

## **CURRICULUM VITAE**

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### ***Educational Background***

- ❖ Ph.D. (Horticulture) with specialization in Vegetable Crops from Bidhan Chandra Krishi Viswavidyalaya (BCKV) in 2009
- ❖ M.Sc. (Horticulture) in Vegetable Crops from BCKV in 2005
- ❖ B. Sc. (Horticulture) Hons. from BCKV in 2003

### ***Academic Position***

- ❖ 2021-till date: Associate Professor (Academic Level 13A) in Horticulture & Head, Division of Agriculture
- ❖ 2018-2021: Assistant Professor (Stage-III/Academic Level 12) in Horticulture
- ❖ 2013-2018: Assistant Professor (Stage-II/Academic Level 11) in Horticulture
- ❖ 2009-2013: Assistant Professor (Stage-I/Academic Level 10) in Horticulture

### ***Research Association***

- ❖ Crop improvement (horticultural crops especially vegetables)
- ❖ Organic/natural farming

### ***Research Projects***

- ❖ Science, Technology and Innovation Hub for Creating Sustainable Livelihood Opportunities of Scheduled Tribes in Angara Block, Ranchi District,

Jharkhand funded by Department of Science and Technology (DST), Govt. of India [ongoing].

- ❖ Jharkhand Tribal Empowerment and Livelihood funded by International Fund for Agricultural Development (IFAD) through Jharkhand Tribal Development Society (JTDS) [completed].
- ❖ Evaluation of Jharkhand Tribal Empowerment and Livelihoods Project funded by Dr. Ramdayal Munda Tribal Welfare Research Institute, Government of Jharkhand [completed].

### **Graduate Supervisions**

- ❖ Master's Level: **27** [24(completed) +3(ongoing)]
- ❖ Doctoral Level: **5** [3 (completed) + 2 (ongoing)]

### **Research Papers**

- ❖ **Dutta, A. K.**, Kiran, S. And Das, R. (2024). Expression of quantitative and qualitative traits in tomato (*Solanum lycopersicum* L.) under non-chemical growing conditions in the eastern Indian plateau. *International Journal of Research in Agronomy*, **7** (in press).
- ❖ Mukherjee, S., Biswas, S., Sankar, A., Biswas, R., Sarkar, B., Yadav, P., Dey, S., Pathak, S., Gowtham, R., Biswas, S., Dhote, V.W., Mishra, P.K., Singh, A.K., and **Dutta, A.K.** (2023). Optimizing the Application Timing of Liquid Organic Formulations and Their Effects on Sustainable Cowpea Production in Soils of Eastern Indian Plateau. *Journal of Soil Science and Plant Nutrition*, **23**(4): 5781-5797. Published online on 1<sup>st</sup> September 2023. [ISSN: 0718-9508 (Print) & 0718-9516 (Electronic)] <https://doi.org/10.1007/s42729-023-01439-5>
- ❖ Ghoshal, S. and **Dutta, A. K.** (2023). Expression of Quantitative and Qualitative Traits in Potato (*Solanum tuberosum* L.) Grown through Organic Production Intervention in Eastern Indian Plateau. *Current Agriculture Research Journal*, **11**(2): 508-519. [ISSN: 2347-4688 (Print) & 2321-9971 (Online)] <https://dx.doi.org/10.12944/CARJ.11.2.12>
- ❖ Rajan, N., Debnath, S., Dutta, A. K., Pandey, B., Singh, A. K., Singh, R. K., Singh, A. K. and Dugbakie, B. N. (2022). Elucidation of Nature

of Gene Action and Estimation of Combining Ability Effects for Fruit Yield Improvement and Yield Attributing Traits in Brinjal Landraces. *Journal of Food Quality*, **2022**: 1-12. Article ID 8471202, 12 pages, 2022. [ISSN: 0146-9428 (Print); ISSN: 1745-4557 (Online)]. <https://doi.org/10.1155/2022/8471202>.

- ❖ Dutta, A. K.; Mahto, S. K. and Kumar, K. (2022). Performance of Organically Grown French Bean during Post-Kharif Season in South Chhota Nagpur Plateau of Eastern India. *Journal of Bio Innovation*, **11**(1): 33-43. [ISSN 2277-8330 (Electronic)]. <https://doi.org/10.46344/JBINO.2022.v11i01.04>
- ❖ Reddi, G. and Dutta, A. K. (2021). Performance of Different Open-Pollinated Brinjal Varieties Grown by Organic Amendments under Eastern Indian Plateau of Jharkhand. *The Journal of Research ANGRAU*, **49** (4): 59-68. [ISSN: 0970-0226]. <https://epubs.icar.org.in/index.php/TJRA/article/view/133576>
- ❖ Mahto, S. K. and Dutta, A. K. (2021). Evaluation of bush type French bean varieties through organic farming in south Chhotanagpur plateau of eastern India. *Agricultural Science Digest*, **41**(3): 427-432. [ISSN: 0253-150X (Print); 0976-0547 (Online)]. <https://doi.org/10.18805/ag.D-5270>
- ❖ Dutta, A. K. and Majee, S. K. (2021). Performance of organically grown garden pea varieties in the south Chhotanagpur plateau of eastern India. *Journal of Applied Horticulture*, **23**(1): 78-83. [ISSN: 0972-1045]. <https://doi.org/10.37855/jah.2021.v23i01.15>
- ❖ Rajan, N.; Debnath, S.; **Dutta, A. K.**; Pandey, B. and Singh, A. K. (2020). Characterization of Indigenous Brinjal (*Solanum melongena* L.) Lines Using Morphological Traits Under Jharkhand Condition. *Annals of Plant and Soil Research*, **22** (4):425-431. [ISSN: 0972-1959 (Print); 2347-6036 (Online)]. <https://doi.org/10.47815/apsr.2020.10016>
- ❖ Tripathy, S. and **Dutta, A. K.** (2019). Effect of enriched Sanjeevani and Agnihotra on growth, yield and quality of brinjal (*Solanum*

