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Research Publication of NRRI-**2023**

Sr. No.	Type of Authorship (First Author/ Co-Author)	Title and Authors	Journal Name	NAAS Score	Year of Publication
1.	First Author	Agronomic manipulation in main season and ratoon rice influences growth, productivity, and regeneration ability in tropical lowlands. Lal B, Gautam P, Nayak AK, Raja R, Panda BB, Tripathi R, Shahid M, Chatterjee D, Bhattacharyya P, Bihari P, Singh T, Meena SK,Yadav VK, Rathore VS. 2023.	Field Crops Research, 294:108872. https://doi.org/10.1016/j.fcr.2023.108872	12.15	2023
2.	First Author	Extreme temperature and rainfall events trend in MiddleGangetic Plains from 1980 to 2018: A case study from Varanasi, Uttar Pradesh, India. Shanmugam Vijayakumar, Sudhir Kumar Rajpoot, N Manikandan, R JayakumaraVaradan, J P Singh, Dibyendu Chatterjee, Sumanta Chatterjee, Santosha Rathod, Anil Kumar Choudhary, Adarsh Kumar	Current Science	7.17	2023
3.	First Author	Bio-efficacy of herbicide mixtures on weed dynamics in direct wet-seeded rice. Mahapatra A, Saha S, Munda S, Satapathy BS, Meher S, Jangde HK	Indian Journal of Weed Science. 55(1): 18-23.	5.84	

4.	First Author	Soil-plant-microbe interactions: An innovative approach towards improving soil health and plant growth. Kumar U, Sheleke RM, Singh R.	Frontiers in Agronomy 5:1165328	0	2023
5.	Co-Author	Response of soil microbeand soil enzymes to long term tillage with residue levels: Exploring relation between soil microbial community, enzymes, organic carbon, soil functionality and GSG emission in rainfed semiarid regions, Pratibha G, Manjunath M, Raju BM, Srinivas I, Rao KV, Shankar AK, Prasad JV, Rao MS, Kundu S, Indoria AK, Kumar U, Anna S, Rao ChS, Singh VK, Biswas AK, Chaudhan SK.	Frontiers in Microbiology, DOI: 10.3389/fmicb.2023.1102682	12.06	2023
6.	First Author	Multi-criteria assessment to screen climate smart rice establishment techniques in coastal rice production system of India Mohapatra KK, AK Nayak, RK Patra, Rahul Tripathi, Chinmaya Kumar Swain, KC Moharana, Anjani Kumar, Mohammad Shahid, Sangita Mohanty et a	Frontiers in Plant Science	12.63	2023
7.	First Author	Nitrogen use efficiency of rice in India: A regional analysis. Mohanty S, Nayak AK, Tripathi R, Bhaduri D, Chatterjee D, Kumar A, Mohammad S, Kumar U, Munda S, Mandi G, Pathak H	*International Journal of Sustainable Development & World Ecology*, DOI: 10.1080/13504509.2023.2211542	10.87	2023
8.	First Author	A state-of-the-art review on cadmium uptake, toxicity, and tolerance in rice: From physiological response to remediation process. Ghouse P, Sheikh P, Khanam	Environmental Research 220, 115098. doi: 10.1016/j.envres.2022.115098	14.43	2023

		R, Das S, Kumar A, Tack FMG, Meers E, Vithanage M, Shahid M, Kumar A, Chakraborty S, Bhattacharya T, Kumar J (2023)			
9.	First Author	Comparative assessment of soil properties and heavy metals indices at rehabilitated and non-rehabilitated sites in coal mine spoils. Swain, S., Khanam, R., Bhaduri, D., Dash, P. K., Padhy, S. R., Nayak, A. K., & Bhattacharyya, P.	International Journal of Environmental Science and Technology, 1-14	9.52	2023
10.	First Author	Long-term impact of pulses crop rotation on soil fungal diversity in aerobic and wetland rice cultivation. Panneerselvam, P., Senapati, A., Chidambaranathan, P., Prabhukarthikeyan, S.R., Mitra, D., Govindharaj, G.P.P., Nayak, A.K. and Anandan, A., 2023.	Fungal Biology	8.91	2023
11.	First Author	Arbuscular Mycorrhizal Fungi Response on Soil Phosphorus Utilization and Enzymes Activities in Aerobic Rice under Phosphorus-Deficient Conditions. Mitra, D., Panneerselvam, P., Senapati, A., Chidambaranathan, P., Nayak, A.K. and Mohapatra, P.K.D	Life, 13(5), p.1118	9.25	2023
12.	First Author	Unraveling arbuscular mycorrhizal fungi interaction in rice for plant growth development and enhancing phosphorus use efficiency through recent development of regulatory genes. Mitra, D., Nayeri, F.D., Sansinenea, E., Ortiz, A., Bhatta, B.B., Adeyemi, N.O., Janeeshma, E., Tawfeeq Al-Ani, L.K., Sharma, S.B., Boutaj, H., Priyadarshini, A., Chakroborty, D., Senapati, A., Guerra Sierra B. E.,	Journal of Plant Nutrition, pp. 1-37.	8.28	2023

		Parameswaran, C., Das Mohapatra, P. K., Panneerselvam, P. 2023.			
13.	Co-Author	Decrypting the multi-functional biological activators and inducers of defense responses against biotic stresses in plants. Khoshru, B., Mitra, D., Joshi, K., Adhikari, P., Rion, M.S.I., Fadiji, A.E., Alizadeh, M., Priyadarshini, A., Senapati, A., Sarikhani, M.R. and Panneerselvam, P., 2023.	Heliyon. 9 (3), e13825	9.78	2023
14.	First Author	Biosynthesis and characterization of nanoparticles, its advantages, various aspects and risk assessment to maintain the sustainable agriculture: Emerging technology in modern era science. Mitra, D., Adhikari, P., Djebaili, R., Thathola, P., Joshi, K., Pellegrini, M., Adeyemi, N.O., Khoshru, B., Kaur, K., Priyadarshini, A. Senapati, A., and Panneerselvam, P. 2023.	Plant Physiology and Biochemistry. 196, 103-120.	11.44	2023
15.	First Author	Rice straw recycling: A sustainable approach for ensuring environmental quality and economic security. Kumar, A., Nayak, A.K., Sharma, S., Senapati, A., Mitra, D., Mohanty, B., Prabhukarthikeyan, S.R., Sabarinathan, K.G., Indra, M.A.N.I., Garhwal, R.S., Thankappan, S., Panneerselvam, P. 2023.	Pedosphere, 33(1), pp.34-48.	11.51	2023
16.	First Author	Marine estuaries act as better sink for greenhouse gases during winter in undisturbed mangrove than degraded ones in Sundarban, India.	Marine Environmental Research. 2023 Aug 19:106147.	9.74	2023

		Bhattacharyya P, Padhy SR, Khanam R, Nayak AK, Dash PK, Reddy CS, Chakraborty A, Mandal D, Swain S, Baig MJ.			
17.	First Author	Arsenic Cleanup Goals in Soil-Water-Rice-Human Continuum: Interplay of Amendments. Khanam, R., Hazra, G. C., Kulsum, P. G. P. S., Chatterjee, N., Thingujam, U., & Shukla, A. K. (2023).	Journal of Soil Science and Plant Nutrition, 1-12.	9.61	2023
18.	Co-Author	Zinc oxide nanoparticles in combination with biochar alleviates arsenic accumulation in field grown rice (*Oryza sativa* L.) crop. Shukla, K., Khanam, R., Biswas, J. K., & Srivastava, S. (2023).	Rhizosphere, 100764.	9.44	2023
19.	First Author	Impact of long□term resource conservation techniques on biogeochemical characteristics and biological soil quality indicators in a rice green□gram farming system. Dash PK, Bhattacharyya P, Shahid M, Kumar U, Padhy SR, Swain CK, Senatapati A, Bihari P, Nayak AK	Environmental Geochemistry and Health.	10.90	2023
20.	First Author	Soil Quality Assessment of Lowland Rice Soil of Eastern India: Implications of Rice Husk Biochar Application. Munda S, Nayak AK, Shahid M, Bhaduri D, Chatterjee D, Mohanty S, Tripathi R, Kumar U, Kumar A, Khanam R, Jambhulkar N.	Heliyon 9 (2023) e17835	9.78	2023
21.	First Author	Eco-efficiency and technical efficiency of different integrated farming systems in eastern India. Nayak AK, Tripathi R, Dhal	International Journal of Agricultural Sustainability. 21(1):2270250.	9.51	2023

		B, Nayak AD, Vijayakumar S, Satpathy B, Chatterjee D, Swain CK, Moharana KC, Nayak PK, Poonam A.			
22.	Co-Author	Plant Growth-Promoting Bacteria and Crop Residue in Rice–Wheat System Cultivated with Favorable Tillage Influence Crop Productivity, Nutrient Uptake, Soil Quality, and Profitability in the Terai Agro-Ecological Zone of West Bengal, India. Padbhushan R, Sinha AK, Kumar U, Bhattacharya PM, Poddar P.	Agronomy. 13(10):2454.	9.95	2023
23.	First Author	Silica sources for arsenic mitigation in rice: machine learning-based predictive modeling and risk assessment. Khanam R, Nayak AK, Kulsum PG, Mandal J, Shahid M, Tripathy R, Bhattacharyya P, Selvam P, Munda S, Manickam S, Debnath M.	Environmental Science and Pollution Research. 18:1-4.	11.19	2023
24.	First Author	Co-applied nitrogen and auxin via nano-clay-polymer composites enhances yield and nitrogen use efficiency. Chatterjee D, Adak T, Nayak BK, Paul R, Pradhan A, Sutton MA, Drewer J, Das SR, Nayak AK, Pathak H	Journal of Soil Science and Plant Nutrition. 4:1-4.	9.61	2023
25.	First Author	Potential soil organic carbon sequestration vis-a-vis methane emission in lowland rice agroecosystem. Das SR, Nayak BK, Dey S, Sarkar S, Chatterjee D, Saha S, Sarkar D, Pradhan A, Saha	Environmental monitoring and assessment. 195(9):1099.	9.31	2023

		S, Nayak AK.			
26.	First Author	Carbon and water footprints of major crop production in India. Nayak AK, Tripathi R, Debnath M, Swain CK, Biswaranjan DH, Vijaykunar S, Nayak AD, Mohanty S, Shahid M, Kumar A, Rajak M,Moharana KC, Chatterjee D, Munda S, Guru P, Khanam R, Lal B, Gautam P, Pattanaik S, Shukla AK, Fitton N, Smith P, Pathak H.	Pedosphere. 2023 33(3):448-62.	11.51	2023
27.	First Author	Combined application of basic slag and methanotroph-formulation have good potential to mitigate greenhouse gases emissions in lowland rice ecology. Swain, S., Bhattacharyya, P*., Parida, P., Padhy, S.R., Padhi, P.P. and Parida, S.P., 2023.	Atmospheric Pollution Research, p.101915.	10.83	2023
28.	First Author	Comparative accounting of methane and nitrous oxide fluxes with related soil parameters of degraded mangrove wetlands and adjacent rice fields in Sundarban, India. Padhy, S.R., Bhattacharyya, P*., Dash, P.K., Nayak, S.K., Das, A., Parida, S.P. and Swain, S., 2023.	Atmospheric Pollution Research, 14(5), p.101749.	10.83	2023
29.	First Author	Anticipated atmospheric CO_2 elevation differentially influenced the soil microbial diversities in crop, grassland, and forest: A meta-analysis. Bhattacharyya, P*, Varghese, E., Dash, P.K., Padhy, S.R., Das, A., Santra, P. and Mohapatra, T., 2023.	Rhizosphere, 25, p.100630.	9.44	2023
30.	First Author	Conservation Agriculture for Enhancing Crop Productivity, Energy Use Efficiency, Carbon Stock, Soil Health and Reducing GHG Emissions.	Communications in Soil Science and Plant Analysis. 54(8):1134-50.	7.58	2023

		Munda S, Khanam R, Nayak AK, Guru PK, Shahid M, Kumar A, Tripathi R, Saha S, Panda BB, Mohapatra SD.			
31.	Co-Author	Enzymes-mediated solid waste management: a sustainable practice for recycling. Janeeshma E, Habeeb H, Sinha S, Arora P, Chattaraj S, Mohapatra PK, Panneerselvam P, Mitra D.	Waste Management Bulletin.	0	2023
32.	First Author	Unraveling arbuscular mycorrhizal fungi interaction in rice for plant growth development and enhancing phosphorus use efficiency through recent development of regulatory genes. Mitra D, Nayeri FD, Sansinenea E, Ortiz A, Bhatta BB, Adeyemi NO, Janeeshma E, Tawfeeq Al-Ani LK, Sharma SB, Boutaj H, Priyadarshini A.	Journal of Plant Nutrition. 46(13):3184-220.	8.28	2023
33.	Co-Author	Enhancing manganese availability for plants through microbial potential: A sustainable approach for improving soil health and food security. Khoshru B, Mitra D, Nosratabad AF, Reyhanitabar A, Mandal L, Farda B, Djebaili R, Pellegrini M, Guerra-Sierra BE, Senapati A, Panneerselvam P.	Bacteria. (3):129-41.	0	2023
34.	Co-Author	Articulating beneficial rhizobacteria-mediated plant defenses through induced systemic resistance: A review. Rabari A, Ruparelia J, Jha Ck, Sayyed Rz, Mitra D, Priyadarshini A, Senapati A, Panneerselvam P, Mohapatra Pk.	Pedosphere. 2023 33(4):556-66.	11.51	2023
35.	First Author	Predicting chlorophyll and nitrogen content in rice using	Journal of Plant Nutrition. 1:1-24.	8.28	2023

		multiple regression models. Tripathi R, Mohanty S, Swain CK, Das S, Nayak P, Moharana KC, Mohapatra SD, Goud BR, Raghu S, Sahoo RN, Ranjan R.			
36.	First Author	Chemo-prospecting Cleistanthus collinus, Lantana camara and Strychnos nux-vomica for rice pest management under laboratory conditions. Adak T, Mishra T, Guru-Pirasanna-Pandi G, Gadratagi BG, Patil N, Annamalai M, Yadav MK, Munda S, Mukherjee AK, Rath PC, Jena M.	Journal of Natural Pesticide Research. 5:100041.	0	2023
37.	Co-Author	Effect of zinc and iron management with different level of nitrogen on growth and productivity of rice (Oryzasativa L.) under aerobic condition. Patel, N., Pramanik, K., Bhaduri, D. and Saren, B.K., 2023.	*ORYZA-An International Journal of Rice*, *Oryza, 60*(2): 304-314.	5.03	
38.	Co-Author	Residual effect of nitrogen and micronutrient management on growth and yield of transplanted mustard (Brassica juncea L.). Patel, N., Pramanik, K., Bhaduri, D.,Saren, B. K., Ghosh, P., &Jaiswal, D. K. (2023).	*International Journal of Bio-resource and Stress Management*, *14*(5), 772-779.	0	
39.	Co-Author	Fuzzy logic, geostatistics, and multiple linear models to evaluate irrigation metrics and their influencing factors in a drought-prone agricultural region. Al Zihad, S.R., Islam, A.R.M.T., Siddique, M.A.B., Mia, M.Y., Islam, M.S., Islam, M.A., Bari, A.M., Bodrud-Doza, M., Yakout, S.M., Senapathi, V. and Chatterjee, S., 2023.	*Environmental Research*, *234*, p.116509.https://doi.org/10.1016/j.envres.2023.116509	14.43	
40.	Co-Author	Unrevealing the potential of microbes in decomposition of	*Journal of Environmental*	14.91	

		organic matter and release of carbon in the ecosystem. Raza, T., Qadir, M.F., Khan, K.S., Eash, N.S., Yousuf, M., Chatterjee, S., Manzoor, R., ur Rehman, S. and Oetting, J.N., 2023.	*Management*, *344*, p.118529. https://doi.org/10.1016/j.jenvman.2023.118529		
41.	Co-Author	Historical shifting in grain mineral density of landmark rice and wheat cultivars released over the past 50 years in India. Debnath, S., Dey, A., Khanam, R., Saha, S., Sarkar, D., Saha, J. K., ... & Mandal, B. (2023).	*Scientific Reports*, *13*(1), 21164.	11.00	
42.	Co-Author	Municipal solid waste: Opportunities, challenges and management policies in India: A review. Meena, M.D., Dotaniya, M.L., Meena, B.L., Rai, P.K., Antil, R.S., Meena, H.S., Meena, L.K., Dotaniya, C.K., Meena, V.S., Ghosh, A., Meena, K.N.,..Chatterjee, S., et al., 2023.	Waste Management Bulletin, 1(1), pp.4-18. https://doi.org/10.1016/j.wmb.2023.04.001	0	
43.	First Author	Induction of defense-related enzymes and enhanced disease resistance in rice against Sarocladium oryzae by Bacillus cereus RBS-57. Sawant, S. B., Prabhukarthikeyan, S. R., Mishra, M. K., Parameswaran, C., Keerthana, U., & Senapati, A. K. (2023)..	Physiological and Molecular Plant Pathology, 128, 102168. https://doi.org/10.1016/j.pmpp.2023.102168	8.74	2023
44.	First Author	Dual Role of Potassium Silicate and Salicylic Acid: Plant Growth Promotor and Plant Immunity Booster Against Bakanae Disease of Rice. Shivappa R, Jeevan B, Baite MS, Prabhukarthikeyan SR, Keerthana U, Annamalai M, Prajna Pati, Mohapatra SD,	Silicon (2023). https://doi.org/10.1007/s12633-023-02738-3.	8.94	2023

