

## Book Chapters

- Bhattacharya P, Somasundaram J, Sinha NK, Mohanty M and Chaudhary RS (2015). Rothmsted carbon (Roth C) model and its application in agriculture. In crop growth simulation modelling and climate change (Eds Mohanty et al.) Pp 244-263 Scientific publisher, Jodhpur, ISBN:978-81-7233-941-8.
- Chauhan A, Shirkot CK, Kaushal R and Rao DLN (2015). Plant Growth Promoting Rhizobacteria of Medicinal Plants in NW Himalayas: Current Status and Future Prospects. In: Plant-Growth-Promoting Rhizobacteria (PGPR) and Medicinal Plants Eds. D. Egamberdieva, S. Shrivastava and A. Verma, Springer, Berlin, pp 381-412.
- Elanchezhian R (2015). Biophysical impacts and priorities for adaptation of agricultural crops in a changing climate. In: Mohanty M, Sinha NK, Hati KM, Chaudhary RS, Patra AK Eds. Crop Growth Simulation Modeling and Climate Change, pp 44-52; published by Scientific Publishers (India), Jodhpur (ISBN: 978-81-7233-941-8).
- Hati KM, Mohanty M and Chaudhary RS (2015). Climate change projections – India's perspective. In: Crop Growth Simulation Modelling and Climate Change. Eds: Mohanty M Sinha, NK, Hati, KM, Chaudhary RS and Patra, AK Scientific Publishers, Jodhpur, Rajasthan, Pp. 53-68.
- Hati KM, Somasundaram J, Saha R, and Mohanty M (2015). Conservation agriculture: A strategy to cope with climate change. In: Crop Growth Simulation Modelling and Climate Change. Eds: Mohanty M, Sinha NK, Hati KM, Chaudhary RS and Patra AK Scientific Publishers, Jodhpur, Rajasthan, Pp. 186- 195.
- Kumar N, Sinha NK and Mohanty M (2015). Integrating remote sensing data in crop process models. In crop growth simulation modelling and climate change (Eds Mohanty et al.) Pp 212-221 Scientific publisher, Jodhpur, ISBN:978-81-7233-941-8.
- Lenka S, Lenka NK, Sejian V, Mohanty M (2015). In: Climate Change impact on livestock: adaptation and mitigation. Springer publication, pp 37-48.
- Lenka S, Lenka NK, Sejian Veerasamy, Mohanty (2015). Contribution of Agriculture Sector to Climate Change. In. Climate Change Impact on Livestock: Adaptation and mitigation. Sejian, V. Gaughan, J. Baumgard, L. Prasad, C. (Eds.). Springer India publisher, 2015, pp-37-48 (DOI 10.1007/978-81-322- 2265-1).
- Manna M C, Singh M, Wanjari R H, Mandal A and Patra AK (2015). Soil Nutrient Management for Carbon Sequestration. In: Encyclopedia of Soil Science. 3rd Edition Volume 3. Edited by Rattan Lal. Pp 1-6 (In press)
- Manna MC, Mandal B, Ghosh PK, Patra AK and Sahu A (2016). Enhancing Carbon Sequestration Potential through Nutrient Management. In: Soil management for regulating carbon pools: Perspective in tropical and subtropical soils. Ghosh et al. (Eds). (in press).
- Manna MC, Sahu A and Patra AK (2016). Exploring soil organisms for SOC storage. In: Soil management for regulating carbon pools: Perspective in tropical and subtropical soils. Ghosh

et al. (Eds). (in press).