*melongena* L.). *Journal of Phytology*, **11**: 42-46. [ISSN: 2075-6240].  
<https://doi.org/10.25081/jp.2019.v11.3818>

- ❖ Pathak, S. and **Dutta, A. K.** (2019). Screening Onion Varieties through Organic Farming in the South Chhotanagpur Plateau of Jharkhand during Post-Kharif Season. *Journal of Emerging Technologies and Innovative Research*, **6**(5): 492-500. [ISSN: 2349-5162]. [JETIR1905273\\_1-libre.pdf \(d1wqtxts1xzle7.cloudfront.net\)](https://doi.org/10.25081/jp.2019.v11.3818)
- ❖ Jana, B. and **Dutta, A. K.** (2019). Performance of Capsicum Cv. Yellow Wonder Grown Through Organic Farming under Low Cost Protective Structure and Open Field Conditions. *Journal of Emerging Technologies and Innovative Research*, **6**(5): 485-491. [ISSN: 2349-5162].
- ❖ Roy, S. and **Dutta, A. K.** (2019). Evaluation of Organically Grown Sprouting Broccoli cv. Fiesta under Open Field Condition of Eastern Indian Plateau. *Journal of Emerging Technologies and Innovative Research*, **6**(2): 489-495. [ISSN: 2349-5162].
- ❖ Guha, S. and **Dutta, A. K.** (2019). Performance of Organically Grown Strawberry cv. Douglas under the South Chhotanagpur Plateau Region of Jharkhand. *Journal of Emerging Technologies and Innovative Research*, **6**(2): 496-503. [ISSN: 2349-5162].
- ❖ Rajak, K.; Reddi, G.; Mahto, A. K. and **Dutta, A. K.** (2019). Performance of Different Varieties of Brinjal Grown Through Organic Farming in Chhotanagpur Plateau. *Journal of Emerging Technologies and Innovative Research*, **6**(2): 449-459. [ISSN: 2349-5162].
- ❖ Mahto, S. K. and **Dutta, A. K.** (2018). Influence of different low-cost organic inputs on growth, yield and quality of French bean (*Phaseolus vulgaris* L.) cv. Swarna Priya. *Indian Journal of Agricultural Research*, **52**(6): 661-665. [ISSN:0367-8245 (Print); 0976-058X (Online)].  
<https://doi.org/10.18805/IJARE.A-5104>
- ❖ **Dutta, A. K.**; Majee, S. K. and Das, R. (2018). Effect of *BD-501* and *Panchagavya* on Yield and Quality of Garden Pea cv. Arkel. *International Journal of Latest Engineering and Management Research*,

- 3(2):** 50-53. [ISSN: 2455-4847]. [Effect-of-BD-501-and-Panchagavya-on-Yield-and-Quality-of-Garden-Pea-cv-Arkel.pdf \(researchgate.net\)](#)
- ❖ Nag, D.; Sengupta, A. and **Dutta, A. K.** (2017). Impact of organic manures on onion cultivation: A review. *Journal of Interacademia*, **21(3):** 341-348. [ISSN: 0971-9016]. [Impact of organic manures on onion cultivation: A review. - Google Scholar](#)
  - ❖ Nag, D. and **Dutta, A. K.** (2017). Yield and Quality of Sand Mulched Onion with the Application of Different Liquid Organic Manures. *Environment and Ecology*, **35(2B):** 1050-1054. [ISSN 0970-0420]. [3108-libre.pdf \(dlwqtxts1xzle7.cloudfront.net\)](#)
  - ❖ **Dutta, A. K.** and Adak, A. K. (2016). Screening Tomato Varieties Based on Growth, Yield and Quality Attributes as Influenced by Different Organic Treatments. *Journal of Agricultural Engineering and Food Technology*, **3(3):** 215-220. [ISSN: 2350-0085 (Print); 2350-0263 (Online)]. [Screening Tomato Varieties Based on Growth, Yield... - Google Scholar](#)
  - ❖ Nag, D. and **Dutta, A. K.** (2016). Involvement of rural youth on onion-based farming system: Cases from the selected villages of Jharkhand. *Journal of Rural and Agricultural Research*, **16(1):** 10-13. [ISSN: 0972-4370 (Print); 2348-6643 (Online)]. [D:\Shared Folder\JRAR\3. Involv \(jraragra.in\)](#)
  - ❖ Baraik, S. K.; Nag, D.; Sengupta, A. and **Dutta, A. K.** (2016). Performance of Onion as Influenced by Traditional, Integrated and Organic Management Approaches. *International Journal of Agriculture Sciences*, **8(23):** 1467-1469. [ISSN: 0975-3710 (Print); 0975-9107 (Online)]. [IJAS-070316-64309 8 23 4 IJAS-libre.pdf \(dlwqtxts1xzle7.cloudfront.net\)](#)
  - ❖ Sarkar, R. and **Dutta, A. K.** (2015). Sweet Potato as a Worthy Option for Rural Livelihood: A Study on Tribal Dominating Villages of Jharkhand. *Global Journal for Research Analysis*, **4(7):** 435-436. [ISSN: 2277-8160]. <https://www.doi.org/10.36106/gjra>

