa* L.)**' at National Rice Research Institute for a period from 29.06.2015-22.07.2018.
6. Presently working as Research Associate (RA) in the DBT project (EAP263) entitled '**From QTL to variety: Genomics assisted introgression and field evaluation of rice varieties with genes/QTLs for yield under drought, submergence and salt stress' at** National Rice Research Institute for a period from 23.07.2018 to till date.

PROFESSIONAL TRAINING

1. Workshop on **"ESSENTIAL PROGRAMMING FOR LIFE SCIENTISTS"** July 13-15, 2017, Molecular Biophysics Lab, Department of Biotechnology, Indian Institute of Technology, Hyderabad, Kandi, Telangana-502285.
2. Science Academies Refresher course on **"Genetics and Molecular Biology"** Sponsored by Indian Academy of Sciences, Bengaluru, (IASc), Indian National Science Academy, New Delhi,(INSA) and The National Academy of sciences, India,Allahabad,(NASI) January 16-29, 2017, Department of Microbiology and cell Biology, Indian Institute of science, Bangalore 560012.
3. DBT funded training programme "**Bioinformatics for whole Genome Sequencing**" 27-30 January 2016, ICAR-Indian Institute of Spices Research, Kozhikode, Kerala.
4. Workshop on "**NEXT GENERATION SEQUENCING**" October 07-09, 2015, INSTITUTION OF EXCELLENCE (IOE), University of Mysore, Karnataka.
5. Six month professional training entitled "**Persistence-toxicity of chlorpyriphos against rice insect pests**" from 01/07/2014 to 31/12/2014, ICAR, CRRI, Cuttack-753006, Odisha, India.
6. Training programme on "**Application of SAS software for Multivariate analysis**" December 09-11, 2014, ICAR, CRRI, Cuttack-753006, Odisha, India.
7. UGC-NRC 10th workshop on "**Bioinformatics"** October 27-November 1, 2014, Department of Microbiology and cell Biology, Indian Institute of science, Bangalore 560012.
8. Department of Biotechnology, Government of India sponsored National workshop on Hands-on training course of **Molecular Biology and Bioinformatics tools on:** "**DNA Barcoding and Genomic Diversity of Bioresources**" January 27-31, 2012, Assam University, Silchar.
9. Diploma in Management **(DIM).**
10. Post graduate Diploma in Financial Management **(PGDFM).**

DETAILS OF PARTICIPATION IN CONFERENCES/SEMINAR/SYMPOSIUMS

1. **Panda RS,** Tripathy JP, Swain P, Dash SK, Patra BC, Pradhan SK,Singh ON and Behera L (2018). Assessment of genetic and phenotypic diversity in ril mapping population of rice for reproductive stage drought stress tolerance. 3rd ARRW International Symposium, February 6-9, 2018, NRRI,Cuttack, India.
2. **Panda RS,** Tripathy JP, Sipra BS, Swain P, Dash SK, Patra BC, Pradhan SK, Roy S, Subudhi HN, Behera L, Singh ON (2017). Development of association mapping panel for identification of Genes/QTLs associated with grain yield under reproductive stage drought stress in rice. XIII Agricultural Science Congress, 21st to 24th February, 2017 Pp362, University of Agricultural Sciences, Bengaluru.
3. **Panda RS,** Mohanty SK, Jena M, Behera L, Sahu RK and Sahu SC (2017). Screening of TN1/Salkathi F_8 RILs and identification of antibiosis mechanism of resistance of the landrace salkathi to brown plant hopper, *Nilaparvata lugens* stal. in rice. 1st International conference on " BIO-RESOURCE, ENVIRONMENT AND AGRICULTURAL SCIENCES (ICBEAS)" 4-6 February, 2017, Visva-Bharati, Santiniketan, West Bengal, India.
4. **Panda RS,** Mohanty PP, Rao J, Prakash A, Behera L and Sahu SC (2014). DNA Fingerprinting of insects infesting stored food grains.In AZRA silver Jubilee International conference on "Probing Biosciences for Food Security and Environmental Safety"16th to 18th February,2014 ,CRRI, Cuttack (Odisha),India.
5. S.KMohanty,**R.SPanda**,S.L.Mohapatra,M.Jena,L.Behera,R.K.Sahu&SCSahu.(2013);Genetics of resistance to rice brown plant hopper(*Nilaparvata lugens*) in the land race Salkathi.National Seminar on Climate Change and Biodiversity, Central University of Orissa ,Koraput on November 23rd and 24thPp 90-91.

