RESUME

NAME: Dr Prasanta Kumar Patra

DESIGNATION: Professor

CONTACTS:

1. OFFICIAL ADDRESS FOR CORRESPONDENCE: Department of Agricultural Chemistry and Soil Science, BCKV

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- 6. GOOGLE SCHOLAR PROFILE: https://scholar.google.com/citations?hl=en&user=Ck5klM8AAAAJ&view_op=list_w orks&authuser=2&gmla=ABOIHiyJVpV-9A2DVMbLG_VZYRs5B6sehVvTzbRP_Lghvw5MSDgkMwqdJzDa_YcC0rcikNtd2 Upk

7.RESEARCHGATE PROFILE: <u>https://www.researchgate.net/profile/Prasanta-Patra-</u>
<u>2</u>

8. DATE OF BIRTH: 29/07/1959

9. DATE OF JOINING TO THE UNIVERSITY: 26/07/1989

10. ACADEMIC PROFILE:

LEVEL	NAMEOFTHEDEGREEWITHDISCIPLINE/DEPARTMENT	INSTITUTE	YEAR OF PASSING
DOCTORAL	Ph D (Soil Science)	Indian Agricultural Research Institute	1987
MASTER'S	M Sc (IARI), Soil Science	Indian Agricultural Research Institute	1982
BACHELOR'S	B Sc (Hons) Agriculture	Bidhan Chandra Krishi Viswavidalaya	1980

• Research work for the Ph D degree was conducted at the International Rice Research Institute, Manila, Philippines under IARI-IRRI Collaborative Program

11. EMPLOYMENT HISTORY: (Starting from present position)

POSITION	ORGANIZATION	PERIOD	
		From (Date)	To (Date)
Professor	Bidhan Chandra Krishi Viswavidalaya	01.01.2010	Continuing



Reader	Bidhan	Chandra	Krishi	01.01.2001	31.12.2009
	Viswavid	lalaya			
Sr. Lecturer	Bidhan	Chandra	Krishi	27.06.1994	31.12.2000
	Viswavid	lalaya			
Lecturer ®	Bidhan	Chandra	Krishi	27.06.1989	26.06.1994
	Viswavidalaya				

12. ADMINISTRATIVE POST(S)/ RESPONSIBILIY(IES) (IF ANY)

SL. NO.	NAME OF THE POST(S)/ RESPONSIBILITY(IES)	PERI	OD
		From (Date)	To (Date)
1	Associate Dean, College of Agriculture, BCKV, Susunia-Chhatna, Bankura; Role: Academic, Administrative		

13. AREA OF RESEARCH: (Bulleted list)

- Soil Chemistry
- Soil Fertility and Plant Nutrition
- Management of organic waste
- Management of industrial waste
- Mitigation of arsenic in water-soil-plant-human continuum
- Mitigation of heavy metals in soil and plant
- Mitigation of fluoride in soil and plant

14. COURSES ASSOCIATED WITH:

LEVEL	COURSE NO.	COURSE TITLE	CREDIT
UNDERGRADUATE	Old Syllabus		
		• Soil Science Advance IV (7 th Term)	2+1
	ACSS-361	• Soil Testing –I (Job Oriented Course) 6 th Term	2+1
	ACSS-404	 Soil Testing –II (Job Oriented Course) 7th Term 	0+1
	ACSS-254	 Manures and Fertilizers (ACSS- 254) 4th Semester 1+1 credits 	1+1
	New Syllabus ACSS 255	 Manures, fertilisers and soil fertility management 	2+1
	ACSS(H) 256 CHEM-111	• Soil, Water and Plant Analysis	2+1 1+1
		Engineering Chemistry	171
POST GRADUATE	Old Syllabus ACSS -553 ACSS - 502	• Physical Chemistry of Soils	2+0 2+1

ACSS-65 ACSS - 3 <u>New Syll</u> SOIL-50 SOIL-50 SOIL-50 SOIL-50	 514 Submerged Soils Fertiliser Technology Soil Fertility and Fertiliser use Radio-isotopes in soil and plant studies Remote sensing and GIS technique for soil and crop studies 	2+1 1+0 2+1 1+1 2+1 1+0
Ph.D. Old Sylla ACSS-65 ACSS-70 ACSS-75 ACSS-75 ACSS-75 New Sylla SOIL-60 SOIL-69 SOIL_69 SOIL_69	 51 Submerged Soils Radio-isotopes in Soil and Plant Studies 52 Remote Sensing and GIS Techniques for Soil and Crop Studies Advances in Soil Physiscs Advances in Soil Physiscs Physical chemistry of soil Doctoral Seminar (ORW) 	2+1 1+1 2+1 2+0 2+0 1+0 1+0 1+0