- ❖ Nag, D.; Roy, P. and **Dutta, A. K.** (2015). Seasonal Potato Cultivation in Ranchi District-A Comparative Study. *Human Resource Reflection*, **2**(4): 35-40.
- ❖ Nag, D. and **Dutta, A. K.** (2014). A comparative study on present agriculture-based livelihood status for the villagers of different Tolas of Chanpi village, Jharkhand. 'Palli Charcha'-*The Indian Journal of Rural Studies*, **1**(1): 61-75. [ISSN: 2350-1227] [\(99+\) "Palli Charcha" —The Indian Journal of Rural Studies-1st Issue-Vol-1 no.-1 | Santanu Rakshit - Academia.edu](#)
- ❖ **Dutta, A.K.**, Shirin Akhtar, C. Karak and P. Hazra (2013). Gene actions for fruit yield and quality characters of tomato through generation mean analysis. *Indian Journal of Horticulture*, **70**(2): 230-237. [ISSN: 0972-8538 (Print); 0974-0112 (Electronic)]. [Gene-actions-for-fruit-yield-and-quality-characters-of-tomato-through-generation-mean-analysis.pdf \(researchgate.net\)](#)
- ❖ Shirin Akhtar, S.H. Ansary, **A. K. Dutta**, C. Karak and P. Hazra (2012). Crucial reproductive characters as screening indices for tomato (*Lycopersicon esculentum* Mill.) under high temperature stress. *Journal of Crop and Weed*, **8**(1):114-117. [ISSN: 0974-6315 (Print); 2349-9400 (Electronic)]. [Crucial reproductive characters as screening indices for tomato\[Solanum lycopersicum \] under high temperature stress \(cropandweed.com\)](#)
- ❖ Roy, T., S. Bhattacharya, **A. K. Dutta**, Shirin Akhtar, C. Karak and P. Hazra. (2011). Characterization of four genic male sterile lines of tomato (*Solanum lycopersicum*). *The Horticultural Journal*, **24** (1): 47-52.
- ❖ Hazra, P. and **Dutta, A. K.** (2011). Parthenocarpy in tomato (*Solanum lycopersicum*), its inheritance pattern and association with marker characters. *Indian Journal of Genetics and Plant Breeding*, **71** (3): 248-253. [ISSN: 0019-5200]. [Parthenocarpy in tomato \(Solanum lycopersicum\), its inheritance pattern and association with marker characters. \(googleusercontent.com\)](#)



- ❖ Hazra, P. and **Dutta, A. K.** (2010). Inheritance of parthenocarpy in tomato (*Solanum lycopersicum*) and its association with two marker characters. *International Research Journal of Plant Science*, **1**(6): 144-149. [ISSN: 2141-5447]. [Microsoft Word - Hazra and Dutta pdf \(researchgate.net\)](#)
- ❖ Hazra, P.; **Dutta, A. K.** and Padma Chatterjee (2010). Altered gibberellin and auxin level in the ovaries in the manifestation of genetic parthenocarpy in tomato (*Solanum lycopersicum*). *Current Science*, **99** (10): 1439-1443. [ISSN: 0011-3891]. [Altered gibberellin and auxin levels in the ovaries in the manifestation of genetic parthenocarpy in tomato \(Solanum lycopersicum\) on JSTOR](#)
- ❖ Hazra, P. and **Dutta, A. K.** (2010). Expression of Parthenocarpy in Tomato Due to Temperature and Pollination Treatment. *International Journal of Vegetable Science*, **16** (3): 222–232. [ISSN: 1931-5260 (Print); 1931-5279 (Online)]. <https://doi.org/10.1080/19315260903562775>
- ❖ Pandit, M. K.; **Dutta, A.**; Akhter, S. and Hazra, P. (2010). Variability and heritability estimates of quality parameters in tomato (*Lycopersicon esculentum* Mill.). *Environment and Ecology*, **28**(4A): 2594-2596. [ISSN 0970-0420]. [Variability and heritability estimates of quality parameters in tomato \(Lycopersicon esculentum Mill.\). \(googleusercontent.com\)](#)
- ❖ Pandit, M. K.; **Dutta, A.** and Hazra, P. (2010). Study of variability components and correlation patterns in pumpkin (*Cucurbita moschata* Duch. ex. Poir) genotypes for yield contributing traits and yield. *Green Technology*, **9**: 59-63.
- ❖ Hazra, P.; Ansary, S. H.; **Dutta, A. K.**; Balacheva, E. and Atanassova, B. (2009). Breeding tomato tolerant to high temperature stress. 4<sup>th</sup> Balkan Symposium for Vegetables and Potato, 9-12 September, 2008, Plovdiv, Bulgaria. *Acta Horticulturae*, **830**: 241-248. [ISSN: 0567-7572 (Print); 2406-6168 (Electronic)]. <https://www.doi.org/10.17660/ActaHortic.2009.830.33>

- ❖ Hazra, P.; Mandal, A. K.; **Dutta, A. K.** and Ram, H. H. (2007). Breeding pumpkin for fruit yield and other characters. *International Journal of Plant Breeding*, **1**(1): 51-64.
- ❖ Hazra, P.; Mandal, A. K.; **Dutta, A. K.**, Sikdar, D. and Pandit, M. K. (2007). Breeding pumpkin (*Cucurbita moschata* Duch. ex Poir.) for high yield and carotene content. In: M. L. Chadha *et al.* (Eds.) *Proc. 1<sup>st</sup> Intern. Conf. on Indigenous Veg. and legumes. Acta Horticulturae*, **752**: 431-435.
- ❖ **Dutta, A. K.**; Hazra, P. and Pandit, M. K. (2006). Determination of selection indices for pumpkin. *The Horticultural Journal*, **19**(3): 298-300.

