

## ***Brief Resume of Dr. K.G. Mandal***

**Dr. Krishna Gopal Mandal, M.Sc. (Ag.), Ph.D., Post-Doc;**  
*FNABS, FISA, FAScT, MNASc*

### **Director**

**ICAR-Mahatma Gandhi Integrated Farming Research Institute (MGIFRI)**, Piprakothi- 845429, Motihari, East Champaran, Bihar  
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**Born:** West Bengal, India; **Category:** General

### ***Research Specialization***

Agronomy- soil & nutrient management, bioenergetics in crop production, agricultural water management, conservation farming, soil organic carbon in cropping systems, irrigation agronomy, agroclimatology, integrated farming system, extension agronomy and training.

### ***Academic Background***

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| 1987-1991 | B.Sc. (Ag.) Hons. 1 <sup>st</sup> Class First, Visva-Bharati, Gold Medal Award, Memorial Awards, the then Hon'ble Prime Minister's invitation on the Republic Day 1992 at New Delhi |
| 1991-1993 | M.Sc. (Ag.) in Agronomy, 1 <sup>st</sup> Class First, Visva-Bharati, Faculty Topper & Certificate of Merit, Memorial Award  |
| 1994-1998 | Ph.D. (Ag.) Agronomy, OGPA 4/4, Bidhan Chandra Krishi Viswavidyalaya, West Bengal   |

### ***Professional Service Experience***

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|-------------|---------------------|---|
| 1998-2002   | Scientist           | ICAR- Indian Institute of Soil Science, Bhopal  |
| 2002-2007   | Scientist-SS        | ICAR- Indian Institute of Soil Science, Bhopal  |
| 2005-2006   | Scientist-SS        | Post-Doctoral Studies on Agronomy, China Agricultural University (CAU), Beijing, P.R. China |
| 2007-2010   | Sr Scientist        | ICAR- Indian Inst. of Water Management, Bhubaneswar   |
| 2010-2013   | Sr Scientist PB4    | ICAR- Indian Inst. of Water Management, Bhubaneswar   |
| 2013-2021   | Principal Scientist | ICAR- Indian Inst. of Water Management, Bhubaneswar   |
| 2021-contd. | Director            | ICAR- Mahatma Gandhi Integrated Farming Research Institute (MGIFRI), Motihari, Bihar        |

### ***Awards, Honours & Recognitions***

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| 2018 | Fellow, National Academy of Biological Sciences (NABS), Chennai  |
| 2016 | Fellow, Indian Society of Agronomy (ISA), New Delhi  |
| 2016 | Fellow, West Bengal Academy of Science and Technology (WAST), Kolkata  |
| 2017 | Member, The National Academy of Sciences, India (NASI)   |
| 2005 | Chinese Govt. Fellowship 2005-16 by MoHRD, Govt. of India and China Scholarship Council (CSC), Govt. of P.R. China |
| 2003 | Senior Research Fellowship, ICRISAT, Patancheru, India   |
| 2006 | Doreen Mashler Award of ICRISAT, Patancheru, India   |
| 2016 | Outstanding Researcher Award- Agril. Sci., Aufau International, CSRL, Research AP                                  |

2018	BKJF-INCSW Sookshma Sinchai Puraskar, CWC, MoWR, GoI & Jain Irrig, Jalgaon
2019	Dr. K.G. Tejwani Award (Biennium 2016-17), IASWC, ICAR-IISWC, Dehradun
2019	K.C. Das Memorial Award, The Institution of Engineers, Odisha State, Bhubaneswar
2012	ICAR-DWM (presently IIWM) Scientist Proficiency Award, ICAR-IIWM, Bhubaneswar
2018	Outstanding Reviewer Certificate by Field Crops Research (Elsevier)
2016-contd	Associate Editor, Agronomy Journal, American Soc. of Agronomy, USA
2016-2021	Editor, Indian Journal of Agronomy, Indian Soc. of Agronomy, New Delhi
2012-contd	Editor, Journal of Food Agriculture and Environment, WFL, Finland
2012-14	Elected Member (twice), Agriculture & Forestry Science Section, ISCA, Kolkata
2014-16	Sectional Recorder, Agriculture & Forestry Science Section, ISCA, Kolkata
2021	Certificate of Honour, Indian Society of Agronomy (ISA), New Delhi

### **Publications**

Total 220: Research papers 95 (International 39, National 46), Research Reviews 12, Books/ Book Chapters 15, Bulletins 04, Training Manual 11, Popular scientific articles 13, Conference Proceedings 81