15. NUMBER OF STUDENTS SUPERVISED:

Master's: 17 Doctoral:11 (Degree Awarded) + 2 (Continuing) =13

16. RESOURCE PERSON FOR OTHER INSTITUTES (involvement in teaching or working as member of academic/ research bodies of other organizations, if any)

- Acted as paper setter for Vidyasagar University, Midnapore
- Acted as paper setter and external examiner for evaluating PhD thesis for Rajendra Agricultural University, Bihar, Pusa (Samastipur)- 848125
- Acted as Examinar in the Selection of teachers in Secondary and higher Secondary Schools under West Bengal School Service Commission, Western Circle
- Acted as paper setter and external examiner for evaluating PhD thesis for Uttarbanga Krishi Viswavidyalaya, Pundibari, Coochbehar, West Bengal
- Acted as a Member of the "Board of Moderators" for Semestral Examination of different courses and external expert member for selection of Research Fellow of Indian Statistical Institute, 203, Barrackpore Trunk Road, Kolkata
- Acted as External examiner for evaluation of M Sc thesis at "The Institute of Agricultural Sciences, University of Calcutta".
- Acted as member of selection committee at CRIJAF, Barrackpore
- Acting as paper setter for Assam Agricultural University, Jorhat, Assam
- Acting as External Examiner for College of Agriculture, Bhawanipatna, under Orissa University of Agriculture and Technology.

- Acting as External Examiner for College of Agriculture, Sabur, under Bihar Agricultural University.
- Acted as External examiner in the Pre-submission thesis seminar, evaluation of Ph D thesis and Pd D thesis viva-voce examination at the Palli Siksha Bhavana (Institute of Agricultural Science) (Sriniketan), Visva-Bharati University, Santiniketan
- Acted as External examiner for evaluation of Ph D thesis at the Banaras Hindu University (BHU), Varanasi, UP.
- Acted as question setter and External examiner for comprehensive examination and evaluation of Ph D thesis at the Odisha University of Agriculture and Technology, Bhubaneswar, Odisha

17. LIFE MEMBERSHIP OF ACADEMIC SOCIETIES

- 1. Crop Science Societies of the Philippines Life Member
- 2. Association of Rice research Workers -
- 3. Indian Society of Soil Science

- Life Member Life Member
- _ 4. Crop and Weed Science Society Life Member _

18. PROJECT ACTIVITIES

SL. NO.	TITLE OF THE PROJECT	FUNDING AGENCY	ONGOING/ COMPLETE D	PI/ Co-PI
01	Influence of Maxgrow Organic Products On Nutrient Transformation in Relation to Yield and Quality of Potato (2006- 2010)	M/S Maxgrow Biotech (P) Ltd, Ludhiana, Punjab.	Completed	PI
02	Effect of concentrated organic manures on nutrient dynamics in soil in relation to growth and yield in rice based cropping system in West Bengal (2009-2012)	M/S Maxgrow Biotech (P) Ltd, Ludhiana, Punjab.	Completed	PI
03	"Screening of Low Arsenic Accumulating Rice Varieties and Hybrids for West Bengal" funded by National Food Security Mission (under Strategic Research Project) (01.07.2015 to 30.09.2017)	Ministry of Agriculture and farmers Welfare, Govt. of India (under NFSM)	Completed	PI
04	"Mitigation of arsenic accumulation in rice through soil and water management" (18.01.2016 to 31.03.2017)	ICAR under Extramural research Projects	Completed	PI
05	Field studies on yellow gypsum from LD slag as a source of plant nutrients in	M/S Tata Steel, Jamshedpur	Completed	PI