		*Guru-Pirasanna-Pandi Govindharaj.			
45.	First Author	Unraveling Stability in Rice Genotypes for Resistance Against Leaffolder (*Cnaphalocrocis medinalis*) Under Varied Envoronmental Conditions. Anjan Kumar Nayak, Arundhati Sasmal, Prasanthi Golive, Soumya Shephalika Dash, KRajasekhara Rao and Shyamaranjan Das Mohapatra.	Cereal research communications	7.24	2023
46.	First Author	Effect of selected rice landraces on the fecundity and survival of rice leaffolder *Cnaphalocrocis medinalis* (Guenee) Anjan Kumar Nayak, Prasanthi Golive, Arundhati Sasmal, Soumya Shephalika Dash, Shyamaranjan Das Mohapatraand Tribikram Samal.	Indian journal of entomology. Online published (ref. e23778). 1-5.	5.08	2023
47.	First Author	Sublethal phosphine fumigation induces transgenerational hormesis in a factitious host, Corcyra cephalonica. Anshuman Nath, Basana Gowda G, Ravi Prakash Maurya, Farman Ullah, Naveenkumar B Patil, Totan Adak, Guru Pirasanna Pandi G, Aishwarya Ray, Annamalai Mahendiran, Nicolas Desneux, Prakash Chandra Rath	Pest Management Science, doi: 10.1002/ps.7542	10.46	2023
48.	First Author	Phosphine estimation in fumigated food grains using gas chromatography equipped with FPD detector. Arora Sumitra, Naveenkumar Patil, Totan Adak, J. Stanley, Mayabini Jena, Falguni Patel, and Montu Patel.	*Environmental Monitoring and Assessment* 195 (9):1-12.	9.31	2023
49.	First Author	Durable Resistance of Rice to Major and Emerging	The Open Agriculture	0	2023

		Diseases: Current Status. Bag Manas Kumar, Raghu Shivappa, Banerjee Amrita, Prabhukarthikeya SR, Baite Mathew S., Yadav Manoj, 2023.	Journal, 17, 1-14.		
50.	First Author	Development and application of recombinase polymerase amplification for rapid detection of rice false smut pathogen (Ustilaginoidea virens). Banerjee Amrita, Bag MK, Chandra AK, Roy Somnath, Raghu S, Mandal NP, 2023.	Crop Protection, 167, 106204.	9.04	2023
51.	First Author	Volatile cues from Corcyra cephalonica larva elicit behavioural responses in parasitoid, Habrobracon hebetor. G. Basana Gowda1,Totan Adak1, P. D. Kamala Jayanth,P. Saravan Kumar, G. Guru-Pirasanna-Pandi, Naveenkumar B. Patil, M. Annamalai1 and P. C. Rath	Current Science, 125 (2): 183-190.	7.17	2023
52.	First Author	Genome organization and comparative evolutionary mitochondriomics of rice earhead bug Leptocorisa oratoria (Fabricius). G. Guru-Pirasanna-Pandi, M. Annamalai,Jaipal Singh Choudhury, G. Basana Gowda, Totan Adak, Naiyar Naaz, Naveenkumar B. Patil ,Enrico Ruzzier and Prakash Chandra Rath (2023)	Current Science,Vol. 125, No.4 :407-415, 25 August 2023	7.17	2023
53.	First Author	First record of Brachymeria excarinata Gahan, 1925 (Hymenoptera: Chalcididae) as a hyperparasitoid of Charops bicolor (Szepligeti, 1906) (Hymenoptera: Ichneumonidae) from India. Golive Prasanthi, Rath PC, Debjani Dey (2023).	National Academy Science Letters, https://doi.org/10.1007/s40009-023-01204-3	6.65	2023
54.	First Author	Phenotypic and Genotypic	PLoS ONE 18(3):	9.75	2023

		screening of fifty-two rice (Oryza sativa L.) genotypes for desirable cultivars against blast disease. Jeevan B*., Rajashekara H, Koti PS, Vinaykumar HD, et al. (2023)	e0280762		
55.	First Author	Diversity of bioprotective microbial organisms in Upper Region of Assam and its efficacy against *Meloidogyne graminicola*. Jena, R., Choudhury, B., Das, D., Bhagawati, B., Borah, P.K., Prabhukartikeyan, S.R., Singh, S., Mahapatra, M., Lal, M.K., Tiwari, R.K. and Kumar, R.	*PeerJ*, *11*, p.e15779	9.06	2023
56.	First Author	Facile synthesis of novel magnesium oxide nanoparticles for pesticide sorption from water. Kar, A., Deole, S., Gadratagi, B.G., Patil, N., Guru-Pirasanna-Pandi, G., Mahapatra, B. and Adak, T., 2023.	*Environmental Science and Pollution Research*, *30*(45), pp.101467-101482.	11.19	2023
57.	First Author	Bacterial synthesized silver nanoparticle inhibits Rhizoctonia solani Kuhn, the causal organism for sheath blight disease of rice. Lopamudra Behera, Ram Chandra, Srikanta Lenka*, Arabinda Mahanty, Sumit Kumar and Prakash Chandra Rath	Oryza, Vol. 60(1), 166-174,	5.03	2023
58.	Co-Author	Soil application of potassium silicate reduces insect pest damage and impact of next generation seed germination in TN-1 rice variety. Mamta Paikra, DK Rana, PC Rath, Annamalai M and Santosh Kumar Behera (2023)	The Pharma Innovation Journal; 12(7): 1109-1119.	5.23	2023
59.	Co-Author	Crop and soil productivity of a rice□green gram system under integrative nutrient management.	*Agronomy Journal*, *115*(5), pp.2631-2645.	8.65	2023

		Mangaraj, S., Paikaray, R.K., Garnayak, L.M., Behera, S.D., Patra, B., Sethi, D., Pradhan, S.R. and Jena, R.			
60.	First Author	First hand report of False Smut in Coastal Rice Ecosystem at Naira, Andhra Pradesh.Indian Soc.Coastal Mathew S. Baite, Kiran G Baptala and P.C.Rath	Agriculture Research 41(1):86-88	0	
61.	First Author	Marker-trait association analysis for gall midge (Orseolia oryzae) resistance in a diverse rice population. Nandini Sahu, Basana Gowda Gadratagi, Ladu Kishore Rath, Anilkumar Chandrappa, Rameswar Prasad Sah, Lopamudra Mandal, Guru Pirasanna Pandi Govindharaj, Naveenkumar B. Patil, Totan Adak, Annamalai Mahendiran, Prakash Chandra Rath	Annals of Applied Biology, 2023;1–10	8.77	2023
62.	First Author	Phenotyping of rice genotypes against gall midge, Orseolia oryzae, (Wood-Mason). Nandini Sahu, Prakash Chandra Rath, Ladu Kishore Rath, Ankita Mohanty, Chinmayee Patra and Swapnalisha Mohapatra	The Pharma Innovation Journal 2023; 12(3): 3058-3063	5.23	2023
63.	First Author	A novel insecticide seed treatment formulation (Chlorantraniliprole 625 g/ L FS) for yellow stem borer and leaf folder management in rice. Naveenkumar B. Patil*, Aparna Baruah, Totan Adak, Basana Gowda G, Guru Pirasanna Pandi G, Mahendiran Annamalai, Raghu S and PC Rath (2023).	Oryza 60:1,159-165.	5.03	2023

64.	First Author	Rhizosphere Bacteria Isolated from Medicinal Plants Improve Rice Growth and Induce Systemic Resistance in Host Against Pathogenic Fungus. Naveenkumar Patil ·S. Raghu · L. Mohanty · B. Jeevan · G. Basana□Gowda · Totan Adak · M. Annamalai1 ,Prakash Chandra Rath · Senthil□Nathan Sengottayan · Guru Pirasanna Pandi Govindharaj (2023)	Journal of Plant Growth Regulation	10.64	2023
65.	First Author	Geographic distribution, host preference and phylogenetic relationships among Pyricularia species inciting millet and rice blast disease in India. Palanna, K.B., Vinaykumar, H.D., Koti, P.S., Jeevan, B*., Rajashekara, H., Raveendra, H.R. et al. (2023)	Plant Pathology, 00, 1–14.	8.77	2023
66.	First Author	Unravelling geospatial distribution and genetic diversity of greenhouse whitefly, Trialeurodes vaporariorum (Westwood) from Himalayan Region. Paschapur, A.U., Singh, A.K., Buski, R., Guru, P.N., Jeevan B. et al.	Sci Rep 13, 11946.	11.00	2023
67.	First Author	Rhizosphere Bacteria Isolated from Medicinal Plants Improve Rice Growth and Induce Systemic Resistance in Host Against Pathogenic Fungus. Patil, N., Raghu, S., Mohanty, L. ·Jeevan B, Basana□Gowda B, Totan Adak, Annamalai M, Prakash Chandra Rath, Senthil□Nathan S, *Guru□Pirasanna□Pandi Govindharaj. (2023)	J Plant Growth Regul.	10.64	2023
68.	First Author	Functional response of an egg parasitoid, *Trichogramma chilonis* Ishii to sublethal imidacloprid exposure. Ray A, Gadratagi BG*,	Pest management science.	10.46	2023

		Budhlakoti N, Rana DK, Adak T, Govindharaj GPP, Patil NB, Mahendiran A, Rath PC, 2023,			
69.	First Author	Population structure, genetic diversity and bakanae disease resistance among rice varieties. S. Raghu , M. S. Baite, M. K. Yadav, S. R. Prabhukarthikeyan, U. Keerthana, C. Anil Kumar, B. Jeevan, S. Lenka, H. N. Subudhi and P. C. Rath	Plant Genetic Resources: Characterization and Utilization 1–9.	0	2023
70.	First Author	Antixenosis and antibiosis mechanisms of resistance to Asian rice gall midge, Orseolia oryzae (Wood-Mason) in rice landraces. Sahu N, Basana Gowda G*, Govindharaj GPP, Patil NB, Basak N, Rath PC, C Anilkumar, Rath LK (2023).	Annals of applied biology. 182:361–370.	8.77	2023
71.	First Author	Toxicity and resistance levels of phosphine against *Tribolium castaneum* (Herbst) and *Sitophilus oryzae* (L.) populations. Santosh Kumar Behera, SS Shaw, PC Rath, Totan Adak, Basana Gowda G, Guru Pirasanna Pandi G, Annamalai M, P Pati, L Mandol and Naveenkumar B Patil	Oryza, 60 (2):287-296.	5.03	2023
72.	First Author	Induction of defense-related enzymes and enhanced disease resistance in rice against Sarocladium oryzae by Bacillus cereus RBS-57. Sawant, S. B., Prabhukarthikeyan, S. R., Mishra, M. K., Parameswaran, C., Keerthana, U., & Senapati, A. K. (2023).	Physiological and Molecular Plant Pathology, 128, 102168.	8.74	2023
73.	Co-Author	Influence of seed treatment of tetraniliprole 480 FS on plant germination, major insect pests and natural enemies of rice. Singh, S., Pandey, A.K., Kumar, M., Jena, R. and	The Pharma Innovation Journal	5.23	2023

		Nalini, P., 2023.			
74.	First Author	Genetic analysis of brown planthopper,Nilaparvata lugens (Stål) (Hemiptera:Delphacidae) based on microsatellite markers. Soumya Bharati Babu, Govindharaj Guru-Pirasanna-Pandi,C. Parameswaran, Jayaraj Padhi, G. Basana-Gowda, M. Annamalai,Naveenkumar Patil, Chanchala Meher, S. Sabarinathan and Prakash Chandra Rath (2023)	Current Science, 125 (7): 777-783	7.17	2023
75.	First Author	Studies on in vitro Growth Rate of Culturable Gut Bacterial Flora of Three Stem Borers Infesting Rice (Oryza sativa) Subrata Goswami, S.B. Das and P.C. Rath	Research Biology, 2023, 5(3):97-101	0	2023
76.	Co-Author	Deciphering the melatonin-mediated response and signaling in the regulation of heavy metal stress in plants. Altaf, M.A., Sharma, N., Srivastava, D., Mandal, S., Adavi, S., Jena, R., Bairwa, R.K., Gopalakrishnan, A.V., Kumar, A., Dey, A. and Lal, M.K.	*Planta*, *257*(6), p.115.	10.54	2023
77.	Co-Author	Exploring potato seed research: a bibliometric approach towards sustainable food security. Lal, P., Tiwari, R.K., Behera, B., Yadav, M.R., Sharma, E., Altaf, M.A., Jena, R., Ahmad, A., Dey, A., Kumar, A. and Singh, B.	*Frontiers in Sustainable Food Systems*, *7*.	11.01	2023
78.	First Author	Development and validation of HS-SPME-GCMS/MS method for quantification of 2-acetyl-1-pyrroline in rice cultivars. Adak Totan, Arabinda Mahanty, Sutapa Sarkar, Nabaneeta Basak , Gaurav Kumar, Priyadarsini Sanghamitra, Torit Baran Bagchi, Mridul Chakraborti. (2023).	J Food SciTechnol 60, 1185–1194.	9.12	
79.	First Author	Dietary supplementation of	*Animal Feed*	9.31	