### **Conference Proceedings**

- ❖ Maity, S. and **Dutta, A. K.** (2019). Evaluation of Chilli Varieties Grown Through the Application of Organic Liquid Manure and Agnihotra Farming. In: *Proceedings of the International Conference on Livelihood Promotion, Bio-diversity Conservation and Social Security in Indian Sundarbans*, Mondal, B.; Mondal, P. and Bhattacharya, I. (Eds.). New Delhi Publishers, 90, Sainik Vihar, Mohan Garden, New Delhi-110059, India, pp. 470-478. [ISBN No.: 978-93-88879-26-2].
- ❖ Ghosh, S. and **Dutta, A. K.** (2019). Effect of Organic Liquid Manure (*Sasyagavya*) on Growth, Yield and Quality Attributes of Onion Cv. N-53. In: *Proceedings of the International Conference on Livelihood Promotion, Bio-diversity Conservation and Social Security in Indian Sundarbans*, Mondal, B.; Mondal, P. and Bhattacharya, I. (Eds.). New Delhi Publishers, 90, Sainik Vihar, Mohan Garden, New Delhi-110059, India, pp. 479-484. [ISBN No.: 978-93-88879-26-2].
- ❖ Sarkar, R. and **Dutta, A. K.** (2015). Sweet Potato as a potential food crop for the tribes of Jharkhand: A Review Study. In: Banerjee, H.; Gantait, S.; Gunri, S. K. and Sengupta, K. (Eds.), *Extended Summaries, National Symposium on "Sustainable Agriculture for Food Security and Better Environment"*, December 17-18, 2015. pp. 331-332.



- ❖ Adhikari, S. and **Dutta, A. K.** (2014). Study on the yield and quality attributes of potato grown through organic farming. *Proceedings of the National Seminar on Organic Agriculture-Challenges & Prospects* conducted at Palampur, Himachal Pradesh, India during 28-29 May, 2014, pp. 96-100.
- ❖ Pandit, M.K.; Hazra, P. and **Dutta, A. K.** (2006). Study on heterosis for yield and quality characters of pumpkin (*Cucurbita moschata* Duch. ex. Poir). In: Ram, H. H. and Singh, H. P. (Eds) *Cucurbits Breeding and Production Technology*, Proceedings of the National Seminar on Cucurbits, College of Agriculture, Pantnagar, Uttarakhand, India, pp. 319-327.

### **Books**

- ❖ **Dutta, A. K.** and Mondal, B. (2017). **Fruits for Livelihood: Production Technology and Management Practices**, Published by Agrobios (India), Jodhpur, India. pp. 623. [ISBN No.: 978-81-933644-5-1].
- ❖ Kumar, R. and **Dutta, A. K.** (2012). **Eco-Friendly Approaches to Check Major Pests in Cabbage**. Melnic, T. (Acquisition Editor). LAP LAMBERT Academic Publishing GmbH & Co. KG, Dudweiler Landstr. 99, 66123 Saarbrücken, Germany. pp. 85. (ISBN: 978-3-8484-1684-4).
- ❖ Prasad, M.; **Dutta, A. K.** and Kumar, R. (2012). **Nutritional Response of Strawberry under Eastern Indian Plateau Region**. Hannah Olsen (Acquisition Editor). LAP LAMBERT Academic Publishing GmbH & Co. KG, Dudweiler Landstr. 99, 66123 Saarbrücken, Germany. pp. 257. (ISBN: ISBN: 978-3-659-11002-3.).
- ❖ **Dutta, A. K.** (2011). **Genetic Parthenocarpy in Tomato**. Olsen, H. (Acquisition Editor). LAP LAMBERT Academic Publishing GmbH & Co. KG, Dudweiler Landstr. 99, 66123 Saarbrücken, Germany. pp. 177 (ISBN: 978-3-8465-0721-6).

### **Book Chapter(s)**

- ❖ **Dutta, A. K.**; Kumar, N.; Reddi, G.; Mukherjee, S.; Dey, S.; Biswas, S. and Singh, A. (2024). Biodiversity and Crop Dynamics of Domesticated Legumes in Eastern India. In: Dr. Jimenez-Lopez and Dr. Escudero-Feliu (Eds.), *Legumes Crops - Cultivation, Uses and Benefits*, Intech Open Publisher, 5 Princes Gate Court, London, SW7 2QJ, UK (*in press*).

- ❖ Maity, S. and **Dutta, A. K.** (2019). Evaluation of Chilli Varieties Grown Through the Application of Organic Liquid Manure and Agnihotra Farming. In: Proceedings of the International Conference on Livelihood Promotion, Bio-diversity Conservation and Social Security in Indian Sundarbans, Mondal, B.; Mondal, P. and Bhattacharya, I. (Eds.), New Delhi Publishers, New Delhi. pp. 470-478. [ISBN: 978-93-88879-26-2]
- ❖ Ghosh, S. and **Dutta, A. K.** (2019). Effect of Organic Liquid Manure (Sasyagavya) on Growth, Yield and Quality Attributes of Onion CV. N-53. In: Proceedings of the International Conference on Livelihood Promotion, Bio-diversity Conservation and Social Security in Indian Sundarbans, Mondal, B.; Mondal, P. and Bhattacharya, I. (Eds.), New Delhi Publishers, New Delhi. pp. 479-484. [ISBN: 978-93-88879-26-2]
- ❖ Mondal, S. and **Dutta, A. K.** (2018). Performance of *kharif* potato Cv. Kufri Pukhraj Grown Through Organic Farming in Chhota Nagpur Plateau. In: Zaman, A. and Maitra, S. (Eds.), *Cutting Edge Technology for Agricultural Sustainability* published by New India Publishing Agency, Pitam Pura, New Delhi 110 034, India. pp. 365-371. [ISBN: 978-93-87973-28-2]
- ❖ Chatterjee, S.; **Dutta, A. K.**; Swami, B. and Das, P. (2018). Influence of *Sasyagavya* on Growth, Yield and Quality Attributes of Cabbage and Bio-Chemical Properties of Soils of the Experimental Site. In: Zaman, A. and Maitra, S. (Eds.), *Cutting Edge Technology for Agricultural Sustainability* published by New India Publishing Agency, Pitam Pura, New Delhi 110 034, India. pp. 407-415. [ISBN: 978-93-87973-28-2]
- ❖ **Dutta, A. K.** (2017). Important Fruits of India: Scenario, Export Potentiality and Production Technologies. In: Dutta, A. K. and Mondal, B. (Eds.), *Fruits for Livelihood: Production Technology and Management Practices* Published by Agrobios (India), Jodhpur, India. pp. 3-49.
- ❖ **Dutta, A. K.** and Ray, R. N. (2017). Ber: A Minor Fruit for Dry Land Farming. In: Dutta, A. K. and Mondal, B. (Eds.), *Fruits for Livelihood: Production Technology and Management Practices* Published by Agrobios (India), Jodhpur, India. pp. 133-143.
- ❖ **Dutta, A. K.** (2017). Carambola: An Underexploited Miracle Fruit. In: Dutta, A. K. and Mondal, B. (Eds.), *Fruits for Livelihood: Production Technology and Management Practices* Published by Agrobios (India), Jodhpur, India. pp. 145-153.