	different crops"			
06	Fluoride Contamination of the Food Chain: A pilot Study	Public Health engineering Department, Govt of West Bengal	Completed	PI
07	Field studies on the use of iron ore slime waste on different soil quality parameters influencing nutrient and pollutant concentration in rice plants in the Acid soil of Jharkhand'	Jamshedpur	Completed	PI
01		and Associated Scient KRIBP (E) on		Co-PI
VI	Ad-hoc Project on "Farmers' Participatory Research for Increased Pulse Production at the Regional Research Station, Red and Laterite Zone of West Bengal", 1999 – 2003.	KRIBP (E) on Rainfed Agriculture	Completed	0-11
02	NATP on "Improving the Traditional Biasi System of Rainfed Rice Farming (RRPS-21)", 2000 – Sept. 2003	ICAR under NATP	Completed	Co-PI
03	NAIP (Component-3) on "Sustainable Farming System to Enhance Livelihood Security of Poor in Purulia, Bankura and West Midnapore Districts of West Bengal"	ICAR under NAIP (Component-3)	Completed	Co-PI
04	AgroecosystemRestoration to CombatClimateChangeinSouth24ParganasDistrict of West Bengal.A Project for ImprovingLivelihoodinRuralWest Bengal	UnderRashtriyaKrishiVikasYojana(RKVY)inNationalAgricultureDevelopmentProgramme(NADP)Govt. ofIndia	Completed	Co-PI
05	"Bio-efficacy of crystal phosphates herbicides"	M/S Crystal Phosphates Ltd., GI-17, Industrial Area, G. T. Karnal	Completed	Co-PI

		Road, Azadpur, Delhi-110033		
06	"Arsenic in Food-Chain: Cause, Effect and Mitigation"	ICAR under National Agricultural Innovation Project (NATP)	Completed	Co-PI
07	Adhoc Research Project on, "Improvement of productivity of land through diversity and activity of soil organisms in various agro ecosystem of the System of Rice Intensification (SRI) in West Bengal"	Sir Dorabji Tata Trust, Mumbai	Completed	Co-PI
08	Testing of efficacy of compost prepared from bio-waste collected in BASF <i>Eco-vio</i> certified compostable waste bags in different crops	The Capital 1204-C, 12 th Floor, Plot No. C-70 G Block,	Completed	Со-РІ

19. CAPACITY BUILDING/FACULTY DEVELOPMENT PROGRAMME A. ORGANIZED

SL. NO.	NAME PROGRAM	OF ME	THE	DURATION	PLACE	ROLE

B. ATTENDED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
	Training Program for District Resource Persons on Watershed Development Programme of Midnapore District held at during	5 days (Sept. 10 – 14, 1998)	Planning and Development Society, Barua, Midnapore, West Bengal, India,	Resource Person
2	Soil and Water Management in Indo- Gangetic Plains	21 day Summer training Course (Aug. 8 – 28, 2003)	Punjab Agricultural University, Ludhiana, Punjab, India	Trainee
3	Remote Sensing and GIS for Natural	Feb. 28 to	NNRMS	Trainee

4	Resource Management Soil, Water and Nutrient Management for Different Crops Under Rainfed Agro-ecosystem	March 12, 2005 21-day summer training Course (Aug.23 – Sept. 12, 2005)	(National Natural Resource Management System) Training Program at RRSSC of ISRO, at IIT Campus, Kharagpur, Midnapore, West Bengal, India Birsa Agricultural University, Ranchi, Jharkhand, India	Trainee
5	"Data analysis using SAS" of the NAIP Consortium "Strengthening Statistical Computing for NARS"	One week training Program (February,13 –18, 2012)	Funded by National Agricultural Innovation Project held at Bidhan Chandra Krishi Viswavidyalaya, Kalyani, West Bengal	Trainee

20. SEMINAR/ SYMPOSIUM/ WORKSHOP etc A. ORGANIZED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE

B. ATTENDED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
Α	International: 6			
1	International Symposium on "Sulphur in Indian Agriculture" Organised by The Sulphur Institute, U.S.A. and The Fertiliser Association of India, New Delhi	March 9 – 11, 1998	New Delhi.	Attended
2	International Conference on "Soil, water and environmental quality – issues and strategies"	28.01.2005 to 01.02.2005	I.A.R.I., New Delhi, India	Attended and presented a paper
3	The 8th International Symposium on	December 16	B.C.K.V.,	Attended