		Terminalia arjuna bark extract improved growth, biochemical parameters and innate immunity in *Heteropneustesfossilis* larvae. Mohanty, S., Ferosekhan, S., Choudhary, P., Chandan, N.K., Das, P.C., Sahoo, S.K., Mishra, S.S. and Adak, T., 2023.	*Science and Technology*, *306*, p.115793.		
80.	First Author	Natural colours could be used as dye to identify Triboliumcastaneum (Herbst) eggs. Renuka, V.V.L., Adak, T., Nayak, R.R., Patil, N.B., Sanghamitra, P., Mahapatra, B., Gadratagi, B.G., Annamalai, M., Pokhare, S.S. and Rath, P.C., 2023.	*Journal of Stored Products Research*, *101*, p.102084.	8.83	
81.	First Author	Bioefficacy against Major Sucking Pest Complex and Residue Dynamics of Fipronil in Green Chilli (*Capsicum annum* Linn.). Halder, J., Majumder, S. and Adak, T., 2023.	*Pesticide Research Journal*, *35*(2), pp.214-221.	5.49	
82.	Co-Author	A metabolic reprogramming in *Bacopa monnieri* plants induced by methyl-jasmonate and enhanced biosynthesis of triterpene saponins. Annu Kumari, Ashwani Kumar, Sudhamoy Mandal, Partha Roy, Debabrata Sircar (2023).	Industrial Crops and Products;204 (2023):117241	12.45	
83.	Co-Author	Amphiphilic Copolymer-based Pesticide Nanoformulations for Better Crop Protection: Advances and Future Need. Sarkar, D.J., MuluLoha, K., Adak, T., Kaushik, P., Koli, P., Majumder, S., Yadav, D.K., Chowdhury, A.R., Kumari, A., Singh, B.B. and Rana, V.S., 2023.	*Current Chinese Science*, *3*(5), pp.369-385.	0	
84.	First Author	Gene based markers improve precision of genome-wide association studies and	Heredity, pp.1-11	9.83	2023

		accuracy of genomic predictions in rice breeding. Anilkumar, C*.,MuhammedAzharudheen, T.P., Sah, R.P*., Sunitha, N.C., Devanna, B.N., Marndi, B.C. and Patra, B.C., (2023).			
85.	First Author	Impact of cooking, parboiling and fermentation on nutritional components, predicted glycemic index and pasting properties of rice . Bagchi TB, Das B, Kumar A, Kumar G, Banerjee J, Gain H, Adhikari AA, Chattopadhyay K (2023).	Journal of cereal science. 114: 103763	10.08	2023
86.	First Author	Transfer of Stress Resilient QTLs and Panicle Traits into the Rice Variety, Reeta through Classical and Marker-Assisted Breeding Approaches. Barik, S.R.; Moharana, A.; Pandit, E.; Behera, A.; Mishra, A.; Mohanty, S.P.; Mohapatra, S.; Sanghamitra, P.; Meher, J.; Pani, D.R.; Bhadana, V.P.; Datt, S.; Sahoo, C.R.; K. R, Reshmi Raj and S.K. Pradhan et al.	International Journal of Molecular Science, 24 (13)	12.21	2023
87.	First Author	Association Mapping for Quantitative Trait Loci Controlling Superoxide Dismutase, Flavonoids, Anthocyanins, Carotenoids, -Oryzanol and Antioxidant Activity in Rice. Bastia, R.; Pandit, E.; Sanghamitra, P.; Barik, S.R.; Nayak, D.K.; Sahoo, A.; Moharana, A.; Meher, J.; Dash, P.K.; Raj, R.; et al. (2023).	Agronomy, 12: 3036.	9.95	2023
88.	Co-Author	Physiological and molecular implications of multiple abiotic stresses on yield and quality of rice.. Beena R, Sunitha NC, Sah RP, MdAzharudheen TP, Krishna GK, Umesh DK, Thomas S, Anilkumar C,	Frontiers in Plant Science, https://doi.org/10.3389/fpls.2022.996514	12.63	2023

		Upadhyay S, Kumar A, ManikantaCh LN, Behera S, Marndi BC and Siddique KHM (2023)			
89.	First Author	Over expression of Setariaitalicaphosphoenolpyruvate carboxylase gene in rice positively impacts photosynthesis and agronomic traits. Behera, D., Swain, A., Karmakar, S., Dash, M., Dash, B.P., Swain, P., Baig,M.J* and Molla, K.A*.(2023).	Plant Physiology and Biochemistry, 194, 169-181. https://doi.org/10.1016/j.plaphy.2022.11.011	11.44	2023
90.	First Author	Assessment of genetic diversity in androgenic-based doubled haploid-derived improved restorer lines of indica rice. Bhuyan, S.S., Barik, D.P., Dash, B., Rout, P., Pattnaik, S.S., Verma, R., Katara, J.L., Parameswaran, C., Devanna, B.N., Sahoo, R.K., Mishra, A., Sabarinathan S., Samantaray S*, (2023).	*Journal of Crop Science and Biotechnology*, pp.1-13.	0	2023
91.	First Author	Mapping genetic determinants for grain physicochemical and nutritional traits in brown and pigmented rice using genome-wide association analysis. Chattopadhyay K*, Bagchi, TB, Sanghamitra P, Sarkar S, Anilkumar C, Marndi BC, Kumar A, Moharana N, Mohapatra SS, Sahoo SK. (2023).	Euphytica. 219:57, https://doi.org/10.1007/s10681-023-03184-3.	8.19	2023
92.	Co-Author	Genome-wide analysis of proline-rich extensin-like receptor kinases (PERKs) gene family reveals their roles in plant development and stress conditions in Oryza sativa L. Kesawat, M.S., Kherawat, B.S., Katara, J.L., Parameswaran, C., Misra, N., Kumar, M., Chung, S.M.,	Plant Science, 334, 111749.	11.36	

		Alamri, S. and Siddiqui, M.H. (2023).			
93.	First Author	Marker-Assisted improvement for durable bacterial blight resistance in aromatic rice cultivar HUR 917 popular in eastern parts of India. Kumar, M., Singh, R.P., Jena, D., Singh, V., Rout, D., Arsode, P.B., Choudhary, M., Singh, P., Chahar, S., Samantaray, S. and Mukherjee, A.K., (2023).	*Plants*, *12*(6), p.1363.	10.66	2023
94.	First Author	Mapping the Genomic Regions Controlling Germination Rate and Early Seedling Growth Parameters in Rice. Mohanty SP, Nayak DK, Sanghamitra P, Barik SR, Pandit E, Behera A, Pani DR, Mohapatra S, Raj KRR, Pradhan KC, Sahoo CR, Mohanty MR, Behera C, Panda AK, Jena BK, Behera L, Dash PK, Pradhan SK (2023).	Genes 14: 902.	10.14	2023
95.	First Author	Relative contribution of ion exclusion and tissue tolerance traits govern the differential response of rice towards salt stress at seedling and reproductive stages. Mohanty,A., Chakraborty K, Mondal S, Jena P, Panda RK, Samal KC, Chattopadhyay K (2023).	Environmental and Experimental Botany. 206, 105131,	12.03	
96.	First Author	Molecular Breeding for Incorporation of Submergence Tolerance and Durable Bacterial Blight Resistance into the Popular Rice Variety 'Ranidhan'. Mohapatra S, Barik SR, Dash PK, Lenka D, Pradhan KC, Raj KRR, Mohanty SP, Mohanty MR, Sahoo A, Jena BK, Panda AK, Panigrahi D, Dash SK, Meher J, Sahoo	Biomolecules 13: 198.	12.06	2023

		CR, Mukherjee AK, Das L, Behera L, Pradhan SK (2023).			
97.	Co-Author	Genome-Wide Analysis of Amino Acid Transporter Gene Family Revealed That the Allele Unique to the Aus Variety Is Associated with Amino Acid Permease 17 (OsAAP17) Amplifies Both the Tiller Count and Yield in Indica Rice (Oryza sativa) L.). Nayak, I., Sahoo, B., Pradhan, C., Balasubramaniasai, C., Prabhukarthikeyan, S.R., Katara, J.L., Meher, J., Chung, S.M., Gaafar, A.R.Z., Hodhod, M.S. and Kherawat, B.S., (2023).	*Agronomy*, *13*(10) , p.2629.	9.95	2023
98.	Co-Author	Exploring the diversity of virulence genes in the Magnaporthe population infecting millets and rice in India. Palanna, K. B., Vinaykumar, H. D., Koti. Prasanna, S, Rajashekara, H., Devanna, B. N., Anilkumar, C., Jeevan, B., Raveendra, H. R., Farooq Khan, SaiBhavana, C. H., Vinod Upadhyay, Patro, T. S. S. K., LaxmiRawat, Rajesh, M., Saravanan, P. T., PrahladNetam, Rajesha, G., Das, I. K., Patil, H. E., Jain, A. K., Saralamma, S., Chandra Nayaka, S., Prakash, G. and Nagaraja, T. E. (2023)	Frontiers in Plant Science, 14:1131315.	12.63	2023
99.	First Author	Light intensity–mediated auxin homeostasis in spikelets links carbohydrate metabolism enzymes with grain filling rate in rice. Panda D, Mohanty S, Das S, Mishra B, Baig MJ, Behera L (2023).	Protoplasma 260:1233–1251.	9.19	
100.	First Author	Phytochrome A mediated modulation of photosynthesis, development and yield in rice (Oryza sativa L.) in fluctuating light environment.	Environmental and Experimental Botany 206: 105183.	12.03	2023

		Panda D, Dash GK, Mohanty S, Sekhar S, Roy A, Tudu C, Behera L, Tripathy BC, Baig MJ (2023).			
101.	First Author	Mitochondrial markers differentiate two distinct phylogenetic groups in indigenous rice landraces of northeast India: an evolutionary insight. Parida M, Gouda G, Chidambaram P, Umakanta N, Katara J L, Balasubramaniasai C, Samantaray S, Patra B C and Mohapatra T. (2023).	Journal of Genetics. 102:26	7.51	2023
102.	First Author	Accelerating crop domestication through genome editing for sustainable agriculture. Pattnaik, D., Avinash, S.P., Panda, S., Bansal, K.C., Chakraborti, M., Kar, M.K., Baig, M.J &Molla, K.A*(2023).	Journal of Plant Biochemistry and Biotechnology.	7.53	2023
103.	First Author	Agronomical performances of doubled haploids derived through androgenesis of a quality rice hybrid 27P63. Pattnaik, SS, Rout, P, Bhuyan, SS, Dash, B, Verma, RL, Parameswaran, C., Katara, JL, Sabarinathan, S., Nayak, B., Ramesh, N., Samantaray S.* (2023).	ORYZA-An International Journal of Rice, 60(2), 239–248.	5.03	2023
104.	First Author	Assessment of allelic and genetic diversity, and population structure among farmers' rice varieties using microsatellite markers and morphological traits. Roy, P.S., Nayak, S., Samanta, S., Chhotaray, A., Mohanty, S., Dhua, S., Dhua, U., Patra, B.C., Tiwari, K.K., Mithra, S.A.C., Behera, L*.,Mohapatra, T. and Sah, R.P., (2023).	Gene Reports, 30, p.101719.	0	2023

105.	First Author	cgSSR marker based genome wide association study identified genomic regions for panicle characters and yield in rice (Oryzasativa L.). Sah, R.P*.,Nayak, A.K., Chandrappa, A., Behera, S., Azharudheen TP, M. and Lavanya, G.R., 2023.	Journal of the Science of Food and Agriculture, 103(2), pp.720-728.	10.13	2023
106.	Co-Author	A Comprehensive Genome-Wide Investigation of the Cytochrome 71 (OsCYP71) Gene Family: Revealing the Impact of Promoter and Gene Variants (Ser33Leu) of OsCYP71P6 on Yield-Related Traits in Indica Rice (Oryzasativa L.). Sahoo, B., Nayak, I., Parameswaran, C., Kesawat, M.S., Sahoo, K.K., Subudhi, H.N., Balasubramaniasai, C., Prabhukarthikeyan, S.R., Katara, J.L., Dash, S.K. and Chung, S.M., (2023).	*Plants*, *12*(17), p.3035.	10.66	2023
107.	First Author	Discrimination of haploids and doubled haploids/diploids in indica rice: correlation of morphological indicators with molecular markers. Singh, S.K., Jeughale, K.P., Dash, B., Bhuyan, S.S., Chandravani, M., Parameswaran, C., BN, D., Verma, R.L., Katara, J.L. and Samantaray, S*, (2023).	*Biologiaplantarum*, *67*, pp.294-302.	7.12	2023
108.	First Author	Agronomical Performances of doubled haploids derived through androgenesis of a quality rice hybrid 27P63. Snigdha Samir Pattnaik, Prachitara Rout, SudhansuSekharBhuyan, Byomkesh Dash, ram LakhanVerma, Parameswaran C, JawaharlalKatar, Sabarinath S, BaijayantiNayak, Narayanperumala Ramesh and Sanghamitra Samantaray. (2023).	Oryza, 60: 239-248.	5.03	2023
109.	Co-Author	Identification of Simple	Frontiers in Plant	12.63	2023

		Sequence Repeat (SSR) markers linked to heat tolerance in rice using Bulked Segregant Analysis in F2 population of NERICA-L 44 x Uma. Stephen, K., Aparna, K., Beena, R*.,Sah, R., Jha, U.C. and Behera, S., (2023).	Science, 14, p.969.		
110.	First Author	Conventional and contemporary approaches for drought tolerance rice breeding: Progress and prospects. Anilkumar, C., Sah, R. P., Beena, R., Azharudheen, T.P.M., Kumar, A., Behera, S., Sunitha, N.C., Pradhan, S., Reshmi Raj, K., Parameswaran, C., Marndi, B., and Singh, A. K. (2023).	Plant Breed,142: 418-438.	8.54	2023
111.	First Author	Alteration in the physico-chemical traits and nutritional quality of rice under anticipated rise in atmospheric CO2 concentration: A review, Gaurav Kumar, NabaneetaBasak,SupriyaPriyadarsani,*ToritBaranBagchi*, AnjaniKumar, Sharat Kumar Pradhan, PriyadarsiniSanghamitra	Journal of Food Composition and Analysis 121 (2023),105332.	10.52	2023
112.	First Author	C4 orphan crop, Gynandropsisgynandra, joins the genome club. Molla, K.A*. A (2023).	The Plant Cell, koad043. https://doi.org/10.1093/plcell/koad043	18.09	2023
113.	First Author	Vein density in C4 and C3 leaves: One step closer to understanding the molecular genetic basis. Molla, K.A*.(2023).	The Plant Cell,koad136. https://doi.org/10.1093/plcell/koad136	18.09	2023
114.	First Author	From the archives: Nuclear import of pathogenic noncoding RNAs, ubiquitination and the control of heading date in rice, and the use of ribozymes to modulate gene expression.	The Plant Cell,koad203.	18.09	2023