- Manna MC, Sahu A, Patra AK and Khanna SS (2016). Significance of microbes for humification process. In: *Microbes for Plant Stress Management and Restoration of Degraded Land*. DJ Bagyaraj (Eds). Published by Scientific Publishers, Jodhpur, India. (in press).
- McDermid SP, Mohanty M, et al., (2015). The AgMIP Coordinated Climate Crop Modeling Project (C3MP): Methods and Protocols. *Handbook of Climate Change and Agroecosystems. The Agricultural Model Intercomparison and Improvement Project (AgMIP) Integrated Crop and Economic Assessments*. (Edited by Daniel Hillel and Cynthia Rosenzweig). American Society of Agronomy, Crop Science *Society of America*, and *Soil Science Society of America*. Volume 3, 191-222.
- Mohanty M, Sinha NK and Patra AK (2015). Crop growth simulation models in agricultural crop production. In *crop growth simulation modelling and climate change* (Eds Mohanty et al.) Pp 1-27 Scientific publisher, Jodhpur, ISBN:978-81-7233-941-8.
- Mohanty M, Sinha NK, Chaudhary RS and Patra AK (2015). Crop simulation modelling for climate risk assessment: Adaptation and mitigation measures and rules of simulations. In *crop growth simulation modelling and climate change* (Eds Mohanty et al.) Pp 244-263 ISBN:978-81-7233-941-8.
- Mohanty M, Sinha NK, Lenka S, KM Hati, Somasundaram J, Saha R, Singh RK, RS Chaudhary, Rao AS (2015). Climate Change Impacts on Rainfed Soybean yield of Central India: Management Strategies through Simulation Modelling. In. *Climate Change Modelling, Planning and Policy for Agriculture*. Singh, A.K., Dagar, J.C., Arunachalam, A. RG, Shelat KM (eds.). Springer India publisher, 2015 pp: 39-34 (DOI 10.1007/978-81-322-2157-9\_5).
- Mohanty M, Sinha NK, Patidar Rohit and Patra AK (2015). Crop growth simulation models in agricultural crop production. In *crop growth simulation modelling and climate change* (Eds Mohanty et al.) Pp 28- 43 Scientific publisher, Jodhpur, ISBN:978-81-7233-941-8.
- Patra AK, Adhikari T, and Bhardwaj AK (2016). Enhancing crop productivity in salt-affected environments by Stimulating soil biological processes and remediation using Nanotechnology in Jagdish Dagar et al. (eds) *Innovative Saline Agriculture*, Springer Interanationa (In press)
- Patra AK, Ganeshamurthy AN, Srivastava S (2015). Successful Models of Soil Management. In. *State of Indian Agriculture Soil* (Eds. H Pathak SK Sanyal PN Takkar). National academy of agricultural sciences, new delhi, 2015, pp 310-321.
- Rao AS, Lakaria BL and Jha P (2015). Management of Soil Fertility: Macronutrients. In: *State of Indian Agriculture* (eds. H Pathak, SK Sanyal and PN Takkar). National Academy of Agricultural Sciences, New Delhi, India, pp 100-120.
- Rao AS, Lakaria BL and Jha P (2015). Management of Soil Fertility: Macronutrients in (eds. Pathak H, Sanyal, SK and Takkar, PN) *State of Indian Agriculture-Soil*. NAAS, New Delhi, India XIII+392.
- Rao Srinivasa Ch, Lal R, Rao DLN, Sahrawat KL, Gupta Raj K, Balloli S and Srinivas K (2015). *Technology Frontiers for Soil Management*. In: *State of Indian Agriculture: Soil*. Eds H.

- Pathak, S.K. Sanyal and P.N. Takkar. NAAS, New Delhi. pp 294-309.
- Singh A B, Ramesh K, Lakaria BL, Ramana S and J K Thakur (2016). Technologies and strategies for Organic Farming in Madhya Pradesh. In: Organic Farming: Technologies and Strategies Book (Eds. B Gangwar and N K Jat, Today and Tomorrows Printers & Publishers, New Delhi), pp 193-211.
- Singh UB, Sahu A, Renu, Singh DP, Sahu N, Manna MC, Sharma BK, Singh HB, Prasad SR and Sharma AK (2015). Microbial Diversity and biodegradation organic pollutants and heavy metals from rhizosphere ecosystems: A mechanistic approach. In: Microbial Biodiversity: A boon for agriculture sustainability (Asha Sinha et al., Eds), Biotech Books, New Delhi.pp 23-58.
- Singh UB, Sahu A, Sahu N, Renu, Wasiullah, Malviya D, Singh BP, Imran, Pallavi, Kaur S, Singh A, Dixit R, Karthikeyan, Pandiyan K, Nagrale DT, Sharma PK, Rai JP, Manna MC, Sharma AK (2015). Biological control of plant parasitic nematodes: Recent perspectives. In: Microbial Empowerment in Agriculture: A Key to Sustainability and Crop Productivity. BK Sarma and A Singh (Eds). Published by Biotech Books, New Delhi. pp 173-226.
- Sinha NK, Mohanty M, Gupta S, Tiwari PK, Meena BP and Patidar R (2015). Crop growth simulation models in agricultural crop production. In crop growth simulation modelling and climate change (Eds Mohanty et al.) Pp 196-211 Scientific publisher, Jodhpur, ISBN:978-81-7233-941-8.
- Somasundaram J, Hati KM, Chaudhary RS, Jha P, Biswas AK, Rao AS and Patra AK (2015). Conservation Agriculture for Carbon Sequestration and Sustaining Soil Health in Rainfed Region of Central India. In: Advances in Soil and Water Resource Management for Food and Livelihood Security in Changing Climate Eds: Suraj Bhan and Sanjay Arora. Soil Conservation Society of India, NASC Complex, Pusa, New Delhi, pp. 468-478.
- Somasundaram J, Hati KM, Chaudhary RS, Jha P, Biswas AK, Rao AS and Patra AK (2015). Conservation Agriculture for carbon sequestration and sustaining soil health in rainfed region of central India. In: Advances in soil and water resource management for food and livelihood security in changing climate Eds. Suraj Bhan and Sanjay Arora. Soil Conservation Society of India, NASC Complex, Pusa, New Delhi, pp.468-478.
- Trimurtulu N and Rao DLN (2015). Efficacy of Carrier-based and Liquid Microbial Inoculants on Field Crops in Tropical Soils. In: Plant Microbe Interactions. Eds. K Ramasamy and K. Kumar, New India Publishing Agency, New Delhi, pp 419-447.