- ❖ **Dutta, A. K.** and Sengupta, S. (2017). Karonda: A Potential Minor Fruit for Jharkhand. In: Dutta, A. K. and Mondal, B. (Eds.), *Fruits for Livelihood: Production Technology and Management Practices* Published by Agrobios (India), Jodhpur, India. pp. 183-189.
- ❖ **Dutta, A. K.** (2017). Kendu: A Fruit of the Forest for Tribal Livelihood. In: Dutta, A. K. and Mondal, B. (Eds.), *Fruits for Livelihood: Production Technology and Management Practices* Published by Agrobios (India), Jodhpur, India. pp. 191-197.
- ❖ **Dutta, A. K.** (2017). French Bean. In: *Genesis and Evolution of Horticultural Crops*, Peter, K. V. (Ed.), Volume-I, Published by Kruger Brentt Publishers UK. Ltd. 68 St Margaret Road, Edgware, Middlesex HA8 9UU, United Kingdom, pp. 143-156. [ISBN: 978-1-78715-001-0]
- ❖ Kumar, R. and **Dutta, A. K.** (2015). Pests of Brinjal (Eggplant) and Their Management. In: *Pests of Vegetables: Bionomics and Management*. Laskar, N.; Chatterjee, H. and Biswas, S. (Eds.), New India Publishing Agency, pp: 11-40. [ISBN: 978-93-85516-01-6]
- ❖ Mahto, A.K.; Adhikari, S.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Kunapajala* by mixing with different carrier materials. In: *Sustainable Rural Development through Soil Health and Fertility Management in Agriculture*. Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 92-98. [ISBN: 978-81-88863-57-0].
- ❖ Oraon, V.; Nag, D.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Shashyagavya* prepared by utilizing different locally available bio-resources. In: *Sustainable Rural Development through Soil Health and Fertility Management in Agriculture*. Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 168-172. [ISBN: 978-81-88863-57-0].
- ❖ Mohanta, S.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Sanjivani* prepared by using different bio-resources. In: *Sustainable Rural Development through Soil Health and Fertility Management in Agriculture*. Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 60-65. [ISBN: 978-81-88863-57-0].

- ❖ **Dutta, A. K.** (2014). Organic Production of Vegetables. In: Hand Book of Vegetables. Peter, K. V. and Hazra, P. (Eds), Studium Press LLC, P.O. Box 722 200, Houston, Texas-77072, USA, Vol. II, Chapter-11, pp. 351-384. [ISBN: 1-62699-038-7]
- ❖ Singh, D. K. and **Dutta, A. K.** (2014). French Bean. In: Hand Book of Vegetables, Peter, K. V. and Hazra, P. (Eds), Studium Press LLC, P.O. Box 722 200, Houston, Texas-77072, USA, Vol. III, Chapter-6, pp. 151-191. [ISBN: 1-62699-038-7].
- ❖ **Dutta, A. K.** (2013). Contract Farming. In: “Advances of Rural Development for Sustainable Agriculture” in Das Gupta, D. (Ed.). M/S Agrobios (India), Jodhpur, Rajasthan, Volume-II: Part-A. pp. 79-95. [ISBN (13): 978-81-7754-530-2].
- ❖ Hazra, P. and **Dutta, A. K.** (2011). Vegetable Breeding for Quality Traits. In: *Breeding and Protection of Vegetables*, Rana, M. K. (Ed.). New India Publishing Agency, Pitam Pura, New Delhi-110088, Chapter-7, pp: 274-314. [ISBN: 978-93-8023549-3].

### ***Current Research Interest***

- ❖ Crop improvement especially vegetables through screening of different genotypes/varieties/local cultivars and conducting adaptive research trials under organic farming conditions.
- ❖ Documentation and exploration of different land races of indigenous vegetables and edible tubers of the forests.
- ❖ Standardization of agro-techniques for cultivation of different vegetables through non-chemical farming approaches.
- ❖ Year-round home scale safe vegetables production through organic intervention in different kitchen garden models under the south Chhotanagpur plateau regions of Jharkhand.
- ❖ Identification of nutritionally rich sweet potato varieties for tribal communities of Jharkhand.
- ❖ Standardization of kharif & pre-kharif onion production for sub-tropical climate of Jharkhand through organic farming.
- ❖ Study on vegetable-based livelihood of small and marginal farmers of Jharkhand.
- ❖ Study on the forest-based livelihood of the tribal populace of Ranchi district of Jharkhand.

- ❖ Production potentiality study of some important vegetables through organic, conventional and advance management situations under the Chhotanagpur plateau region.