		Molla, K.A*. (2023). https://doi.org/10.1093/plcell/koad203NAAS:18.09			
115.	First Author	Molecular switch to regulate salt tolerance in rice. Molla, K.A*.(2023).	The Plant Cell, koad178. https://doi.org/10.1093/plcell/koad178	18.09	2023
116.	Co-Author	Ethylene sensitivity underscores the yield advantage of high-grain numbers incylinder-shapedricepanicles. Sonam Panigrahi ,Ekamber Kariali, Sushanta Kumar Dash*, Binod Bihari Sahu, Pravat Kumar Mohapatra . 2023.	Environmental and Experimental Botany. 214,105466.	12.03	
117.	Co-Author	Imaging Sensor-Based High-Throughput Measurement of BiomassUsingMachineLearning Models in Rice. Allimuthu Elangovan, NguyenTrungDuc,DhandapaniRaju,SudhirKumar,BiswabiplabSingh,ChandrapalVishwakarma,SubbaiyanGopalaKrishnan,RanjithKumar Ellur , Monika Dalal, Padmini Swain , Sushanta Kumar Dash , Madan Pal Singh ,Rabi Narayan Sahoo ,GovindarajKamalam Dinesh , Poonam Gupta and ViswanathanChinnusamy . 2023.	Agriculture,13,852.	9.41	
118.	Corresponding author (First author)	Shasmita, Swain, BB., Mishra, S., Mohapatra, PK., Naik, SK., Mukherjee, AK*.,(2023). Chemo priming for induction of disease resistance against pathogens in rice.	*Plant Science, 334:111769*,	11.36	
119.	Co-Author	Chavhan, R.L., Sable, S., Narwade, A.V., Hinge, V.R., Kalbande, B.B., Mukherjee, A.K., Chakrabarty, P.K., Kadam, U.S. (2023). Multiplex molecular marker-assisted analysis of	*Biocatalysis and Agricultural Biotechnology*, 47:102557;doi:https://doi.org/10.1016/j.bcab.2022.102557		

		significant pathogens of cotton (*Gossypium* sp.),			
120.	Co-Author	Gyanendra K Patra, Gobinda K Acharya, J Panigrahi, Arup K Mukherjee, Gyana R Rout (2023). The soil-borne fungal pathogen Athelia rolfsii: past, present, and future concern in legumes.	*Folia Microbiologica*.68 (5):677-690	8.63	
121.	Co-Author	Kumar, S., Mukherjee, A.K., Dash, S.R. (2023). In-Silico Characterization and Homology Modelling of Membrane Bound Proteins in Different Rice Cultivars.	Grenze International Journal of Engineering and Technology.9(1):1561-1567.	0	
122.	First Author	SHANTI PRAVA BEHERA, ARUP K. MUKHERJEE*, TOTAN ADAK, HAREKRUSHNA SWAIN, TORIT B. BAGCHI, RADEEP KUMAR CHAND (2023). Volatile organic compounds emitted by Trichoderma spp. for growth promotion and management of rice diseases.	Journal of Mycopathology Research 61(4):465-479.	0	
123.	First Author	Mukherjee, A.K. (2023). Trichoderma: A way for rice health management.	Mycopathology Research 61(4):279-285.	0	
124.	First Author	The diversity of phytic acid content and grain processing play decisive role on minerals bioavailability in rice. Awadhesh Kumar, Milan Kumar Lal, Soumya Kumar Sahoo, Goutam Kumar Dash, Upasana Sahoo, Biswaranjan Behera, Lopamudra Nayak, Torit Baran Bagchi (2023)	*Journal of Food Composition and Analysis,* 115: 105032,	10.52	2023
125.	Co-Author	Oxidative metabolism, moisture imbibing capacity and their association with pre-harvest sprouting in rice. Repudi Shalem Raju, Chittaranjan Sahoo, Prashantkumar S Hanjagi, Samal KC, Devanna BN, Manasi Dash, Sushma M	*Cereal Research Communications.*	7.24	2023

		Awaji and MJ Baig			
126.	Co-Author	Physiological and biochemical traits regulating preharvest sprouting resistance in rice. Repudi Shalem Raju, Chittaranjan Sahoo, Prashantkumar S Hanjagi*, Samal KC, Devanna BN, Manasi Dash, Sushma M Awaji and MJ Baig	*Oryza* 60(1): 106-116.	5.03	2023
127.	First Author	Identification of multiple abiotic stress tolerant donors for climate-resilient rice (*Oryzasativa*) development Chakraborty K, Roy S, Jena P, Dash GK, Barik M, Behera M, Sar P, Senapaty J, Baig MJ, Swain P* (2023)	*Indian Journal of Agricultural Sciences* 93(3): 258–262	6.37	2023
128.	Co-Author	Seed priming with NaCl helps to improve tissue tolerance, potassium retention ability of plants, and protects the photosynthetic ability in two different legumes, chickpea and lentil, under salt stress. Paul A, Mondal S, Pal A, Biswas S, Chakraborty K, Mazumdar A, Biswas AK, Kundu R* (2023)	*Planta* 257: 111.	10.54	2023
129.	Co-Author	Zinc-Sulphate and Zn-EDTA Enhances Zn and Other Nutrients and Yield and Quality of Table-Purpose Peanut Cultivars. Singh AL, Singh S*, Chaudhari V, Patel CB, Chakraborty K, Thawait LK, Mahatma MK (2023)	*Communications in Soil Science and Plant Analysis* 54: 1806–1815.	7.58	2023
130.	Co-Author	Measuring residual transpiration in plants: a comparative analysis of different methods. Hasanuzzaman M, Chakraborty K, Zhou M, Shabala S* (2023)	*Functional Plant Biology* 50: 983–992.	8.81	2023
131.	Corresponding author (First author)	Exploring the physiological basis of yield enhancement in New Generation Rice (NGR): a comparative assessment with non-NGR rice	*Plant Physiology Reports* 28: 543–555.	5.50	2023

		genotypes. Panda B, Mondal S, Mohanty A, Senapaty J, Meher J, Sahoo CR, Samal KC, Dash M, Chakraborty K*, Dash SK* (2023)			
132.	Corresponding author (First author)	Exploring the physiological efficiencies of promising rice accessions for increasing grain yield. Panda B, Dash SK, MondalS, Senapaty J, Dash M,Samal KC, Sahoo CR, Chakraborty K*(2023)	*Indian Journal of Agricultural Sciences* 93: 1180–1185.	6.37	2023
133.	Co-Author	Nanotechnology, a frontier in agricultural science, a novel approach in abiotic stress management and convergence with new age medicine-A review. Mariyam S, Upadhyay SK, Chakraborty K, Verma KK, Duhan JS, Muneer S, Meena M, Sharma RK, Ghodake G, Seth CS* (2023)	*Science of The Total Environment* 912: 169097	16.75	2023
134.	Co-Author	Laboratory rearing of citrus trunk borer, *Pseudonemophas versteegi* (Coleoptera: Cerambycidae) to study the different developmental stages. Malakar, Kanmoni, Mihsill, Karen R.R., Saikia, Kanchan and Keshan, Bela. 2023.	*Indian Journal of Hill Farming.* 36:188-202.	5.04	2023
135.	Co-Author	Sustaining maize (Zea mays) productivity through improved agronomic management practices under jhum ecosystems. Ramkrushna G. I. Layek, J., Das, A., Verma, B.C., Pande, R., Mohapatra, K.P., Subhash Babu (2023)	*Indian Journal of Agricultural Sciences* 93 (1): 73–77	6.37	
136.	Co-Author	Can biochar conserve soil moisture and improve soil properties for sustainable intensification of acid soils in the Eastern Indian Himalayas?	Land Degradation and Development. DOI: 10.1002/ldr.4981	10.38	

		Ramkrushna G.I., Das, A., Sungoh, H., Layek, J., Mandal, S., Verma, B.C., Lal, R., Krishnappa, R., Babu, S., and Hazarika, S. (2023)			
137.	Co-Author	System productivity, soil carbon and nitrogen sequestration of intensive rice□based cropping systems can be improved through legume crop inclusion with appropriate fertilizer application and crop residues incorporation in the eastern Indo□Gangatic plain. Mukesh Kumar, Mitra, S., Mazumdar, S.P., Verma, B.C., and Pramanick, B. (2023)	Plant and Soil. doi.org/10.1007/s11104-023-06415-7	10.99	
138.	First Author	Evaluation of rice germplasm for tolerance to multiple abiotic stresses using multivariate techniques and molecular screening. Roy, S., Chakraborty, K., Banerjee, A., Kumar,J., Sar,P., Verma,B.C., Priyamedha and Mandal, N.P. (2023)	Indian Journal of Genetics 83(1): 15-23, doi: 10.31742/ISGPB.83.1.3	7.34	
139.	First Author	Evaluation of Rice Varieties Under Different Crop Management Options in Rainfed and Drought Prone Ecology of Jharkhand. Verma, B.C., Saha, S., Singh, C.V., Srivastava, A. K., Prasad, S. M, Roy, S., Banerjee, A., Priyamedha, Bhagat, S., and Mandal, N.P. (2023)	*Journal of Rice Research 16(1) 72-77 https://doi.org/10.58297/FTHR4599*	4.05	
140.	First Author	Recombinase Polymerase Amplification Based Rapid Detection of Aroma Gene in Rice. Banerjee Amrita, Bharti S, Kumar J, Sar P, Priyamedha, Mandal NP, Sarkar S and Roy S (2023).	Rice Science. 30(2): 96-99	10.41	
141.	Co-Author	Simple template-based	Letters in Applied	8.81	

		reverse transcription-recombinasepolymerase amplification assay for routine diagnosis of citrus tristeza virus. Sharma SK, Pathaw N, Wangkhem B, Jackson KS,Devi KS, Roy SK, Singh RK, Singh R, Banerjee Amrita, et al. (2023).	Microbiology, 2023, 0, 1–9		
142.	Co-Author	Influence of nitrogen and weed management practices on crop-growth indices and productivity of dry direct seeded rice (*Oryza sativa*). Singh Sachin, Ghosh A., Das T K,Shiva Dhar, Prasad S M and Tripathi Sasmita (2023)	Indian Journal of Agronomy 68 (1): 89-92	5.55	
SOCIAL SCIENCE					
143.	First Author	Growth and instability analysis of rice production: A district level assessment in Uttar Pradesh and Uttarakhand states of India. Jambhulkar, NN*, Mondal, B., Bisen, J, Mishra, SK, and Pradhan, AK (2023).	The Pharma Innovation Journal; 12(2): 813-819.	5.28	
144.	First Author	Performance and macro-economic scenarios of rice market outlook in India. Bisen JP, Kumar S, Singh DR, Main MS, Arya P and Tiwari U (2023).	*Oryza*, Vol. 60 (Special Issue). Pp. 78-90. DOI https://doi.org/10.35709/ory.2023.60.0.7	5.03	
145.	First Author	Growth and instability of rice production: a district level analysis in West Bengal, India. Jambhulkar, NN*, Mondal, B., Bisen, J, and Pradhan, AK (2023).	Oryza, 60(3): 487-494.	5.03	
146.	Co-Author	Farmer Producer Organization for Turmeric Growers in Tribal Region of Odisha: Success Factors and Constraints. Mahapatra, A., Nikam, V., Ray, M., Paul, S. and Mahra, G.S. (2023).	*Indian Research Journal of Extension Education,* 23 (2): 96 -101. (https://doi.org/10.54986/irjee/2023/apr_jun/96-101)	5.22	

147.	First Author	A Comparison between climate change perceptions and meteorological observations to improve the understanding of adaptation decisions in shifting cultivation. Paul, S., Chakraborty, D., Tripathi, A.K. and Padaria, R.N. (2023).	Theoretical and Applied Climatology. (https://doi.org/10.1007/s00704-023-04521-1)	9.41	
148.	First Author	Impact of minimum support price on paddy cultivation: a micro level assessment. Paul, S.*, Biswajit Mondal, Nitiprasad NamdeoraoJambhulkar, Asit Kumar Pradhan and G. A. K. Kumar (2023).	Current Science; 125(3): 277-282.	7.17	
149.	First Author	Appraising rice consumption pattern in India: trends, preferences and food security. Pradhan, A. K., Mondal, B*., Bisen, J., Jambhulkar, N., Kumar, G., & Mishra, S. (2023).	*ORYZA-An International Journal of Rice*, *60*(03), 479–486. Retrieved from https://epubs.icar.org.in/index.php/OIJR/article/view/143159	5.03	
150.	First Author	Smart food grain storage system using Internet of Things (IoT): Priyadarsani, S., Pradhan, A. K.,& Jena, P. C. (2023).	A Review. *ORYZA-An International Journal of Rice*, *60*(03), 371–387. Retrieved from https://epubs.icar.org.in/index.php/OIJR/article/view/143147	5.03	
151.	First Author	Evaluation of crop research institutes under data and resource constraints: An alternative approach. Samal, P., Mondal, B., Jambhulkar, N.N., Verma, R.L., Das, A.K. and Singh, O.N. (2023).	Evaluation and Program Planning, Vol. 97, https://doi.org/10.1016/j.evalprogplan.2023.102247.	0	
152.	Co-Author	Combatting insects mediated biotic stress (IMBS) through plant associated endophyticentomopathogenic	Frontiers in Plant Science, 13, 5460	12.63	

		fungi (EEPF) in horticultural crops. Samal, I., Bhoi, T. K., Majhi, P. K., Murmu, S., Pradhan, A. K., Kumar, D., ... & Komal, J.			
153.	Co-Author	Status and Changes in Composition of Agricultural Household's Income in India. Tiwari U, Singh A, Kumar P, Venkatesh P, Singh R, Kumar A, Bisen JP and Harish Kumar HV (2023).	*Indian Journal of Extension Education*, Vol. 59 (1). Pp. 59-64.	5.95	

154. Malviya D, Singh P, Verma RL, …Harsh V. Singh (2023) Arbuscularmycorrhizal fungi-mediated activation of plant defense responses in direct seeded rice (*Oryza sativa* L.) against root-knot nematode Meloidogynegraminicola. Front Microbiol. 2023; 14: 1104490. (NAAS Score-12.06)

155. BiswajitSahoo, SandeepBhandarkar, RamlakhanVerma (2023) Segregation analysis using SSR marker in rice (Oryza sativa L.). The Pharma Innovation Journal 2023; 12(7): 375-379. (NAAS Score-5.23)

156. Biswajit Sahoo, SandeepBhandarkar and RamlakhanVerma (2023) Exploring genetic diversity in yield attributing traits of rice (Oryza sativa L.). The Pharma Innovation Journal 2023; 12(7): 201-209. (NAAS Score-5.23)

157. Stephen, K., Aparna, K., Beena, R., Sah, R.P., Jha, U.C. and Behera, S., 2023. Identification of simple sequence repeat markers linked to heat tolerance in rice using bulked segregant analysis in F2 population of NERICA-L 44× Uma. Frontiers in Plant Science, 14, p.1113838. (NAAS Score-12.63)

158. Bollinedi H, Neeraja CN, Chattopadhyay K, Chandel G, Shashidhar HE, JeyaPrakash, Singh AK, Voleti SR, Sundaram RM. 2022. Karuppunel: A promising donor for high zinc content in rice (O saliva) grain. Indian Journal of Agricultural Sciences 92(10): 1247-1252. (NAAS Score-6.37)

159. Bagchi TB, Chattopadhyay K, Kumar A, Sanghamitra P, Sarkar S, Shivasankari M. 2022. Pigmented Rice: A Quality Food for Human Nutrition. Frontiers in Food & Nutrition Research, 8(1): 1-4. (NAAS Score-12.59)

160. Pradhan KC, Barik SR, Mohapatra S, Nayak DK, Pandit E,, Jena BK, Sangeeta S, Pradhan, A, Samal A, Meher J, BeheraL, Panigrahi D, Mukherjee AK, Pradhan SK (2022). (2022). Incorporation of Two Bacterial Blight Resistance Genes into the Popular Rice Variety, Ranidhan through Marker-Assisted Breeding. *Agriculture*12, 1287. (ISSN 2077-0472, A108, NAAS: 9.41).