## Technical Bulletins

- एम.सी.मन्ना, आशा साहू, ए.के.त्रिपाठी, ए.के.पात्र, एस.एस.खन्ना, एस.के.चौधरी और ए.के.सिक्का (2015) त्वरित कम्पोस्ट तकनीक : मृदा में जैविक कार्बन, उत्पादकता की क्षमता में वृद्धिकी प्रक्रिया, Published by ICAR-IISS, Bhopal.
- Mandal A, Thakur JK, Sahu A, Manna MC, and Patra AK (2015). Bioremediation: A green approach for cleaning up of contaminated sites. Scientific Bulletin: 1 IISS/2015.
- Manna MC, Sahu Asha, Patra AK, Khanna SS, Chaudhari SK, Sikka AK (2015). Rapid composting technique: ways to enhance soil organic carbon, productivity and soil health. Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal.
- Manna MC, Singh AB, Tripathi AK and Patra AK (2015). Winter School on Manual on “Waste Recycling and resource management through rapid composting techniques” (Manna et al., Eds.) Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal.pp.1-507.
- Manna MC, Singh M, Wanjari RH, Mandal A and Patra AK (2016). Soil nutrient management for carbon sequestration. Encyclopedia Soil Sci. (USA) (in press).
- Mohanty M, Singh NK, Hati KM, Chaudhary RS and Patra AK (2015). Crop growth simulation modelling and climate change, scientific publishers, Jodhpur, Rajasthan. Pp.331.
- Patra AK, Srivastava S, Lakaria BL, Vishwakarma AK, Dotania ML, Sahu Asha, Shinogi KC (2015). Annual Report 2014-15, ICAR-Indian Institute of Soil Science, Bhopal, M.P., p. 257.
- Phalke DH, Patil SR, Manna MC, Pharande AL, Durguda AG, Nimbalkar CA, Kolekar PT and Solanke AV (2015). Insitu recycling techniques of sugarcane crop residues and sugar industrial waste for better productivity and soil health. (Phalke DH et al Eds.), MPKV, Rahuri.pp1-29.
- Ram S, Singh M, Wanjari RH, Sirari P, Pant PK and Patra AK (2016) Impact of long term fertilizer application on crop productivity, Grain and soil quality under rice-wheat system on mollisols in northern India.p.1- 47.
- Shri Ram, Singh M, Wanjari RH, Sirari P, Pant P K and Patra AK (2016). Impact of Long Term Fertilizer Application on Crop Productivity, Grain and Soil Quality under Rice-Wheat System on Mollisols in Northern India. p. 1-47.
- Srivastava S, Shinogi KC, Das H, Sharma Pankaj, Rashmi I, Radha TK, and Patra Ashok K (2015). टिकाऊ मृदा स्वास्थ्य और फसलोत्पादन बढ़ोत्तरी के लिए किसान अनुकूल प्रौद्योगिकियों के विकल्प ITMU-IISS Publication, p.6.

Tripathi AK, Ramana S, Manna MC, Singh AB and Patra AK (2015). In Glossary of Soil Science (English to Hindi), Tripathi, A.K. et al., (Eds.) IISS, Bhopal. Pp.1-235.

Srivastava Sanjay, Shinogi KC, Das Hiranmoy, Yadav BS, Rashmi I, Radha TK, and Patra AK (2015). Tikavu Mrudga Swasth aur Phasalolpadan Badothari ke liye Kisan Anukool Proudhogikiyom ke Vikalp. ITMU-IISS Publication, p.6