### ***Achievements and Awards***

- ❖ First Class First position in M. Sc. (Horticulture) for the year-2005.
- ❖ Senior Research Fellow of APEDA, Government of India and FPI&H, Government of West Bengal sponsored research projects.
- ❖ Qualified NET conducted by ASRB, ICAR and recognized by the UGC in Horticultural Vegetable Science in the year of 2006.
- ❖ Best Poster Award on the research paper “Influence of various concentrations of BD-501 and Panchagavya on Yield and Quality of Garden Pea cv. Arkel” presented at the National Symposium on ‘Vegetable Legumes for Soil and Human Health’ organized by Indian Society of Vegetable Science in collaboration with Indian Council of Agricultural Research, Indian Institute of Vegetable Research, Indian Institute of Pulses Research and National Horticulture Board during February 12-14, 2016 at IIVR, Varanasi.
- ❖ Best Paper Award on the research paper entitled “Effect of *Shasyagavya* on Yield and Quality Attributes of Onion (*Allium cepa* L.) Cv. N-53” presented at the National Conference on ‘Organic Farming & Sustainable Food Security’ organized by School of Agriculture, ITM University (Sithouli Campus), Gwalior, MP during 19-20 February, 2016.

### ***Professional Experiences***

- ❖ Presently working as **Head, Division of Agriculture** and **Assistant Professor (Horticulture)** in Ramakrishna Mission Vivekananda Educational and Research Institute under the Faculty Centre for Agriculture, Rural and Tribal Development, Ramakrishna Mission Ashrama, Morabadi, Ranchi-834008 since 4<sup>th</sup> August, 2009.
- ❖ Supervising Ph.D. Research Scholars and students of Integrated M. Sc. in ARTD for their M.Sc. dissertation and B. Sc. (ARTD) Honours project works.
- ❖ Worked as **Scientific Officer** under AVRDC-The World Vegetable Centre, Regional Centre for South Asia, Hyderabad from 22<sup>nd</sup> September, 2008 to 31<sup>st</sup> July, 2009. There, my key responsibilities were to conduct different experimental trials on several vegetables including indigenous vegetables, framing of home garden modules for year-round vegetable production as well as safe vegetables production under net house condition.

## **Research Experiences**

- ❖ Identification of different varieties of vegetables more specifically tomato, onion, garden pea *etc.* based on their growth, yield and quality attributes for growing under non-chemical farming condition.
- ❖ **Development of packages of practices** for growing different horticultural crops through **organic farming**.
- ❖ **Framing of agro-techniques** for the year-round production of safe vegetables through home garden and net houses.
- ❖ Worked as **Senior Research Fellow** in the project entitled “Standardization of agro-techniques for quality seed production of onion under Gangetic plains of West Bengal” funded by FPI&H, Government of West Bengal from 21<sup>st</sup> July, 2006 to 19<sup>th</sup> September, 2008.
- ❖ Worked as **Senior Research Fellow** in the project entitled “Export Oriented Vegetable Production under Low-Cost Poly House” funded by **APEDA**, Government of India from 15<sup>th</sup> September, 2005 to 20<sup>th</sup> July, 2006.
- ❖ Around seven years research experiences for documentation of different qualitative and quantitative characters of several vegetables including indigenous vegetables, maintenance of various male sterile lines and making crosses among promising lines of tomato in open field as well as in poly house conditions.
- ❖ Experience on tissue culture techniques for the multiplication of parthenocarpic and male sterile lines of Solanaceous vegetables especially tomato and brinjal.

## **Symposium/Seminar/Conference Organization**

- ❖ Organize National Seminar on “Regeneration of Rural India: Perspectives, Issues and the Way Forward” as a capacity of **Session Convener** during 25-26 September, 2019, held at Faculty Centre for Agriculture, Rural and Tribal Development, RKMVERI, Ranchi, Jharkhand.
- ❖ Nominated as **National Advisory Committee Member** for the “International Conference on Livelihood Promotion, Bio-diversity Conservation and Social Security in Indian Sundarbans” Organized by the Department of Plant Protection, Palli-Siksha Bhavana (Institute of Agriculture), Visva-Bharati and Hiranmaypur Agro-horticultural Society for Technology and Rural Development, Basanti, South 24 Parganas in collaboration with Andrewspalli Centre for Integrated Development, Jogeshganj Project, North 24 Parganas on



7-9 December, 2018 at Jharkhali, Sundarban, South 24 Parganas, West Bengal (India).

- ❖ Organized One-Day National Seminar-Cum-Panel Discussion on “Agricultural Research Towards Doubling Farmer’s Income” as a Capacity of **Organizing Secretary** at the Faculty Centre for Integrated Rural & Tribal Development and Management of Ramakrishna Mission Vivekananda Educational and Research Institute, Ranchi Campus on 31<sup>st</sup> March 2018.
- ❖ Nominated as **National Advisory Committee Member** for the “National Seminar on Human Rights and Social Justice” Organized by SC, ST, OBC Employees Welfare Association of Visva-Bharati on 13-14<sup>th</sup> April 2017, Visva-Bharati, Santiniketan in Commemoration of 126<sup>th</sup> Birth Anniversary of Dr. B. R. Ambedkar.