161. D. K. Nayak, S. Sahoo1, S. R. Barik, P. Sanghamitra , S. Sangeeta , E. Pandit , K. R. Reshmi Raj , N. Basak and S. K. Pradhan. Association mapping for protein, total soluble sugars, starch, amylose and chlorophyll content in rice. BMC Plant Biol 22, 620 (2022)(NAAS:11.25)

162. Pradhan, K.C.; Pandit, E.; Mohanty, S.P.; Moharana, A.; Sanghamitra, P.; Meher, J.; Jena, B.K.; Dash, P.K.; Behera, L.; Mohapatra, P.M.; et al. Development of Broad Spectrum and Durable Bacterial Blight Resistant Variety through Pyramiding of Four Resistance Genes in Rice. Agronomy 2022, 12, 1903(NAAS:9.94)

163. AllimuthuElangovan, Nguyen TrungDuc, DhandapaniRaju, Sudhir Kumar, BiswabiplabSingh, ChandrapalVishwakarma, SubbaiyanGopala Krishnan, Ranjith Kumar Ellur, Monika Dalal, PadminiSwain, Sushanta Kumar Dash, Madan Pal Singh, RabiNarayanSahoo, Govindaraj Kamalam Dinesh, Poonam Gupta and ViswanathanChinnusamy. Imaging Sensor-Based High-Throughput Measurement of Biomass Using Machine Learning Models in Rice. Agriculture 2023, 13,852. https://doi.org/10.3390/agriculture13040852 (NAAS Score-9.41)

164. Nayak, A.K., Tripathi, R., Debnath, M., Swain, C.K., Dhal, B., Vijaykumar, S., Nayak, A.D., Mohanty, S., Shahid, M., Kumar, A., Rajak, M., Moharana K C, Chatterjee Dibyendu, Susmita Munda, Guru Pravat, Khanam Rubina, Lal Banwari, Gautam Priyanka, Pattanaik Suschismita, Shukla Arvind Kumar, Fitton Nuala, Smith Pete, Pathak H, **2023**. Carbon and water footprint of rice, wheat & maize crop productions in India. Pedosphere 33(3): 448–462, 2023. http://doi: 10.1016/j.pedsph.2022.06.045. (NAAS Score-11.51)

165. Jyoti Bala, Shahid M, Bachkaiya V, Bajpai RK, Tripathi R, Mohanty S, Munda S, Nayak PK and Nayak AK (2023). Soil quality as affected by resource conserving technologies in rice-green gram cropping system in eastern India. Journal of the Indian Society of Soil Science. (*Accepted*) (NAAS Score-5.31)

166. Debnath M, Tripathi R, Chatterjee S, Shahid M, Lal B, Gautam P, Jambhulkar NN, Mohanty S, Chatterjee D, Panda BB, Nayak PK, Bhattacharyya P, Shukla AK, Pathak H, Nayak AK (2022). Long-Term Yield of Rice–Rice System with Different Nutrient Management in Eastern India: Effect of Air Temperature Variability in Dry Season. Agricultural Research 11, 76–86. doi:10.1007/s40003-021-00541-3. (NAAS Score-5.95)

167. Kumar, A., Nayak, A.K., Sharma, S., Senapati, A., Mitra, D., Mohanty, B., Prabhukarthikeyan, S.R., Sabarinathan, K.G., Indra, M.A.N.I., Garhwal, R.S., Thankappan, S., Panneerselvam, P*. 2023. Rice straw recycling: A sustainable approach for ensuring environmental quality and economic security. Pedosphere, 33(1), pp.34-48. Kumar, U., Kaviraj, M., Panneerselvam, P. and Nayak, A.K., 2022. Conversion of Mangroves Into Rice Cultivation Alters Functional Soil Microbial Community in Sub-Humid Tropical Paddy Soil. Frontiers in Environmental Science, p.417. (JrnID- F085a;NAAS Score-11.41).

168. Kaviraj M, Kumar U*, NayakAK, ChatterjeeS. 2022. Homology modeling and virtual characterization of cytochrome c nitrite reductase (NrfA) in three model bacteria responsible for short circuit pathway, DNRA in the terrestrial nitrogen cycle. *World Journal of Microbiology and Biotechnology*. 10.1007/s11274-022-03352-y (NAAS Score-10.25)

169. Kumar, S.P., Jat, D., Rao, S.B.N., Chandrasekharaiah, M., Singh, K.P. and Jena, P.C., 2022. Mechanized urea spraying system for balers to enhance the nutritional quality of

straw: a step to prevent straw burning. Current Science (00113891), 123(11). (NAAS Score-7.17)

170. Mangaraj, S., Singh, R., Pawar, D., Potdar, R. R., Jena, P. C., Kumar, R. S., ... & Kudos, A. (2022). Govt. of India sponsored SCSP programme at ICAR-CIAE Bhopal for livelihood support and economic development of SC BPL beneficiaries. Agricultural Engineering Today, 46(2), 49-49. (NAAS Score-4.23)
171. Sabat M., Nalawade RD, Shelake PS, Jena PC. 2023. Energy auditing of a soy-paneer (tofu) processing unit: A case study. Journal of Food Process Engineering, e14481, https://doi.org/10.1111/jfpe.14481 (NAAS Score-8.89)

172. Mandal S, Jena PC, Gangil S, Pal S, Haydary J, Sharma R K and Verma A. 2023. Ni-supported pigeon pea stalk biochar as a catalyst for ex situ tar cracking in biomass gasification. *Biomass Conversion and Biorefinery*, https://doi.org/10.1007/s13399-023-04974-4. (NAAS Score-10.05)
173. Dash, P.K., Bhattacharyya, P., Shahid, M., Kumar, U., Padhy, S.R., Swain, C.K., Senapati, A., Bihari, P. and Nayak, A.K., 2023. Impact of long-term resource conservation techniques on biogeochemical characteristics and biological soil quality indicators in a rice green-gram farming system. Environmental Geochemistry and Health, pp.1-19. (NAAS Score-10.90)
174. Vijayakumar, S., Rajpoot, S.K., Manikandan, N., Varadan, R.J., Singh, J.P., Chatterjee, D., Chatterjee, S., Rathod, S., Choudhary, A.K. and Kumar, A., 2023. Extreme temperature and rainfall event trends in the Middle Gangetic Plains from 1980 to 2018. Current Science (00113891), 124(11). (NAAS Score-7.17)
175. Adak, T., Mishra, T., Guru-Pirasanna-Pandi, G., Gadratagi, B.G., Patil, N., Annamalai, M., Yadav, M.K., Munda, S., Mukherjee, A.K., Rath, P.C. and Jena, M., 2023. Chemo-prospecting Cleistanthuscollinus, Lantana camara and Strychnosnux-vomica for rice pest management under laboratory conditions. Journal of Natural Pesticide Research, 5, p.100041. (NAAS rating: NA)
176. Adhikari B, Senapati RK, Mohapatra M, Mohapatra L, Nigam R,Mohapatra SD (2023) Detection of rice leaf folder, *Cnaphalocrosis medinalis* (Guenee) (Lepidoptera: Crambidae) infestation using ground-based hyperspectral radiometry. Current Science, 124(8):964-975(NAAS Rating: 7.17)
177. Babu SB, Guru-Pirasanna-Pandi G, Parameswaran C, Padhi J, Basana-Gowda G, Annamalai M, Patil N, Meher C, Sabarinathan S, Rath PC. 2023. Genetic analysis of brown planthopper, Nilaparvata lugens (Stål)(Hemiptera: Delphacidae) based on microsatellite markers. Current Science. 2023 10;125(7):777. (NAAS Rating – 7.1)
178. Berliner J, Alfred-Daniel J, Rajkumar B, Hombegowda HC, Manimaran B, Parvez R, Khan MR, Mhatre PH, Guru-Pirasanna-Pandi G. Fauna associated with wheat cultivation in high altitudes of the Nilgiris, India. Current Science. 2023 Feb 25;124(4):426. (NAAS Rating – 7.1)
179. Bhartiya A, Rajesh V, Aditya JP, Jeevan B et al. Evaluation of indigenous and exotic soybean accessions for yield, resistance to frog-eye leaf spot and yellow mosaic virus diseases. Plant Genetic Resources: Characterization and Utilization. 2023:1-7. doi:10.1017/S1479262123000941. (NAAS: 7.28)

180. Meher J, Lenka S, Sarkar A, and Sarma BK. (2023). Transcriptional regulation of OsWRKY genes in response to individual and overlapped challenges of *Magnaporthe oryzae* and drought in indica genotypes of rice. Environmental and Experimental Botany, https://doi.org/ 10.1016/ j.eeeeevxpbot.105221 (NAAS score:12.03).
181. Muduli L, Dash M, Mohapatra SD, Mohapatra KK, Nayak HS, Bastia DN, Pradhan B, Tripathy SK, Jena RC, Pradhan SK (2023). Phenotypic and genotypic assessment of elite rice varieties for brown plant hopper (Nilaparvata lugens Stål.) resistance. Cereal Research Communications (NAAS Score-)
182. Shasmita, BB Swain, S Mishra, PK Mohapatra, Sa K Naik and AK Mukherjee* (2023): Chemopriming for Induction of Disease Resistance against Pathogens in Rice, Plant Science,doi:https://doi.org/10.1016/j.plantsci.2023.111769, (NAAS Score:11.2)
183. Shivappa R, MS B, U K, Pati P, Mohapatra SD, *Guru-Pirasanna-Pandi G. Dual Role of Potassium Silicate and Salicylic Acid: Plant Growth Promotor and Plant Immunity Booster Against Bakanae Disease of Rice. Silicon. 2023 Nov 9:1-0. (NAAS Rating – 9.4)
184. Soumia PS, Shirsat DV, Guru-Pirasanna-Pandi G, Karuppaiah V, Gadge AS, Arunachalam T, Mahajan V. Invasion of fall armyworm, (*Spodoptera frugiperda*, JE Smith) (Lepidoptera, Noctuidae) on onion in the maize-onion crop sequence from Maharashtra, India. Frontiers in Ecology and Evolution.;11:1279640. (NAAS Rating – 9.0)
185. Behera, D., Swain, A., Karmakar, S., Dash, M., Swain, P., Baig, M. J., & Molla, K. A. (2023). Overexpression of *Setaria italica* phosphoenolpyruvate carboxylase gene in rice positively impacts photosynthesis and agronomic traits. *Plant Physiology and Biochemistry*, 194, 169-181. (NAAS- 11.44)
186. Devi R, Sharma E, Thakur R, Lal P, Kumar A, Ahsan Altaf M, Singh B, Tiwari RK, Lal MK, Kumar R. (2023) Non-dairy prebiotics: Conceptual relevance with nutrigenomics and mechanistic understanding of the effects on human health. *Food Research International*. 170 (112980): 1-16. (NAAS: 13.43)
187. Kishore, K., Singh, H. S., Nath, V., Baig, M. J., Murthy, D. S., Acharya, G. C., & Behera, S. (2023). Influence of canopy architecture on photosynthetic parameters and fruit quality of mango in tropical region of India. *Horticulture, Environment, and Biotechnology*, 1-13. (NAAS- 8.14)
188. Kumar A, Lal MK, Sahoo U, Sahoo SK, Sah RP, Tiwari RK, Kumar R, Sharma SG. (2023). Combinatorial effect of heat processing and phytic acid on mineral bioavailability in rice grain. *Food chemistry advances*. 2 (100232): 1-10.
189. Lal P, Behera B, Yadav MR, Sharma E, Altaf MA, Dey A, Kumar A, Tiwari RK, Lal MK, Kumar R. (2023). A Bibliometric Analysis of Groundwater Access and its Management: Making the Invisible Visible. *Water*. 15 (806): 1-13. (NAAS: 9.53)
190. Mohanty A, Jena P, Mondal S, Bhaduri D, Chattopadhyay K, Chakraborty K (2023) Ion exclusion, osmoregulation and management of oxidative stress improve salt tolerance in rice at seedling stage. *Oryza,* 60: 150-158. (NAAS-5.03)
191. Roy, S., Patra, B.C., Kumar, J., Sar, P., Jogi, U.S., Konyak, Z., Banerjee, A., Basak, N., Mandal, N.P. and Bansal, K.C., (2023). Ethnolinguistic associations and genetic diversity of rice landraces in Nagaland, India. *Plants, People, Planet*, 1–18. https://doi.org/10.1002/ppp3.10454

192. Sahoo TR, Behera B, Paikaray RK, Garnayak LM, Sethi D, Jena S, Raza MB, Panda RK, Song B, Lal MK, Kumar A. (2023). Effects of sunflower residue management options on productivity and profitability of succeeding rice under different crop establishment methods. *Field Crops Research*. 290 (108763): 1-11. (NAAS: 12.15)

193. Sahoo, S. K., Dash, G. K., Kumar, A., Lal, M. K., Guhey, A., Baig, M. J., & Swain, P. (2023). Phenological and yield responses for the identification of both vegetative and reproductive stages drought-tolerant rice genotypes for future breeding. *Cereal Research Communications*, 1-15. (NAAS- 7.24)

194. Sahu, S., Gupta, P., Gowtham, T. P., Yogesh, K. S., Sanjay, T. D., Singh, A., ... Baig, M. J., Rai, R. & Dash, P. K. (2023). Generation of High-Value Genomic Resource in Rice: A "Subgenomic Library" of Low-Light Tolerant Rice Cultivar Swarnaprabha. *Biology*, 12(3), 428. (NAAS- 11.17)

195. Swain, P., Baig, M. J., Marndi, B. C., Kumar, G., Dhua, S. R., Bansal, R., & Patra, B. C. (2023). IC330470 (IC0330470; INGR21004), a Rice (Oryza nivara) Germplasm with Vegetative Stage Drought Tolerance. *Indian Journal of Plant Genetic Resources*, 36(1):125-126. (NAAS Score-5.54)

196. Swain, P., Dash, G. K., Baig, M. J., Patra, B. C., Barik, M., & Bansal, R. (2023). AC 42997 (IC0576152; INGR21002), a Rice (Oryza sativa) Germplasm with Vegetative Stage Drought Tolerance. Prolific Roots. High Water Use Efficiency. *Indian Journal of Plant Genetic Resources*, 36(1):124. (NAAS Score-5.54)

197. Ramkrushna, G.I., Das, A., Layek, J., Verma, B.C., Subhash Babu, Mohapatra, K.P. and Shahane, A.A (2022) Assessing maize based cropping systems for higher productivity and income under shifting cultivation in eastern Indian Himalayas. *Indian Journal of Soil Conservation50(2) 101-106.* [NAAS score: 4.63]

198. Ramkrushna, G.I., Layek, J., Das, A., Verma, B.C., Das, S., Mohapatra, K.P. and Ngachan, S.V. 2022. Nutrient management in maize (Zea mays) under shifting cultivation for higher productivity and sustainability in North-East India. *Indian Journal of Agronomy* 67(4): 386-391. [NAAS score: 5.21]

199. Sharma SK, Pathaw N, Wangkhem B, Jackson KS, Devi KS, Roy SK, Singh RK, Singh R, Banerjee Amrita, et al. (2023). Simple template-based reverse transcription-recombinase polymerase amplification assay for routine diagnosis of citrus tristeza virus. Letters in Applied Microbiology, 2023, 0, 1–9[NAAS score: 8.40]

200. Verma, B.C., Manoj Kumar, Choudhury, B.U., Hazarika, S., Bordoloi, L J., Ramesh, T., Moirangthem, P., Ramkrushna, G I. (2022) Effect of Nutrient Management on Soil Organic Carbon Pools and Enzymes Activities under Groundnut in Acidic Soil.Journal of Agricultural Physics 22 (1):*38-44*[NAAS score: 5.02]