6. Behera L, Mohanty SK, **Panda RS**, Mohapatra SL, Jena M, Sahu RK, Sahu SC, Mohapatra T (2013): Quantitative trait loci (QTL) associated with resistance against Cuttack population of brown plant hopper in rice. 11th International Symposium on Rice Functional Genomics. IARI, New Delhi, Nov 20-23.
7. **Panda RS** and Sahu SC (2013).Genetic Diversity among rice yellow stem borers of odisha. *In:* "ARRW Golden Jubilee International Symposium (GJIS) on "Sustainable Rice production and Livelihood Security: Challenges and Opportunities" 2nd to 5th March, 2013, CRRI, Cuttack (Odisha), India.
8. Mohanty SK ,**Panda RS**, Jena Mayabini,Behera L, Sahu RK and Sahu SC (2012).Genetic Analysis of brown plant hopper resistance in the rice cultivar Salkathi. Applied Zoologists Research Association (AZRA) Abstract no.33.National Conference on Applied Zoological Research for National food security and environmental protection 15-16 February, 2012, CRRI, Cuttack.
9. **Panda RS**, Mohanty SK, Behera L, Sasmal S, Sahu SC (2011) Molecular analysis of rice yellow stem borer populations of Orissa . 3rd congress on insect science "Pest management for food security and environment health" April 18-20, 2011, Punjab Agricultural University, Ludhiana.
10. **Panda RS** and Sahu SC (2010).Assessment of genetic variability of Scirpophaga incertulus using RAPD markers.35th Annual conference Odisha Botanical society National seminar on plant resource assessment and conservation under changing environment,29th-30th December,2010,Christ College, Cuttack.
11. **Panda RS**, Mohanty SK, Behera L, Sasmal S, Sahu SC (2010).Genetic variability in rice yellow stem borer populations of Orissa using RAPD markers. National Symposium on Sustainable rice production system under changed climate, 27-29th November, 2010, CRRI, Cuttack.
12. Jena M, Mohanty SK, **Panda RS**, Behera L, Sahu SC (2009).Quantitative trait loci associated with Root-Knot Nematode resistance in rice. National Conference in pest biodiversity in rice and their management under changed climate, 15-16th December, 2009, CRRI, Cuttack.
13. Mohanty SK, **Panda RS**, Nanda A, Jena M, Behera L, Sahu RK and Sahu SC (2009). Quantitative trait loci (QTL) associated with resistance to brown plant hopper in rice. National Conference on pest biodiversity in rice and their management under changed climate, 15 - 16th December, 2009, CRRI, Cuttack.

REFERENCES

Name and occupation	**Mobile No./Email**
Dr.J.L.Katara, Senior Scientist, NRRI, Cuttack,Odisha	9938656516/jawaharbt@gmail.com
Dr. L. Behera, Principal Scientist, NRRI, Cuttack, Odisha	9437479032/lambodarjamujhadi@gmail.com
Dr. A.K.Mukherjee, Principal Scientist, NRRI, Cuttack, Odisha	7205881784/arupmukherjee@yahoo.com

The above furnished information is true to the best of my knowledge and believes.

Rudraksh Shovan Panda

Date: 20.03.2022 **(Rudraksh Shovan Panda)**
Place: Cuttack