	"Water crisis, impact of toxics, global warming and sea level rise in Bengal Basin"	– 18, 2005	Mohanpur, Nadia, West Bengal, India	and presented a paper
4	International Symposium on "System Intensification towards food & environmental security"	February 24- 27, 2011	B.C.K.V., Mohanpur, Nadia, West Bengal, India.	Attended and presented a paper
5	International Workshop on "Arsenic in food chain: cause, effect and mitigation"	20.02.2012	Regional Occupational Health Centre (ROHCE), Kolkata, India	Attended and presented a paper
6	International Seminar on Integrating Agriculture & Allied Research: Prioritizing Future Potentials for Secure Livelihoods (ISIAAR)	November, 6- 9, 2014	Centre for Human Resource Development (FTC- Lake Hall), Kalyani, BCKV, Nadia, West Bengal. India.	Attended and presented a paper
	National: 28			
1	The 2 nd Annual Meeting of the Federation of Crop Science Societies of the Philippines	April 30 – May2, 1986	Banguet State University, Mount Province, Philippines,	Attended and presented a paper
2	The 3 rd Annual Meeting of the Federation of Crop Science Societies of the Philippines	April 28 –30, 1987	University of the Philippines, Los Banos, Laguna, Philippines	Attended and presented a paper
3	FAI (NR) – PPCL Seminar on "Importance of P-Fertilisers With Special Reference to Oil Seeds and Pulses in Northern India"	June 21 – 22, 1988	Lucknow, U.P., India	Attended and presented a paper
4	FAI Seminar on "Towards Self Reliance in Fertiliser Sector"	December 8 – 10, 1988	New Delhi, India	Attended
5	National Seminar on "Plant Physiology Research Imperatives for the Nineties"	January, 1989	C.S.Azad University of Agriculture and Technology, Kanpur, U. P., India.	Attended
6	National Seminar on "The Role of Soil and Water Conversation in Modern Agriculture"	February 23 – 24, 1990	B.C.K.V., Mohanpur, Nadia, West Bengal, India	Attended and presented a paper
7	Workshop for the " ICAR Net Work Project on Acid Soils"	December13 – 14 , 2002	B.C.K.V., Kalyani, Nadia,	

			West Bengal, India	
8	National Symposium on "Crop Production Under Changing Environment"	Nov., 27 – 29, 2003.	Organised by the Agricultural Society of India at B.C.K.V., Mohanpur, Nadia, Wet Bengal, India	Attended and presented a paper
9	AwarenessProgrammeon"ApplicationofRadio-isotopesandRadiationTechnologyforHumanWelfare"(ARRTH – 2005)	Feb. 7 – 8, 2005	Science City, Kolkata, West Bengal, India,	Attended and presented a paper
10	The 71 st Annual Convention of the Indian Society of Soil Science and national seminar on "Developments in Soil science"	November, 10-13, 2006	Orissa University of Agriculture and Technology, Bhubaneswar, Orissa.	Attended and presented a paper
11	National Seminar on "Technology options on organic inputs for sustaining soil health in Indian Agriculture"	November, 25-27, 2006	Palli Siksha Bhavana, Biswa- Bharati, Sriniketan 731236.	Attended and presented a paper
12	The 15 th Annual convention and National Seminar on "Clay Research in relation to Agriculture, Environment and Industry"	Dec 1-2, 2006	Organized by thr Clay Mineral Society of India and department of Agril. Chemistry and Soil Science, B C K V, Mohanpur, Nadia, west Bengal	Attended and presented a paper
13	Agromax - 2007: The CII- Yi national Agri-business Conference on the theme area "Specialized Agricultural. Technology : Growing farmers' Wealth"	31.08.2007	Hyderabad, Andhra Pradesh.	Attended and presented a paper
14	Agromax - 2009: The CII- Yi national Agri-business Conference on the theme area "A dialogue on building Indian Good Agricultural Practices Towards an INDO-GAP "	06. 10. 2009	Guwahati, Assam.	Attended and presented a paper
15	The 42 nd Annual Convention of Indian Society of Agricultural Chemists and National Symposium on Maintenance of Soil Health and Food Security held	November, 27-28, 2009	Bidhan Chandra Krishi Viswavidyalaya, Mohanpur-741252, Nadia, West Bengal	Attended and presented a paper
16	The Platinum Jubilee Symposium on "Soil Science in Meeting the Challenges to Food Security and Environmental Quality"	December, 22-25, 2009	Organized by the Indian Society of Soil Science at the Indian	Attended and presented a paper