201. Mandal NP, Roy Somnath and Banerjee Amrita. 2023. CRR747-12-3-B (IET26337) (IC640651; INGR21114), a rice (*Oryza sativa* L.*)* germplasm with drought tolerant and resistant to blast disease. Indian Journal of Plant Genetic Resources 36 (3), 458-459. [NAAS score: 5.54]

202. Dass MA, Anila M, Kale RR, Pragya S, Anantha MS, Mandal NP, Surekha Rani H, Pawar SC, Roja Rani A, Srinivas A, Prasanth S and Sundaram RM. 2022. Evaluation of Rice Recombinant Inbred Lines Developed from the Cross Rasi × Improved Samba Mahsuri for Drought Tolerance. International Journal of Environment and Climate Change 12(12): 1537-1546. [NAAS score: 5.13]

203. Peramaiyan P, Srivastava AK, Kumar V, Seelan LP, Banik NC, Khandai S, Parida N, Kumar V, Das A, Pattnaik S, Sarangi DR, Yeggina PK, Yadav A, McDonald AJ, Craufurd P, Singh S, Malik RK. 2023. Crop establishment and diversification strategies for intensification of rice-based cropping systems in rice-fallow areas in Odisha. *Field Crops Res.* 302:109078. NAAS-12.15

Book chapter

1. Mohapatra SD, Zaidi NW, Mohapatra M, Nagothu US, Senapati RK, Mohapatra M, Adhikari B, Pradhan SS and Nayak AK (2022) Integrated pest management in rice and potential to contribute to climate-neuitral and resilient farming system. Taylor & Francis, 69-86
2. Kumar A, Nayak AK, Tesfai Mehreteab, Tripathi R, Mohanty S, Mohapatra SD, Mohapatra K and Nagothu US (2022) Direct seeded rice. Taylor & Francis, 106-126
3. PK Guru, Nayak AK, Tripathi R, Debnath M, Priyadarsani S, Shahid Mohammad, Borkar NT, Kumar U, Sivashankari M, Chatterjee D, Munda S, Kumar A, Lal B, Gautam P, Mohapatra SD, Pathak H, Tiwari P and Shrivastava AK (2021). Rice Mechanization and Precesion Farm Operation in India and Future Prospects. Rice Research: Recent Advances and Perspective, ICAR-National Rice Research Institute, Cuttack, 81-107
4. Mohapatra SD, Senapati RK, Nanda D, Raghu S, Gowda B, Mohapatra M, Tripathi R, Nayak PK, Adhikari B, Nigam R and Nayak (AK 2021). *Precision Rice Pest Management: Tomorrow's Technology for Today's Farmer*. Rice Research: Recent Advances and Perspective, ICAR-National Rice Research Institute, Cuttack, 108-144

5. Das SR, Dey S, Pradhan A, Nayak BK, Venkatramaiah E, Chatterjee D (2023). Vermicomposting as a means of removing antibiotic resistance genes (ARGs) from soil and water p. 259-278, In: Fate of Biological Contaminants During Recycling of Organic Wastes, Elsevier, p.386, ISBN 978-0-323-95998-8, https://doi.org/10.1016/B978-0-323-95998-8.00005-4
6. Kumar U, Kaviraj M, Kundu S, Rout S, Priya H, Nayak AK.2023. Microbial Alleviation of Abiotic and Biotic Stresses in Rice. InSustainable Agriculture Reviews

60: Microbial Processes in Agriculture. pp. 243-268). Cham: Springer Nature Switzerland.

7. Jena PC, Guru Prabhat and Debnath M. 2023. Advanced Machinery and Equipment for Rice Farming. In Edited Mohapatra SD, Samantaray S, Dash SK, Mohanty S, Henjagi S, Saha S, Nayak AK, Recent innovations and technologies for transforming rice farming. Association of rice research workers, ICAR-National Rice Research Institute, Cuttack, Odisha, India, p x+370
8. Tripathi R, Chinmaya Kumar Swain, Supratim Das, Lipsa Tripathy, Simran Mohapatra, Pujyasmita Nayak, Dhrupad Kumar Behera, Kiran Kumar Mohapatra, Sangita Mohanty, S D Mohapatra, A K Nayak. 2023. Current Status of carbon neutrality in Indian fields and strategies for its achievement. Recent Innovations and emerging technology for transforming rice farming. 2nd Indian Rice Congress held 11-14th feb 2023. ICAR-National Rice Research Institute, Cuttack, Odisha.
9. Tripathi R, S Mohanty, Chinmaya Kumar Swain, Supratim Das, Pujyasmita Nayak, K C Moharana, SD Mohapatra, B. Raghavendra Goud, S. Raghu, RN Sahoo, Rajeev Ranjan, A K Nayak. 2023. Estimate of nitrogen content in rice using multiple linear regression models. Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp 253-255.
10. Bhaduri D, Vijayakumar S., Daripa A, Verma B. C., Mohanty S. 2023. Carbon Footprint in Rice Cultivation. In: Handbook of Energy Management in Agriculture, A. Rakshit et al. (eds.), Springer Nature Singapore Pte Ltd. 2023. Doi: 10.1007/978-981-19-7736-7_1-1
11. Vijayakumar S*, Chatterjee D, Subramanian E, Ramesh K, Saravanane P (2023). Efficient Management of Energy in Agriculture. 355-382, In: Rakshit A, Biswas A, Sarkar D, Meena VS, Datta R (eds.), Handbook of Energy Management in Agriculture, Springer Nature Singapore, p. 766+xxvi,https://doi.org/10.1007/978-981-19-7736-7_18-2
12. Das SR, Dey S, Nayak BK, Mukherjee S, Pradhan A, Muduli BC, Chatterjee D* (2024) Vermicomposting as a tool for removal of heavy metal contaminants from soil and water environment, pp. 187-205. In: Li F, Huang K, Bhat SA, Kumar V. Earthworm Technology in Organic Waste Management, Elsevier, p.383, https://doi.org/10.1016/B978-0-443-16050-9.00007-4
13. Khanam R, Nayak AK, Chatterjee D (2024) Remediation for heavy metal contamination: A nanotechnological approach, pp. 279-291, In: Malik A, Garg VK (eds.), Bioremediation for Sustainable Environmental Cleanup, CRC Press, p. 322. https://doi.org/10.1201/9781003277941-16
14. Priyadarshini A, Behera S, Mitra D, Senapati A, Shubhadarshi S, Satapathy S, Pattanayak S, Panneerselvam P. 5 Arbuscular Mycorrhizal Fungi and Their Role in Plant Growth Promotion in Rice. Arbuscular Mycorrhizal Fungi: For Nutrient, Abiotic and Biotic Stress Management in Rice. 2023 Jul 31:35.
15. Mitra D, Pellegrini M, Olatunbosun AN, Mondal R, Del Gallo M, Chattaraj S, Chakroborty D, Priyadarshini A, Khoshru B, Sierra BG, de los Santos-Villalobos S. Seed priming with microbial inoculants for enhanced crop yield. InMicrobial Inoculants 2023 Jan 1 (pp. 99-123). Academic Press.

16. S. Harish, S. Parthasarathy, S.R. Prabhukarthikeyan, Arabinda Mahanty, Basavaraj Teli, P.C. Rath, and K. Anandhi Omics: A Potential Tool to Delineate the Mechanism of Biocontrol Agents against Plant Pathogens in: Plant-Microbe Interactions-Harnessing Next-Generation Molecular Technologies for Sustainable Agriculture, pp. 79-100
17. Prakash C Rath, Manas K Bag, NB Patil, Raghu S, Prabhukarthikeyan SR, GP Pandi G and T Adak (2023). Biotic Stress Management in Rice: Recent Scientific Advances. In Souvenir : Second Indian Rice Congress, An International event on "Transforming Rice Research : Recent Scientific Developments and Global Food Crisis" held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp. 26-30.
18. Soumya Shephalika Dash, P. Bhavana, Anjan Kumar Nayak and Prasanti Golive (2023). New methods/recent trends in control of stored grain pests. In: Storage Entomology and Beneficial Insects: An Overview, pp. 106-126.
19. Purakayastha T. J., Bhaduri D, KumarD, Yadav R & Trivedi A. 2023. Soil and Plant Nutrition. In: Trajectory of 75 years of Indian Agriculture after Independence (Eds. PK Ghosh et al.), Springer Nature Singapore pp. 365-411. DOI: 10.1007/978-981-19-7997-2_15
20. RaghavendraGoud B, Panda BB, Bisen JP, Rahul Tripathi, Anjani Kumar, Annie Poonam, Sushmita Munda, Manish Debnath, Panneerselvam P, SangitaMohanty, RubinaKhanam, Mohammad Shahid, Jena PC, Sivashankari M, Kiran Gandhi Bapatla, Shyam CS and Nayak AK. Crop Diversification and Sustainable Farming with Rice-Millet Cropping Systems: A Climate Change Resilient Strategy. *In: Harvesting Prosperity: Rice, Millets and Beyond-Cultivation, Value Addition and Marketing. ICAR-National Rice Research Institute, Cuttack, Odisha, India*. Pp 33-50
21. Parameshwaran C, Cayalvizhi B, Sivashankari M, Jeevan B, Rameswar Prasad Sah, Anjani Kumar and Panneerselvam P. An Analysis of Yield and Related Traits in Pearl Millet Hybrids Released for Cultivation in India. *In: Harvesting Prosperity: Rice, Millets and Beyond-Cultivation, Value Addition and Marketing. ICAR-National Rice Research Institute, Cuttack, Odisha, India.*Pp 81-88
22. Sadvatha RH and Sivashankari M. Innovations in Millet Processing, Packaging and Marketing. *In: Harvesting Prosperity: Rice, Millets and Beyond-Cultivation, Value Addition and Marketing. ICAR-National Rice Research Institute, Cuttack, Odisha, India.*Pp253-275
23. R. M. Sundaram, D. Sanjeeva Rao, P. Sanghamitra, S. GandhadmathSpoorti, J. Veerendra, N. Siromani, G. Niharika, R. Ananthan, J. Aravind Kumar, P. Raghuveer Rao, S. Malathi, S. K. Mangrauthia, M. Balram, J. Ali, and C. N. Neeraja.Redesigning Rice as a Promising Nutraceutical Functional Food. In: Kole, C. (eds) Compendium of Crop Genome Designing for Nutraceuticals. Springer, Singapore. https://doi.org/10.1007/978-981-19-3627-2_1-1
24. Devanna, B.N., Pramesh, D., Prashant, S.H., Rajashekara, H., Kumari, M., Raghu, S., Pawar, D., Awaji, S.M., Parameswaran, C., Katara, J.L. and Samantaray, S., (2023). Multi-omics Approaches and Their Applications for Disease Management in Cereal Crops. In *Advances in Plant Disease Management* (pp. 175-208). CRC Press.
25. PS Hanjagi, SM Awaji and MJ Baig. 2023. Next Generation Phenotyping Applications: Breaking through the bottleneck in developing climate resilient rice varieties (Book chapter). In: Recent innovations and emerging technologies for transforming rice farming. Association of Rice Research Workers, ICAR-National Rice Research Institute, Cuttack-753006, Odisha, India, pp-139-153.
26. *Kumar, G.A.K.*, Mondal, B., Jambhulkar, N.N., Bisen, J.P., Pradhan, A.K., Sai Krishna, R., Rout, C., Parida, S, Sahoo, M. and Nayak, R. (2023). Agribusiness

opportunities in aromatic rice: A case study from Odisha. In: Mohapatra et al. (eds.) (2023) *Recent innovations and emerging technologies for transforming rice farming*. ICAR-National Rice Research Institute, Cuttack, Odisha, India. Pp. 338-349.

27. Mondal, B. (2023). Green innovation in agriculture: an illustrative narration. In: Mohapatra et al. (eds.) (2023) *Recent innovations and emerging technologies for transforming rice farming*. ICAR-National Rice Research Institute, Cuttack, Odisha, India. Pp. 350-366.
28. Srivastava, S.K., Kolady, D., Paul, S. (2023). Changing Food Consumption Pattern and Its Implications on Achieving Zero Hunger in India (SDG-2). In: Narula, S.A., Raj, S.P. (eds) Sustainable Food Value Chain Development. Springer, Singapore. https://doi.org/10.1007/978-981-19-6454-1_9
29. P Samal, MK Kar, AK Mukherjee*(2023). Crosstalk between Melatonin and Gasotransmitters in Plant Adaptation against Abiotic and Biotic Stress.In: Advancement of melatonin research in plants: multi-faceted role in regulating development and stress protection (ed A Roychoudhury).153-161. Taylor and Francis.

Review Papers

1. Marndi BC, Anilkumar C, Azharudheen TP M, Sah RP, Moharana D. Cataloguing of rice varieties of NRRI suitable for different abiotic stress-prone ecologies. Climate Resilient Technologies for Rice based Production Systems in Eastern India. ICAR-National Rice Research Institute, Cuttack, Odisha, India, pp 59-71. 2022
2. Radha, B., Sunitha, N.C., Sah, R.P., TP, M.A., Krishna, G.K., Umesh, D.K., Thomas, S., Anilkumar, C., Upadhyay, S., Kumar, A. and Ch LN, M., 2023. Physiological and molecular implications of multiple abiotic stresses on yield and quality of rice. Frontiers in Plant Science, 13, p.996514.
3. Gautam RK, Langyan S, Devi SV, Singh R, SemwalDP, Ali S, Mangat GS, Sarkar S, Bagchi TB, Roy S, Senguttuvel P. Genetic resources of sticky rice in India: status and prospects. Genetic Resources and Crop Evolution. 2023 Jan;70(1):95-106 (NAAS: 7.88)
4. Sunitha, N.C., Prathibha, M.D., Thribhuvan, R., Lokeshkumar, B.M., Basavaraj, P.S., Lohithaswa, H.C. and Anilkumar, C.* (2023) Focused identification of germplasm strategy (FIGS): a strategic approach for trait-enhanced pre-breeding. *Genetic Resources and Crop Evolution* (2023). https://doi.org/10.1007/s10722-023-01669-7
5. Anilkumar, C., Sah, R. P., Beena, R., Azharudheen, T.P.M., Kumar, A., Behera, S., Sunitha, N.C., Pradhan, S., Reshmi Raj, K., Parameswaran, C., Marndi, B., and Singh,

A. K. (2023). Conventional and contemporary approaches for drought tolerance rice breeding: Progress and prospects. *Plant Breed*,142: 418-438.