### ***Symposium/Seminar/Conference Contribution***

- ❖ National Symposium on “Ornamental and Edible Horticulture: Emerging Challenges and Sustainable Goals” Organized by Bidhan Chandra Krishi Viswavidyalaya Mohanpur, Nadia, West Bengal during 21<sup>st</sup> to 22<sup>nd</sup> February, 2022. [Paper Presented: Evaluation of French bean through organic farming during post-kharif season of eastern Indian plateau].
- ❖ International Conference on “**Climate Change, Sustainability & Livelihood**” Organized by Nirmala College, Ranchi in collaboration Centre for Environment and Economic Development (CEED), New Delhi (A Research Institution Affiliated to NITI Aayog, Govt. of India) during 9<sup>th</sup> March to 10<sup>th</sup> March, 2019. [Paper Presented: Varietal Response of Tomato towards Organic Farming in the South Chhotanagpur Plateau of Eastern India: An Innovative Research Initiative to cope up with Climate Change Scenario].
- ❖ International Conference on “**India Biodiversity Meet 2018**” Organized by Indian Statistical Institute, Kolkata, India from 15<sup>th</sup> March to 17<sup>th</sup> March, 2018.
- ❖ International Conference on “Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development” Organized by Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal and Krishi Sanskriti, New Delhi, India held at Farmers' Academy and Convention Centre (FACC), Lake Hall, Kalyani of Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, West Bengal, India from 13-14 August, 2016.

- ❖ National Seminar on “Agriculture, Rural and Tribal Development: Facts and Facets” Organized by Integrated Rural & Tribal Development and Management Faculty Centre, Ranchi of Ramakrishna Mission Vivekananda University on 14 May 2016.
- ❖ National Seminar on “Organic Agriculture-Challenges & Prospects” held at CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur, Himachal Pradesh, India from 28-29 May, 2014.
- ❖ First International Conference on “Bio-resource and Stress Management” held at Science City, Kolkata, India from 6<sup>th</sup> February to 9<sup>th</sup> February, 2013.
- ❖ National Seminar on “Integrated Rural Development and Management: Issues, Strategies and Policy Options” held at Integrated Rural Development and Management (IRDM) Faculty Centre of Ramakrishna Mission Vivekananda University at Ramakrishna Mission Ashrama, Narendrapur, Kolkata-700103, West Bengal, India from 17<sup>th</sup> to 18<sup>th</sup> December, 2010.
- ❖ Regional Learning Program on “Advances in Vegetables and Vegetable Legumes Breeding” held in AVRDC-Regional Center for South Asia and ICRISAT, Patancheru, Hyderabad, India from 27<sup>th</sup> April to 2<sup>nd</sup> May, 2009.
- ❖ 15<sup>th</sup> West Bengal State Science and Technology Congress held in Bengal Engineering and Science University, Shivpur, Howrah from 28<sup>th</sup> to 29<sup>th</sup> February, 2008.
- ❖ International Symposium on “Management of Coastal Ecosystem: Technological Advancement and Livelihood Security” held at Science City, Kolkata, India from 27<sup>th</sup> to 30<sup>th</sup> October, 2007.
- ❖ National Symposium on “Organic Horticulture-Its Production, Processing, Marketing and Export for Sustainability” held in Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal from 8<sup>th</sup> to 10<sup>th</sup> June, 2007.
- ❖ 13<sup>th</sup> West Bengal State Science and Technology Congress held in Ballygunge Science College, Kolkata from 28<sup>th</sup> February to 1<sup>st</sup> March, 2006.
- ❖ National Symposium on “Sustainable Production and Export of Horticultural Crops” held in Bidhan Chandra Krishi Viswavidyalaya, Lake Hall, Kalyani, West Bengal from 2<sup>nd</sup> to 4<sup>th</sup> December, 2005.

### ***Symposium/Seminar/Conference Contribution (Jointly)***

- ❖ ‘Growth, Yield and Quality Attributes of French Bean Cv. Swarna Priya as Influenced by Different Organic Treatments’ authored by S. K. Mahto and **A. K. Dutta** and presented in the International Conference on "Emerging

Technologies, Systems and Applications (ICETSA-2018)" on 21<sup>st</sup> – 22<sup>nd</sup> April, 2018 at Jharkhand Rai University, Ranchi, India.

- ❖ 'Yield and quality of cabbage as influenced by BD-501 and Shasyagavya' authored by D. Nag, S. Mohanta and **A. K. Dutta** and presented in the National Seminar on "Hi-tech. Horticulture: Challenges and Opportunities" on 26 - 27<sup>th</sup> February 2015 at Babasaheb Bhimrao Ambedkar University, Lucknow, India.
- ❖ 'Yield and Quality of Onion cv. N-53 as Influenced by different concentrations of Sasyagavya' authored by S. Ghosh and **A. K. Dutta** and presented at the 5<sup>th</sup> Organic Farming National Convention on 28<sup>th</sup> February to 2<sup>nd</sup> March, 2015 at National Institute of Technical Teachers Training & Research (NITTTR), Sector-26, Chandigarh.
- ❖ 'Influence of various concentrations of Bio-dynamics-501 (BD-501) and Shasyagavya on yield and quality of cabbage, authored by A. Dutta, **A. K. Dutta** and Swami Bhaveshananda and presented at the National Seminar on "Relevance of Organic Farming in Indian Agriculture" on 3-4<sup>th</sup> February, 2014 organized by the National Institute of Advanced Studies (NIAS), Indian Institute of Science Campus, Venue: Bangalore.
- ❖ 'Response of Potato under Organic Farming Condition' authored by S. Adhikari and **A. K. Dutta** and presented at the National Seminar on "Relevance of Organic Farming in Indian Agriculture" on 3-4<sup>th</sup> February, 2014 organized by the National Institute of Advanced Studies (NIAS), Indian Institute of Science Campus, Venue: Bangalore.
- ❖ 'Study on the yield and quality attributes of potato grown through organic' authored by S. Adhikari and **A. K. Dutta** and presented in the National Conference on "Inter-Disciplinary Researches in Social Sciences in Eastern India with Special Reference to Jharkhand" on 27-28 February, 2013 at Indian Statistical Institute, Sociological Research Unit, Giridih.

### ***Other Relevant Information***

- ❖ Participated in the **UGC Orientation Workshop on Awareness, Adoption & Promotion of the MOOCs on SWAYAM Platform** organized by the University Grants Commission, Eastern Regional Office, Kolkata at Ranchi University on 3<sup>rd</sup> September, 2019.