*Google Scholar Citations:* Total citations 3598, H-index 27, i10 index 53

### **Best-20 Publications**

1. **Mandal, K.G.**, Saha, K.P., Ghosh, P.K., Hati, K.M. and Bandyopadhyay, K.K. 2002. Bioenergy and economic analysis of soybean-based crop production systems in central India. *Biomass and Bioenergy*, 23 (5): 337-345.
2. Bandyopadhyay, K.K., Mohanty, M., Painuli, D.K., Misra, A.K., Hati, K.M., **Mandal, K.G.**, Ghosh, P.K., Chaudhary, R.S and Acharya, C.L. 2003. Influence of tillage practices and nutrient management on crack parameters in a Vertisol of central India. *Soil and Tillage Research*, 71 (2): 133-142.
3. **Mandal, K.G.** and Sinha, A.C. 2004. Nutrient management effects on light interception, photosynthesis, growth, dry-matter production and yield of Indian mustard (*Brassica juncea*). *Journal of Agronomy and Crop Science*, 190 (2): 119-129.
4. **Mandal, K.G.**, Hati, K.M., Misra, A.K., Bandyopadhyay, K.K. and Mohanty, M. 2005. Irrigation and nutrient effects on growth and water-yield relationship of wheat (*Triticum aestivum* L.) in central India. *Journal of Agronomy and Crop Science*, 191 (6): 416-425.
5. **Mandal, K.G.**, Saha, K.P., Hati, K. M., Singh, V.V., Misra, A.K., Ghosh, P.K. and Bandyopadhyay, K. K. 2005. Cropping systems of central India: an energy and economic analysis. *Journal of Sustainable Agriculture* (currently *Agroecology and Sustainable Food Systems*), 25 (3): 117-140.
6. **Mandal, K.G.**, Hati, K.M., Misra, A.K., Bandyopadhyay, K.K. and Mohanty, M. 2006. Assessment of irrigation and nutrient effects on growth, yield and water use efficiency of Indian mustard (*Brassica juncea*) in central India. *Agricultural Water Management*, 85: 279-286.
7. Hati, K.M., **Mandal, K.G.**, Misra, A.K. Ghosh, P.K., Bandyopadhyay, K.K., and Acharya, C.L. 2006. Effect of inorganic fertilizer and farmyard manure on soil physical properties, root distribution, water-use efficiency and seed yield of soybean in Vertisols of central India. *Bioresource Technology*, 97: 2182-2188.

8. Ghosh, P.K., Ajay, Bandyopadhyay, K.K., Manna, M.C., **Mandal, K.G.**, Misra, A.K. and Hati, K.M. 2004. Comparative effectiveness of cattle manure, poultry manure, phosphocompost and fertilizer-NPK on three cropping systems in vertisols of semi-arid Tropics. II. Dry matter yield, nodulation, chlorophyll content and enzyme activity. *Bioresource Technology*, 95 (3): 85-93.
9. **Mandal, K.G.**, Hati, K.M., Misra, A.K. 2009. Biomass yield and energy analysis of soybean production in relation to fertilizer-NPK and organic manure. *Biomass and Bioenergy*, 33 (12): 1670-1679.
10. **Mandal, K.G.**, Hati, K.M., Misra, A.K., Bandyopadhyay, K.K. 2010. Root biomass, crop response and water-yield relationship of mustard (*Brassica juncea* L.) grown under combinations of irrigation and nutrient application. *Irrigation Science*, 28: 271-280.
11. **Mandal, K.G.**, Baral, U., Padhi, J., Majhi, P., Chakraborty, H. and Kumar, A. 2012. Effects of cropping on soil properties and organic carbon stock in Deras region, India. *Regional Environmental Change*, 12 (4): 899-912.
12. **Mandal, K.G.**, Hati, K.M., Misra, A.K., Bandyopadhyay, K.K. and Tripathi, A.K. 2013. Land surface modification and crop diversification for enhancing productivity of a Vertisol. *International Journal of Plant Production*, 7 (3): 455-472.
13. **Mandal, K.G.**, Kannan, K., Thakur, A.K., Kundu, D.K., Brahmanand, P.S. and Kumar, A. 2014. Performance of rice systems, irrigation and organic carbon storage. *Cereal Research Communications*, 42 (2): 346-358.
14. **Mandal, K.G.**, Padhi, J., Kumar, A., Ghosh, S., Panda, D.K., Mohanty, R.K. and Raychaudhuri, M. 2015. Analyses of rainfall using probability distribution and Markov chain models for crop planning in Daspalla region in Odisha, India. *Theoretical and Applied Climatology*, 121 (3-4): 517-528.
15. **Mandal, K.G.**, Thakur, A.K. and Mohanty, S. 2018. Planting techniques and irrigation influenced crop growth, light interception and yield-evapotranspiration relationship of potato. *International Journal of Plant Production* (Springer), 12 (4): 285-296
16. **Mandal, K.G.**, Thakur, A.K. and Mohanty, S. 2019. Paired-row planting and furrow irrigation increased light interception, pod yield and water use efficiency of groundnut in a hot sub-humid climate. *Agricultural Water Management*, 213: 967-977.
17. Thakur, A.K., **Mandal, K.G.**, Mohanty, R.K. and Ambast, S.K. 2018. Rice root growth, photosynthesis, yield and water productivity improvements through modifying cultivation practices and water management. *Agricultural Water Management*, 206: 67-77.
18. **Mandal, K.G.**, Thakur, A.K. and Ambast, S.K. 2019. Current rice farming, water resources and micro-irrigation. *Current Science*, 116 (4): 568-576.
19. Thakur, A.K., **Mandal, K.G.** and Raychaudhuri, S. 2020. Impact of crop and nutrient management on crop growth and yield, nutrient uptake and content in rice. *Paddy and Water Environment*, 18: 139-151.
20. **Mandal, K.G.**, Purbey, S.K., Singh, A.K., Bharti, P.K., Kumar, Ravi, Samal, S.K. and Banerjee, K. 2021. Perspectives on integrated farming in waterlogged ecosystems for ensuring food and nutrition security to farmers. *Indian Journal of Agronomy*, 66 (5th IAC spl issue): S32-S43.

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