6. Beena R, Sunitha NC, Sah RP, Md Azharudheen TP, Krishna GK, Umesh DK, Thomas S, Anilkumar C, Upadhyay S, Kumar A, Manikanta Ch LN, Behera S, Marndi BC and Siddique KHM (2023) Physiological and molecular implications of multiple abiotic stresses on yield and quality of rice. *Frontiers in Plant Science*, https://doi.org/10.3389/fpls.2022.996514
7. Altaf, M.A., Sharma, N., Srivastava, D., Mandal, S., Adavi, S., **Jena, R**., Bairwa, R.K., Gopalakrishnan, A.V., Kumar, A., Dey, A. and Lal, M.K., 2023. Deciphering the melatonin-mediated response and signaling in the regulation of heavy metal stress in plants. *Planta*, *257*(6), p.115. (NAAS- 10.54)
8. Lal, P., Tiwari, R.K., Behera, B., Yadav, M.R., Sharma, E., Altaf, M.A., **Jena, R**., Ahmad, A., Dey, A., Kumar, A. and Singh, B., 2023. Exploring potato seed research: a bibliometric approach towards sustainable food security. *Frontiers in Sustainable Food Systems*, *7*. (NAAS- 11.01)
9. Bag MK, Raghu S, Banerjee Amrita, Prabhukarthikeyan SR, Baite MS and Yadav M (2023) Durable Resistance of Rice to Major and Emerging Diseases: Current Status. The Open Agriculture Journal 17, e187433152212301
10. Bhaduri D, Sihi D, Bhowmik A, Verma BC, Munda S and Dari B (2022) A review on effective soil health bio-indicators for ecosystem restoration and sustainability. Front. Microbiol. 13:938481. doi: 10.3389/fmicb.2022.938481

Abstract

1. L. K. Bose, M. K. Kar, M. Chakraborti, P.C. Rath, H. N. Subudhi, P. Sanghamitra, N. N. Jambhulkar and S.K. Dash. Utilization of New Alleles through Pre-breeding to improve Yield and BPH resistance in cultivated rice. Abstract in: Second Indian Rice Congress, An International event on "Transforming Rice Research: Recent Scientific Developments and Global Food Crisis" held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp-40.
2. PC Rath, S Lenka, GP Pandi G, Basana Gowda G, NKB Patil, Prasanthi G, Totan Adak, R Jena, Prabhukarthikeyan SR, Raghu S, MS Baite, MK Bag. Promotion of IPM modules for management of insect, pest and diseases of rice in farmer's fields under shallow low land ecosystem. Abstract in: Second Indian Rice Congress, An International event on "Transforming Rice Research: Recent Scientific Developments and Global Food Crisis" held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp-368.
3. S. Lenka, L. Behera, A. Mahanty, Raghu S and P.C. Rath. Nano-priming with biosynthesized silver nanoparticle protects rice plant against *Rhizoctonia solani* Kuhn causing sheath blight disease. Abstract in: Second Indian Rice Congress, An International event on "Transforming Rice Research: Recent Scientific Developments and Global Food Crisis" held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp-389.
4. Golive Prasanthi, Supriya Sahoo, Raghu S, Soumya Shephalika Dash, Anjan Kumar Nayak, Totan Adak, SD Mohapatra and Rath PC. Exploration of potential bacterial strains against leaffolder, *Cnaphalocrosis medinalis*. Abstract in: Second Indian Rice Congress, An

International event on “Transforming Rice Research: Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp-391

5. Pritiranjan Sahoo, Mridul Chakraborti, Meera Kumari Kar, Guru Prasanna Pandi G, Arup Kumar Mukherjee, Pankajini Samal, Mayabini Jena, Prakash Chandra Rath and Lambodhar Behera. Introgression of bacterial blight and brown planthopper resistance in susceptible popular indica rice variety Naveen. Abstract in : Second Indian Rice Congress, An International event on “Transforming Rice Research : Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp-411.
6. Soumya Bharti Babu, Guru-Pirasanna-Pandi Govindharaj, Parameswaran C, Jayaraj Padhi, Basana Gowda, Naveen Patil, Annamalai M and PC Rath. Population structure and genetic diversity of brown planthopper, *Nilaparvata lugens* (Stål.) in India. Abstract in : Second Indian Rice Congress, An International event on “Transforming Rice Research : Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp- 413.
7. Guru-Pirasanna-Pandi G, Aashish Kumar Anant, Soumya Bharati Babu, Annamalai M, Basana-Gowda G, Naveenkumar Patil, and PC Rath. Marker-Trait association analysis of brown planthopper, *Nilaparvata lugens* resistance in indigenous rice genotypes of India. Abstract in : Second Indian Rice Congress, An International event on “Transforming Rice Research : Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp- 417.
8. Soumya Shephalika Dash, Golive Prasanthi, Anjan Kumar Nayak, Rajasekhar Rao Korada and P C Rath. Host stage preference and suitability of *Goniozus triangulifer* Kieffer (Hymenoptera: Bethylidae), a parasitoid of rice leaffolder *Cnaphalocrocis medinalis* (Guenée) (Lepidoptera: Pyralidae). Abstract in : Second Indian Rice Congress, An International event on “Transforming Rice Research : Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp- 425.
9. Chanchala Meher, Guru-Pirasanna-Pandi Govindharaj, Parameswaran C, Tribikram Samal, Basana Gowda G, Naveenkumar Patil, Annamalai M and PC Rath. Genetic dissection of brown plant hopper, *Nilaparvata lugens* (Stål), resistance in rice landraces. Abstract in: Second Indian Rice Congress, An International event on “Transforming Rice Research: Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp- 443.
10. Basana Gowda G, Aishwarya Ray, Neeraj Budhlakoti, Dhanendra Kumar Rana, Totan Adak, Prakash Chandra Rath, S. D. Mohapatra. Multigenerational exposure of sublethal imidacloprid improves functional response in an egg parasitoid, *Trichogramma chilonis* Ishii. Abstract in: Second Indian Rice Congress, An International event on “Transforming Rice Research: Recent Scientific Developments and Global Food Crisis” held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp- 445
11. S.S. Dash, P Golive , H. Chatterjee , P.C. Rath , A.K. Nayak , S. Bhattacharya , P. Mondal , P. Bhavana and S.D. Mohapatra (2023)Exploring Resistance in Rice Landraces: A Holistic Analysis of Morphological and Biochemical Traits against Rice Leaffolder, *Cnaphalocrocis medinalis* Guenee , Awarded best Oral presentation in International Conference on Advancement in Plant Health Reasearch-Retrospect and Prospect. at Visva Bharati,West Bengal,India,Date: 7-8th December,2023 pp-53
12. Subrat Goswami, S B Das and P C Rath (2023) Genetic diversity of gut bacterial microbiota of rice stem borer complex…. capabilities. Awarded best Oral presentation in International Conference on Advancement in Plant Health Reasearch-Retrospect and Prospect. at Visva Bharati,West Bengal,India,Date: 7-8th December,2023.

13. Prakash C Rath, Manas K Bag, NB Patil, Raghu S, Prabhukarthikeyan SR, GP Pandi G and T Adak (2023). Biotic Stress Management in Rice: Recent Scientific Advances. In Souvenir: Second Indian Rice Congress, An International event on "Transforming Rice Research: Recent Scientific Developments and Global Food Crisis" held during February 11-14, 2023 organised by Association of Rice Research Workers, Cuttack, Odisha, pp 26-30.
14. Bag M. K., Masurkar P., Raghu S, Prabhukartikeyan SR, Behera L., 2023. Identification of mating type of Indian isolates of V. virens, the causal pathogen of rice false smut disease of rice. In: Second Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held at ICAR-NRRI, Cuttack, 11-14 Feb. 2023. P. 419-420
15. Biswal Swagatika, Baite Mathew S, Pandit Elssa, Pradhan Sharat K, Bag Manas K, Raghu S, Prabhukarthikeyan SR, Keerthana U, 2023. Determination of false smut resistance in rice genotypes through molecular markers. In: Second Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held at ICAR-NRRI, Cuttack, 11-14 Feb. 2023. P. 432
16. Anjan Kumar Nayak, A. Sasmal, P. Golive, G. Kumar, S. S. Dash,T. Adak, N. Kumar B. Patil and S. D. Mohapatra. 2023. Biochemical characterization of rice genotypes against leaf folder *Cnaphalocrocis medinalis* Guenee. 6th International Conference on "Agricultural Innovations for Sustainable Development Goals with Special Focus on Natural Farming" (AISDGONF-2023) 197 Pp.
17. Anjan Kumar Nayak, Prasanthi Golive, Arundhati Sasmal, Devanna, C Anilkumar, Arup Kumar Mukherjee, Soumya Shephalika Dash and Shyamaranjan Das Mohapatra. 2023 Exploring Genetic Divergence and Marker Trait Associations for Leaf Folder, *Cnaphalocrocis medinalis* Resistance in Rice Landraces. International Conference on Plant Health Management ICPHM 2023-Innovation and Sustainability. 51 Pp.
18. Banerjee A, Bharti S, Kumar J, Sar P, Priyamedha, Mandal NP, Sarkar S, Roy S (2023) Development of recombinase polymerase amplification (RPA) based rapid detection protocol for aroma gene in rice. In: Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 100-101.
19. Banerjee A, Chandu A, Bag MK, Roy S, Mandal NP (2023) Development and application of recombinase polymerase amplification (RPA) assay for rapid detection of rice pathogens. In: Proceeding of International Conference on Biotic and Abiotic Stress of Crop Plants and their Sustainable Management. 2-3 February 2023, Visva Bharti, West Bengal, pp 10.
20. Banerjee Amrita, bag MK, Roy S, Bhagat S, Mandal NP (2023) Application of molecular approaches in diagnosis and understanding evolutionary dynamics and host-pathogen interaction of major rice pathogens. In Proceedings of National Women Conference organized by Indian Phytopathological Society, Dec 22-23, 2023; pp48
21. Bera, S., Verma, B.C., Datta, S.P., Saha, S., Naik, S.K., Mahanta, D., and Paul, R.K (2023) Study on Carbon Mineralization as Affected by the Different Organic Amendments in an Acid Soil. pp 25 In: Abstract Book of "International Conference on Advancement in Plant Health Research - Retrospect & Prospect" at Visva Bharati, West Bengal, India, during 7- 8th December, 2023.
22. Chandu A, Banerjee A, Pandi GP, Roy S, Mandal S, Bag MK, Mandal NP (2023) Evolutionary dynamics of rice tungro virus from eastern India and development of recombinase polymerase amplification (RPA) based rapid diagnostic. In: Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 405-406.

23. Deo, R., Sar, P., Kumar, J., Verma, B.C., Banerjee, A., Mandal, N.P., and Roy, S., (2023) Phosphorus-starvation tolerance in *aus*rice (*Oryza sativa* L.) diversity panel. *In* Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 97-98
24. Firos BTM, Sar P, Bhowmick P, Mahato A, Bisht DS, Iquebal MA, Banerjee A, Mandal NP, Roy S (2023) Genetic diversity for early seedling vigour in *aus* rice (Oryza sativa L.). In: Proceeding of 20th International Symposium on Rice Functional Genomics – "Rice Research for Sustainable Food and Nutrition Security" during 3-5 November 2023, Bengaluru, India pp 161.
25. Kumar J, Roy S, Patra BC, Jogi US, Sar P, Basak N, Banerjee A, Konyak Z, Mandal NP, Bansal KC (2023). In: Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 119-120.
26. Mandal NP, Roy S, Priyamedha, Banerjee A, Bhagat S (2023) Genetic enhancement for drought tolerance to improve the productivity of rainfed drought-prone rice environment. In: Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 156-157.
27. Priyamedha, Mandal N P, Roy S, Banerjee A, Verma B C, Anupam A. and Naaz D. (2023). Genotypic screening of rice genotypes for identification of multiple stress tolerant genotypes. In: Abstract National Symposium on "Crop Health Management: Safeguarding Crop through Diagnostics and Innovations" sponsored by DST-SERB, organised by VPKAS, Almora during September 29-30, 2023.pp. 33-34.
28. Priyamedha, Roy, S., Chakraborty, K., Banerjee, A., Kumar, J., Sar, P., Verma, B.C. and Mandal (2023) Phenotypic and Genotypic Evaluation of Rice Landraces of Jharkhand for Tolerance to Multiple Abiotic Stresses. *In* Extended Summaries Second Indian Rice Congress. Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 67-68
29. Priyamedha, Singh V. V., Ram Bhagirath, Sharma H. K., Sujith Kumar M. S., Kumar Pradeep, Dubey Monika and Rai. P. K. (2023). Nutritional profiling and genetic relatedness among Indian mustard (*Brassica juncea* L.) genotypes. In: Proceedings of the 3rd International Conference On Advancement of Science and Technology for Environment, Society and People (ICASTESP III) organised by Society for Technology, Environment, Science& People, Kozhikode, India during October 13 -14 2023. pp.17-18.
30. Priyamedha, Singh V. V., Ram Bhagirath, Sharma H. K., Sujith Kumar M. S., Kumar Pradeep, Dubey Monika and Rai. P. K. (2023). Molecular and Biochemical Characterization of Doble Low Genotypes of Indian mustard (Brassica juncea L.). Invited talk in National Seminar on "Challenges, Opportunities and Strategies of Plant Science for Crop Improvement" in hybrid mode, jointly organized by ISGPB, New Delhi (Ranchi chapter) and BAU, Ranchi during 8th-9th November, 2023
31. Roy S, Sar P, Behera M, Chakraborty K, Nongkham U, Banerjee A, Gupta S, Verma BC, Bhaduri D, Hanjagi PK, Shil S, Priyamedha, Saha S, Mandal NP, Purugganan MJ (2023) Inshights on the agro-morphological variations in *aus*rice germplasm. In: Proceeding of 20th International Symposium on Rice Functional Genomics – "Rice Research for Sustainable Food and Nutrition Security" during 3-5 November 2023, Bengaluru, India pp 164.
32. Sar P, Behera M, Chakraborty K, Kumar J, Ngongkham U, Banerjee A, Verma BC, Bhaduri D, Hanjagi P, Mandal NP, Roy S (2023). In: Proceeding of International Conference on Biotic and

Abiotic Stress of Crop Plants and their Sustainable Management. 2-3 February 2023, Visva Bharti, West Bengal, pp 114.

33. Sar, P., Kumar, J., Behera, M., Chakraborty, K., Banerjee, A., Verma, B.C., Mandal, N.P., Roy, S., (2023) Exploring variability in stomatal traits in *aus*rice germplasm under vegetative stage moisture stress. *In* Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 110-111.
34. Verma, B.C., Saha, S., Prasad, S.M., Roy, S., Mandal, N.P., Banerjee, A., Bhaduri, D., Priyamedha, and Bhagat, S. (2023) Soil Organic Carbon and Mineral Nitrogen Under Rice Based Cropping System. *In* Extended Summaries Second Indian Rice Congress Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, pp 97-98. 217-218

35. Chatterjee D, Das SR, Mohanty S, Muduli BC, Bhatia A, Nayak BK, Rees RM, Drewer J, Nayak AK, Sutton MA (2023) Reactive nitrogen loss under diverse nitrogen management in subtropical lowland rice. pp. 285-287. Theme II: Ecological and sustainable management of rice-based production systems. ARRW/SIRC/Theme II/45. In: Kumar A, Hanjagi PS, Pandi GP, Saha S, Mohapatra SD, Dash SK, Mukherjee AK, Panda BB, Bagchi TB, Molla KA (Eds.). Extended summaries, Second Indian Rice Congress on Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023, 470p. [Poster presentation]
36. Tripathi R, Moharana KC, Chatterjee D, Debnath M, Mohanty S, Kumar A, Gouda BR and Nayak AK (2023). Impact of land use land cover change on land surface temperature distribution in Mahanadi Delta. pp. 263-264. Theme II: Ecological and sustainable management of rice-based production systems. ARRW/SIRC/Theme II/34. In: Kumar A, Hanjagi PS, Pandi GP, Saha S, Mohapatra SD, Dash SK, Mukherjee AK, Panda BB, Bagchi TB, Molla KA (Eds.). Extended summaries, Second Indian Rice Congress on Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023, 470p. [Poster presentation]
37. Mishra A, Chatterjee D, Kumar U, Nayak BK*, Das SR, Kaviraj M, Nayak AK (2023). Functional and structural diversity of nitrifying bacteria under longterm organically managed rice soil. pp. 288-289. Theme II: Ecological and sustainable management of rice-based production systems. ARRW/SIRC/Theme II/46. In: Kumar A, Hanjagi PS, Pandi GP, Saha S, Mohapatra SD, Dash SK, Mukherjee AK, Panda BB, Bagchi TB, Molla KA (Eds.). Extended summaries, Second Indian Rice Congress on Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023, 470p. [Poster presentation]
38. Chatterjee D, Das SR, Munda M, Pradhan A, Saha S, Nayak AK (2023) Effect of long-term organic nutrient management on weed flora in rice-fallow. pp. 290-291. Theme II : Ecological and sustainable management of rice-based production systems. ARRW/SIRC/Theme II/47. In: Kumar A, Hanjagi PS, Pandi GP, Saha S, Mohapatra SD, Dash SK, Mukherjee AK, Panda BB, Bagchi TB, Molla KA (Eds.). Extended summaries, Second Indian Rice Congress on Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023, 470p. [Poster presentation]
39. Chatterjee D, Pradhan A, Sahid M, Nayak AK, Agarwal M, Nayak BK (2023) Hydronano M spray improves productivity and micronutrient content in lowland rice. pp. 292-293. Theme II: Ecological and sustainable management of rice-based production systems. ARRW/SIRC/Theme II/48. In: Kumar A, Hanjagi PS, Pandi GP, Saha S, Mohapatra SD, Dash SK,

Mukherjee AK, Panda BB, Bagchi TB, Molla KA (Eds.). Extended summaries, Second Indian Rice Congress on Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023, 470p. [Poster presentation]

40. Shahid et al. 2023. A paper entitled "Co-application of Zinc oxide suspension concentrate with urea increases rice growth, yield and zinc use efficiency" presented in the 2nd Indian Rice Congress-2023.