17	State Symposium – 2010 on "S. R. I. (Systm of Rice Intensification)" organized by Banglar SRI in collaboration with Bidhan Chandra Krishi Viswavidyalaya and Directorate of Rice Development (DRD), Patna,	12 th April, 2010	Agricultural Research Institute, New Delhi-110012. State Youth Centre, Moulali Yuva Kendra, 142/3, A. J. C. Bose Road, Kolkata	Attended and presented a paper
18	National Seminar on "Emerging challenges and steps for mitigation of productivity constraints in food legumes"	November 20, 2010	Farmers' Training Centre, B C K V, Kalyani.	Attended
19	Seventeenth Annual Convention and "National Symposium" on "Application of Clay Science in Agriculture, Environment and Industry" organized by the Clay Minerals Society of India	April, 27-28, 2012	The National Bureau of Soil Survey and Land Use Planning, Salt lake, Kolkata.	Attended
20	Seminar on "Road map to food security through balanced and integrated use of nutrients"	September, 22, 2012	Kolkata on the occasion of the celebration of Golden Jubilee Year (1962-2012) of the FAI Journal Saar Samachar.	Attended
21	The 77 th Annual Convention of the Indian Society of Soil Science and national seminar on "Developments in Soil science"	December, 3- 6, 2012	Punjab Agricultural University, Ludhiana, Punjab	Attended and presented a paper
22	National Symposium on "In Quest of a Second Green Revolution"	February 26- 28, 2013	the Institute of Agricultural Science, University of Calcutta, 35- Ballygunge Circular Road, Kolkata-700019.	Attended and presented a paper
23	The 9 th Annual Conference of the Crop and Weed Science Society (CWSS) and Workshop on "Second Green revolution"	30 th September, 2013.	F T C, Bidhan Chandra Krishi Viswavidyalaya, Kalyani, Nadia, West Bengal	Attended
24	Kharif workshop of the Adhoc Project sponsored by Sir Dorabji Tata Trust and Allied Trusts (SDTT) on, "Improvement of productivity of land through diversity and activity of soil organisms in various agro	on October, 01, 2013.	BCKV	Attended

	ecosystem of the System of Rice			
	Intensification (SRI) in West Bengal"			
25	One Day Seminar on "Soil Management Options for Integrated Farming towards Better Livelihood Security"	28th January, 2014	Indian Society of Soil Science (ISSS), Kolkata Chapter at NBSS & LUP (ICAR), Regional Centre, Block-DK, Sector- II, Salt Lake, Kolkata – 700 091.	Attended
26	A one day seminar on "Need for Reforms in Fertiliser Policy for Sustaining soil health and Balanced Fertilization	9 th Jan 2015	FAI – Eastern Region at Zonal Project Directorate, ICAR Complex, Salt Lake City	Attended
27	"The 12 th Agricultural Science Congress on Sustainable Livelihood Security for Smallholder Farmers"	during February, 3- 6, 2015	National Academy of Agricultural Science (NAAS), New Delhi, at the I C A R National Dairy Research Institute (NDRI), Karnal, Haryana	Attended
28	National Symposium on "Food and Nutrition: Need for the Future" organized by held between at	25 th to 27 th February, 2015	The Institute of Agricultural Science, University of Calcutta, 51/2, Hazra Road, Kolkata – 700019.	Presented a paper

21. PATENTS/ HONOURS/ AWARDS/ RECOGNITION (Bulleted list):

Under the provisions of PATENTS ACT, 1970 and PATENT RULES, 1972, A patent vide No 201831006964 dated 23.02.2018 entitled **"AN IMPROVED FERTILIZER FOR AUGMENTING SOIL QUALITY AND CROP PRODUCTIVITY FOR LIGHT TEXTURE ACIDIC SOIL**" in the name of TATA STEEL LIMITED of Bistupur, Jamshedpur-831001, India, an Indian Company and Inventorship of PRASHANT DIXIT of Bistupur, Jamshedpur- 831001, India, an Indian citizen, ASIM KUMAR MUKHERJEE of Bistupur, Jamshedpur-831001, India, an Indian citizen, PRASANTA PATRA of Bidhan Chandra Krishi Viswavidyalaya, Nadia, West Bengal, India, an Indian citizen has been filed.

22. INTERNATIONAL COLLABORATIONS/ INVOLVEMENT, IF ANY (Bulleted list):

23. PUBLICATIONS

A. BOOKS
1. Objective-Fundamentals of Soil Science
Authors: Arbind Kumar Gupta; Prasanta Kumar Patra; Atik Ahamad; Deo Kumar and Rubina Khanam
Publisher: Kalyani Publisher: New Delhi
Year of Publication:2019
ISBN 13: 9789388778299; ISBN 10: 9388778294