- ❖ **Academic Journal Expert Committee Member:** Appointment as Member of the Academic Journal Expert Committee of Ramakrishna Mission Vivekananda Educational and Research Institute.
- ❖ **External Examiner** for Evaluation of M.Sc. Dissertation Thesis of the School of Agricultural Sciences and Rural Development, Medziphema Campus of Nagaland University and Department of Vegetable Science, Faculty of Horticulture, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal-741252.
- ❖ **Paper Setter and External Examiner:** Tropical and Sub-tropical Vegetables (VSC-101), Water Management in Horticultural Crops (VSC-151) and Seed Production of Vegetable, Tuber and Spice Crops (VSC-351), Department of Vegetables and Spices Crops, Uttar Banga Krishi Viswavidyalaya, Pundibari, Coochbehar, West Bengal-736165.
- ❖ **External Examiner:** Production Technology of Vegetables, Flowers and Spices (HRT-207) under Faculty of Agriculture of Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal-741252.
- ❖ **Question Paper Setter:** Production Technology of Vegetable and Spices (AHT-201) for 3<sup>rd</sup> Semester of B. Sc. (Hons) Agriculture Programme of Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur-848125 (Bihar).

### ***Extension Activities***

- ❖ Organized *Kishan Gosthi* and acted as member judgement committee of the stalls and exhibits in the Central Ramakrishna Kishan Mela organized by Divyayan Krishi Vigyan Kendra, Ramakrishna Mission Ashrama, Ranchi during 12-13 February, 2015.
- ❖ Organized *Kishan Gosthi* and acted as member judgement committee of the stalls and exhibits in the Central Ramakrishna Kishan Mela organized by Divyayan Krishi Vigyan Kendra, Ramakrishna Mission Ashrama, Ranchi during 28-29 January, 2016.
- ❖ Organized *Kishan Gosthi* and acted as member judgement committee of the stalls and exhibits in the Central Ramakrishna Kishan Mela organized by Divyayan Krishi Vigyan Kendra, Ramakrishna Mission Ashrama, Ranchi during 23-24 January, 2017.
- ❖ Organized *Kishan Gosthi* and acted as member judgement committee of the stalls and exhibits in the Central Ramakrishna Kishan Mela organized by

Divyayan Krishi Vigyan Kendra, Ramakrishna Mission Ashrama, Ranchi during 1-2 February, 2018.

## **TV/Radio Talks**

### **(Doordarshan Kendra, Ranchi)**

- ❖ Improved agro-techniques for tomato cultivation during kharif (rainy) season in Jharkhand (*Barsati tomato ki unnat kheti*) on 29<sup>th</sup> June, 2019 and subsequently telecasted through Krishi Darshan Programme of Doordarshan Kendra Ranchi (Prasar Bharati) on 03.07.2019 at 5:30 PM. [<https://youtu.be/oTc6KfeVsrA>]
- ❖ Growing climbing vegetables during rainy season in Jharkhand (*Jharkhand me barsati latadar sabji ko unnat kheti*) on 29<sup>th</sup> June, 2019 and subsequently telecasted through Krishi Darshan Programme of Doordarshan Kendra Ranchi (Prasar Bharati) on 10.07.2019 at 5:30 PM. [<https://youtu.be/XXz6d0mLjaw>]

### **(For ANNADATA Program through NEWS 18 Bihar/Jharkhand Networks)**

- ❖ Cultivation of Cucumber by using Mulching and Drip irrigation [In Hindi telecasted on 24 January 2020 at 6:00 AM **Drip और Mulching के माध्यम से खीरे(Cucumber) की खेती**: <https://youtu.be/S7Mjk0fv2b8>]
- ❖ Orchard Management Strategies for Important Fruits of Jharkhand [In Hindi telecasted on 1<sup>st</sup> February 2020 at 6:00 AM **Annadata | फल के बागों में लगने वाले रोगों की रोकथाम कैसे करें ?**: [https://youtu.be/j\\_vU2GPSTcA](https://youtu.be/j_vU2GPSTcA)]

## **Invited Talks**

- ❖ An invited talk delivered on “An introduction to Weeds and Crops: Concept and Integrated Management (Physical, Biological & Chemical) Technology of Weeds in Wheat and Vegetables (Cole Crops, Tomato, Brinjal, Chillies, Bhindi)” at MANAGE (Hyderabad) Sponsored Programme ‘DAESI’ implemented by ATMA, Jharkhand on 25<sup>th</sup> August, 2018.
- ❖ Motivational Talk in the RUSA-Jharkhand Sponsored Workshop Programme on “Need for Assessment and Accreditation of HEIs by NAAC” delivered in favour of the Mentor Institute on 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> and 13<sup>th</sup> December, 2019 at Nilambar Pitambar University, Medini Nagar, P. K. Roy Memorial College, Dhanbad of Binod Bihari Mahto Koilanchal University, Sidhu Kanhu Murmu University, Dumka and Kolhan University, Chaibasa, respectively.

- ❖ Motivational Talk in the RUSA-Jharkhand Sponsored Workshop Programme on “Tips on Opt Out Metrics to Secure More Score in Assessment and Accreditation of HEIs by NAAC” delivered in favour of the Mentor Institute on 16<sup>th</sup> and 18<sup>th</sup> December, 2019 at Ranchi University, Ranchi and Vinoba Bhave University, Hazaribagh, respectively.

### ***Scientific Organizational Involvement***

- ❖ **Academic Editor** of the Asian Journal of Advances in Agricultural Research
- ❖ **Reviewer** of the International Journal of Plant & Soil Science.
- ❖ **Life member** of the Indian Academy of Horticultural Society (IAHS) earlier known as Horticultural Society of India.