41. Shahid et al. 2023. A paper entitled "Aluminium and coal fired plants: Industrial pollutants and their impact on agroecosystem" was presented in the 2nd Indian Rice Congress – 2023

42. Shahid et al. 2023. A paper entitled "Impacts of steel slag based environment-friendly amendments on rice growth, yield and lead uptake in soil with lead contamination" was presented in the 2nd Indian Rice Congress -2023.

43. Shahid et al. 2023. A paper entitled "Remediation of cadmium contaminated soil using steel slag-based fertilisers" was presented in the 2nd Indian Rice Congress - 2023.

44. Rahul Tripathi, S Mohanty, Chinmaya Kumar Swain, Supratim Das, Pujyasmita Nayak, K C Moharana, SD Mohapatra, B. Raghavendra Goud, S. Raghu, RN Sahoo, Rajeev Ranjan, A K Nayak. 2023. Estimating chlorophyll content in rice using multiple linear regression models by employing Optical Sensors.Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp: 256-258.

45. Sangita Mohanty, Rahul Tripathi, Chinmaya Kumar Swain, Supratim Das, B. Raghavendra Goud, Pujyasmita Nayak, A.K. Nayak. 2023. Optical sensor based N recommendation for top dressing in low land rice of eastern India.Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. pp: 279-280.

46. Rahul Tripathi, Simran Mohapatra, S. Mohanty, Md. Shahid, S.D. Mohapatra, B.B. Panda,S. Saha, S. Priyadarshani, D.R.Sarangi, N.N.Jambhulkar, A.K. Nayak. 2023 Assessing different crop establishment methods for enhancing rice productivity in eastern India. Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp 253-255.

47. Rahul Tripathi, KC Moharana, D Chatterjee, M Debnath, S Mohanty, Anjani Kumar, B R Goud and AK Nayak. Impact of land use land cover change on land surface temperature distribution in Mahanadi Delta. 2023. Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp 253-255.

48. Supriya Priyadarsani, Rahul Tripathi, Amaresh Kumar Nayak. 2023. Evaluating the greenhouse gas emissions from consumption of common Indian diets for mitigating climate change. Theme II, Ecological and sustainable management of rice-based

production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp 253-255.

49. Anjani Kumar, A K Nayak, Rahul Tripathi, Manish Debnath, Prashantkumar S Hanjagi, Rubina Khanam, Sangita Mohanty, E Venkatramaiah, Sanjoy Saha, B Raghvendra Goud. 2023. Physiological and morphological responses of rice varieties introgressed with drought QTLs under different levels of water deficit stress. Theme II, Ecological and sustainable management of rice-based production systems. Extended Summary: 2nd Indian Rice Congress, ARRW, ICAR-National Rice Research Institute, Cuttack, 753006. Pp

50. Padbhsan R, Sinha AK, Bhattachryya PM, Kumar U. 2023. Microbial Diversity and Soil Carbon Sequestration in Response to Tillage, Residue Retention, and Biofertilizer Application in Acid Alluvial Soil. In National Seminar on Climate resilient and Input Beneficent Agriculture fur Food & Nutritional Security January 19-20, 2023, UBKV, Pundibar. Cauch Behar, West Bengal
51. Jena PC, Guru PK and Nayak AK. 2023. Energetics of Rice Production under different Crop Establishment Methods. Extended summaries, 2nd Indian Rice Congress, Transforming Rice Research: Recent Scientific Developments and Global Food Crisis, February 11-14, 2023.

52. Saha S, Kumar A, Munda S, Poonam A, Goud R, Jena PC, Debnath M, Bhaduri D and Mohanty S. 2023. Efficient technologies for sustainable management of rice based production systems. In Souvenir: Second Indian Rice Congress | February 11-14, 2023, Cuttack, India, pp 20-25.

53. Bhaduri D, Swain S, Sahoo S, Chakraborty K., Munda S. (2023). Carbon assimilation in soil and plant governed by rice straw biochar under elevated and ambient CO_2 conditions. 2nd Indian Rice Congress 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' February 11-14, 2023, ICAR-NRRI, Cuttack.
54. Bhaduri D. 2023. Enrichment of soil health, productivity and grain quality under long-term organic nutrient management in rice cultivation. National Symposium on Digital Farming: The Future of Indian Agriculture (February 2-3, 2023) ICAR-Indian Institute of Soil Science, Bhopal.
55. Bhaduri D, Sahoo S, Mohanty S (2023). Soil C-N mineralization and associated microbial parameters under long-term rice cultivation: Influence of organic nutrient management. 2nd Indian Rice Congress 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' (February 11-14, 2023), ICAR-NRRI, Cuttack.
56. Sar P, Kumar J, Behera M, Chakraborty K, Banerjee Amrita, Verma BC, Mandal NP, Roy S (2023) Exploring variability in stomatal traits in aus rice germplasm under vegetative stage moisture stress. *In the proceedings of Second Indian Rice Congress (SIRC)* held at ICAR-National Rice Research Institute, Cuttack during 11-14 Feb, 2023. pp 110.
57. Kumar J, Roy S, Patra BC, Jogi US, Sar P, Basak N, Banerjee Amrita, Konyak Z, Mandal NP, Bansal KC (2023) Genetic diversity in rice (Oryza sativa L.) landraces from Nagaland. *In the proceedings of Second Indian Rice Congress (SIRC)* held at ICAR-National Rice Research Institute, Cuttack during 11-14 Feb, 2023. pp 119.
58. Banerjee Amrita, Bharti S, Kumar J, Sar P, Priyamedha, Mandal NP, Sarkar S, Roy S (2023) Development of recombinase polymerase amplification (RPA) based rapid detection protocol for aroma gene in rice. *In the proceedings of Second Indian Rice Congress (SIRC)* held at ICAR-National Rice Research Institute, Cuttack during 11-14 Feb, 2023. pp 100.

59. Chandu A and Amrita Banerjee (2023) Development of recombinase polymerase amplification (RPA) assay for detection of rice tungro bacilliform virus from crude sap. *In the proceedings of IPS Delhi Chapter e-Symposium on "Pathogen Profile and Pathogenesis in Relation to Crop Disease Management"* held at ICAR-IARI, New Delhi during January 13, 2023, pp 18.

60. Bisen JP, Kumar S, Mondal B, Kumar GAK, Tiwari U, Jambhulkar NN, Pradhan AK (2023). Historical trends and projected rice situation for India till 2032-33. ARRW/SIRC/Theme IV/15: Socio-extension approaches in rice farming to address global food security issues. *Second Indian Rice Congress 2023. ICAR- ICAR-National Rice Research Institute, Cuttack (Odisha)*, Pp. 465-466.

61. Pradhan AK, Kumar D, Bisen JP, Mondal B and Kumar GAK (2023). Challenges and prospects for application of drone technology in agriculture. ARRW/SIRC/Theme IV/16: Socio-extension approaches in rice farming to address global food security issues. *Second Indian Rice Congress 2023. ICAR- ICAR-National Rice Research Institute, Cuttack (Odisha),* Pp. 467-468.

62. Mondal B., Mishra, S.K., Satapathy, B.S., Paul, S., Lenka, S., Jethy, S. and Jena, K. (2023). Module-based Interventions in Farmer-FIRST Programme: An Impactful Approach for Livelihood Enhancement. In: Extended Summaries of 2nd Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held during February 11-14, 2023 at ICAR-NRRI, Cuttack. Pp.460.

63. Jambhulkar N.N. and Mondal B. (2023). Assessment of Consumption of Rice in Odisha. In: Extended Summaries of 2nd Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held during February 11-14, 2023 at ICAR-NRRI, Cuttack. Pp.452.

64. Paul, S., Kumar, G.A.K. and Mondal, B. (2023). Diffusion of NRRI Varieties in Eastern and Northeastern Parts of India: A Micro-Level Assessment. In: Extended Summaries of 2nd Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held during February 11-14, 2023 at ICAR-NRRI, Cuttack. Pp.459.

65. Mohanty, S.K., De, H.K., Rath, D.P., Nayak, M. and Mondal, B. (2023). Mapping Rice Research in India (2003-2022): An Analysis of Research Productivity. In: Extended Summaries of 2nd Indian Rice Congress on 'Transforming Rice Research: Recent Scientific Developments and Global Food Crisis' held during February 11-14, 2023 at ICAR-NRRI, Cuttack. Pp.458.

66. Sethy, S., Mogra, R. and Lakhawat, S. 2023. Millets based food premixes: Sustainable food options towards attaining nutritional security. In: Compendium of International Conference on "*Strategies for Global Food and Nutritional Security, Sustainability and Wellness*" (NUTRI-2023) during December 4-6, 2023, organized by CCS Haryana Agricultural University, Hisar, Haryana.

Book

1. Panneerselvam P, Pradeep Kumar Das Mohapatra, Amaresh Kumar Nayak, Debasis Mitra, Kulandaivelu Velmourougane, Sergio De Los Santos-Villalobos. 2023. Arbuscular Mycorrhizal Fungi For Nutrient, Abiotic and Biotic Stress Management in Rice. CRC Press ISBN 9781032406411

2. Kumar U, Shelake RM, Singh R eds. (2023). Soil-plant-microbe interactions: An innovative approach towards improving soil health and plant growth. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-83251-919-6 (ISBN 978-2-83251-919-6)
3. Panneerselvam P, Kumar A, Jeevan B, Parameswaran C, Sah R P, Sivasankari M, Chandrasekar V, Nayak AK (Eds) (2023). Harvesting Prosperity: Rice, Millets and Beyond - Cultivation, Value Addition and Marketing. ICAR- National Rice Research Institute, Cuttack, Odisha, India. pp 292.
4. Mohapatra S D., Samantaray S, Das SK., Mohanty S., Hanjagi. PS., Saha S., Nayak AK., "Recent innovations and emerging technologies for transforming ricefarming. "ICAR-National Rice Research Institute, Cuttack, Odisha, India (2023)

Bulletins

1. Chattopadhyay K, Bagchi TB., Bose LK, Poonam A, Mukherjee A, Mohapatra SD, Marandi BC, Samantaray S, Chakraborty M, Kumar A, Basak N, Sanghamitra P, Dehuri PL, Maharana N, Mohapatra SS, Neerja CN, Patra BC (2023) CR Dhan 315: Uccha jastayukt jaibasuhadikruta chawal ki kisam (Hindi). NRRI Technical Bulletin No. 205, ICAR-NRRI, Cuttack, 4p
2. CR Dhan 315: A high zinc biofortified rice variety (Hindi) – K Chattopadhyay, T.B. Bagchi, L.K. Bose, A. Poonam, A. Mukherjee, S.D. Mohapatra, B.C. Marandi, S. Samantaray, M. Chakraborty, A. Kumar, N. Basak, P Sanghamitra, P.L. Dehuri, N. Maharana, S.S. Mohapatra, C.N. Neerja and B.C. Patra

3. Arunkumara CG and Soumya Sah (2023) Occurrence of Flea Beetle, *Alticacyanea* (Weber) (Coleoptera: Chrysomelidae) feeding on weeds *Ludwigia parviflora* and *Commelinadiffusa* at CRURRS Hazaribag. NRRI Newsletter (July-September) 44(3): 25
4. Chandu A, Amrita Banerjee, GP Pandi, Somnath Roy , S Mandal , MK Bag and NP Mandal (2023) Molecular characterization of Rice tungro bacilliform virus (RTBV) isolate from Odisha based on large intergenic region. NRRI Newsletter (April-June) 44(2): 25-26
5. Puranjoy Sar, Motilal Behera, Koushik Chakraborty, BC Verma, Amrita Banerjee, DebaratiBhaduri, Prashantkumar S. Hanjagi, NP Mandal, P. Swain and Somnath Roy. (2023) Variability for tolerance to drought, submergence and phosphorus-starvation tolerance in aus rice germplasm. NRRI Newsletter (January-March) 44(1): 16-17
6. Maiti, D., Verma, B. C., Saha, S., Banarjee, A., Bhaduri, D., Roy, S.,Bhagat, S. and Mandal, N.P. (2022) Arbuscular Mycorrhizae (AM)- Inoculum production for upland crops under rainfed drought prone ecology. Technical Bulletin No- 197. Central Rainfed Upland Rice Research Station, ICAR-National Rice Research Institute, Hazaribag Pg 8
7. Dr. Sudhamoy Mandal deputed to the Krushi Odisha on "Emerging Technologies in Agriculture" organized by Govt of Odisha in Bhubaneswar during February 16-18, 2023.
8. Dr P C Rath, Dr A K Mukherjee and Dr. R L Verma surveyed insect pest of Kendrapada district on 16.10.2023.

Oral Presentation

1. Chattopadhyay K, Bagchi TB, Chakraborty K, Moharana N, Mohapatra SS, Basak N, Behera L, Chakraborti M, Mohanty A, Sarkar S, Adak T, Samatary S, Sharma SG, Mohanty BP and Mohapatra T. 2023. Omics approaches to unravel the clues of differential grain protein content in rice. Presented in 2nd Indian Rice Congress, 11-14th February 2023, ICAR-NRRI, Cuttack.

Background Paper

1. JP Bisen, S Sarkar, B Mondal, A Pradhan, S Priyadarsani, M Chakraborty, T Adak, BC Patra, S Sethi, S Das, B Barad, S Pattanaik, GAK Kumar, and AK Nayak (2023). Background Paper on 4S4R Model for Production, Marketing and Export of Odisha Aromatic Rice (arORIce). *NRRI Background paper,* ICAR-National Rice Research Institute, Cuttack (Odisha), 1-21.

Policy Brief

1. JaiprakashBisen, B. RaghavendraGoud, Biswajit Mondal, SanjoySaha and Amaresh Kumar Nayak (2023). 'Can Rice Facilitate Revival of Mighty Millets?' published by ICAR-National Rice Research Institute, Cuttack 753 006, Odisha