B. BOOK CHAPTERS (Best 10)

- Patra, P.K., Hembram, S., Acharjee, P.U., Pal, S., Sarkar, S. (2024). Use of Arsenic-Rich Groundwater in Irrigation-Adverse Effects on Food Chain. In: Sinha Ray, S., Acharyya, A. (eds) Ground Water Contamination in India . Springer, Cham. https://doi.org/10.1007/978-3-031-49092-7_15
- Shreya Das, Debashis Ghosh, Pravat Utpal Acharjee and Prasanta Kumar Patra (2021). Agricultural and Environmental Value of Steel Industry By-Products In book: Latest Trends in Soil Science. Published By: Integrated Publications, Integrated Publications H. No. 3 Pocket H34, Sector 3, Rohini, Delhi-110085, India; Chief Editor: Dr. Sukul Singh Porte ISBN: 978-93-90471-64-5 Book DOI: https://doi.org/10.22271/int.book.57
- Ravinder Juttu, Kamalakar Jogula, Subhashree Priyadarshini, Sharan Bhoopal Reddy, Prasanta Kumar Patra, Bairi Raju, J.D. Saritha, Princy Thakur, S. Rakesh, Jogarao Poiba, A. Krishna Chaitanya and Kiran Pilli (2021). Strategies and Programs for Improved Nutrient Use Efficiency, Doubling Farmer's Income, and Sustainable Agriculture: Indian Context. DOI: <u>http://dx.doi.org/10.5772/intechopen.98267</u>. In book: Technology in Agriculture. in Web of Science[™] Core Collection (BKCI)

C. RESEARCH PAPERS (Best 10)

Published:80 Presented:75

Title	Citation	Year
<u>Deficit irrigation: An option to mitigate arsenic load of rice grain in</u> <u>West Bengal, India</u> S Sarkar, B Basu, CK Kundu, PK Patra Agriculture, ecosystems & environment 146 (1), 147-152	<u>78</u>	2012
Safe limit of arsenic in soil in relation to dietary exposure of arsenicosis patients from Malda district, West Bengal-A case study D Golui, DNG Mazumder, SK Sanyal, SP Datta, P Ray, PK Patra, S Sarkar, Ecotoxicology and environmental safety 144, 227-235	<u>63</u>	2017
Potential of indigenous plant species for phytoremediation of arsenic contaminated water and soil S Singh, J Karwadiya, S Srivastava, PK Patra, VP Venugopalan Ecological Engineering 175, 106476	<u>36</u>	2022
<u>Effect of different levels of boron and molybdenum on growth and yield of mung bean [Vigna radiata (L.) Wilczek (cv. Baisakhi Mung)] in Red</u>	<u>31</u>	2009

and Late	erite Zone of West Bengal
DK Datra	C Phattachania

PK Patra, C Bhattacharya Journal of Crop and Weed 5 (1), 111-114

Short-Term Carbon Sequestration and Changes of Soil Organic Carbon Pools in Rice under Integrated Nutrient Management in India * Mousumi Ghosh, Waqar Ashiq, Hitesh kumar Bhogilal Vasava, Duminda N 	<u>27</u>	2021
Agriculture 11 (4), 348		
Influence of Organic Manure and Lime on Cadmium Mobility in Soil and Uptake by Spinach (<i>Spinacia oleracea</i> L.) T Kumarpandit, S Kumarnaik, PK Patra, N Dey, PK Patra, DK Das Communications in soil science and plant analysis 48 (4), 357-369	<u>22</u>	2017
Distribution of Different Forms of Phosphorus in Surface Soils of Rice Growing Areas of Red and Laterite Zone of West Bengal Lungmuana, SK Ghosh, PK Patra Journal of the Indian Society of Soil Science 60 (3), 204-207	<u>20</u>	2012
Influence of lime and organic matter on the mobility of cadmium in cadmium contaminated soil in relation to nutrition of spinach TK Pandit, SK Naik, PK Patra, DK Das Soil and Sediment Contamination: An International Journal 21 (04), 419-433	<u>17</u>	2012
Application of highly efficient lignocellulolytic fungi in cocomposting of paddy straw amended poultry droppings for the production of humus rich compost N Saha, D Mukherjee, S Sen, A Sarkar, KK Bhattacharaya, Compost science & utilization 20 (4), 239-244	<u>10</u>	2012
Effect of limited irrigation on growth and yield of rice varieties in a typic Haplustalf soil of Red and Laterite zone of West Bengal M Ghosh, PK Patra, C Bhattacharyya Journal of Crop and Weed 10 (1), 42-47	<u>8</u>	2014

matri

03.05.2024

Signature with Date