

# CURRICULUM VITAE



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## ACADEMIC DISTINCTIONS

Degree	University/Board	Year
10 <sup>th</sup>	Rajasthan Board of Secondary Education	2003
12 <sup>th</sup>	Rajasthan Board of Secondary Education	2005
B.Sc. Ag. (Hons)	Sardar Vallabhbhai Patel University of Agriculture & Technology, Modipuram, Meerut, UP	2011
M.Sc. (Microbiology)	ICAR-Indian Agricultural Research Institute, New Delhi	2013
Ph.D. (Microbiology)	ICAR-Indian Agricultural Research Institute, New Delhi	2019

## POSITIONS HELD

S.N.	INSTITUTE PLACE	POSITION	FROM	TO
1.	ICAR-Central Potato Research Institute, Shimla	Scientist (SS)	July 02, 2022	Present date
2.	ICAR-Central Potato Research Institute, Shimla	Scientist	October 09, 2018	July 01, 2022
3.	ICAR-National Academy of Agricultural Research Management, Hyderabad	Scientist trainee	July 2, 2018	October 9, 2018

## AREA OF RESEARCH

Post-harvest management, fermentation technology for bioethanol production, enhancing nutritional value and preservation of food, plant microbes interaction study

## PARTICULARS OF PRIZES, MEDALS AND SCHOLARSHIPS

- Awarded “**Chancellor Gold medal**” for overall outstanding performance in Bachelor of Science (Ag.) Hons. the degree programme at the 4th Convocation of Sardar Vallabhbhai Patel University of Agriculture & Technology, Modipuram, Meerut, UP on January 18, 2012.
- Awarded “**Vice-Chancellor Gold medal**” for outstanding academic performance in Bachelor of Science (Ag.) Hons degree programme at the 4th Convocation of Sardar Vallabhbhai Patel University of Agriculture & Technology, Modipuram, Meerut, UP on January 18, 2012.
- Awarded the **National Talent Scholarship** (NTS) during B.Sc. (Ag.) Hons from the period 2008 to 2011.
- Awarded the **ICAR-JRF** during M.Sc. (Microbiology) from the period 2011 to 2013.
- Awarded the **ICAR NET** for lectureship in 2014.
- Awarded the **CSIR-UGC JRF** for fellowship and NET in Ph.D, conducted on behalf of the University Grants Commission, New Delhi on 2014.
- Awarded **ICAR-SRF** with fellowship (Ph.D.) in Agril. Microbiology in 2014.

- **Secured First rank (OBC) in the Agricultural Research Service examination** in the discipline of Agricultural Microbiology conducted by the ICAR-Agricultural Scientists Recruitment Board in 2016.
- Elected as the **Councillor of the Indian Potato Association (IPA) during 2021-23.**
- **Awarded 1<sup>st</sup> prize for the Indian Potato Association (IPA) poster presentation** during International Conference Global Potato Conclave 2020 on “Potato as a bioenergy crop for fuel ethanol production: Perspectives and challenges” at Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
- **Awarded 1<sup>st</sup> prize for the poster presentation** by Indian Potato Association (IPA) during the International Conference Global Potato Conclave 2020 on “Application of high throughput plant phenomics techniques for potato” at Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
- **Dr Mukhtar Singh Memorial Best Oral Presentation Award** by Indian Potato Association (IPA) during International Conference Global Potato Conclave 2020 on “Genome-wide the landscape of carotenoids biosynthesis pathway genes in potato” at Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
- **Awarded 1<sup>st</sup> prize for the poster presentation** on the topic entitled “Interactive Effect of Potato Apical Leaf Curl disease on Resistant starch and Glycemic index of Potato (*Solanum tuberosum* L.)” during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021.
- **Awarded 1st prize for the Oral presentation** on the topic entitled “Vacuum Impregnation: A novel tool for the development of ascorbic acid fortified potato and its products” Sushil S Changan, Vandana Parmar, Asha Thakur, Dharmendra Kumar, Milan Kumar Lal, Arvind Jaiswal, Pinky Raigond, Som Dutt, and Brajesh Singh during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021.
- **Awarded 1st prize for the Oral presentation** on the topic entitled “Phosphorus economy and yield enhancement in potato through co-inoculation of AM-fungi and PSB in a Himalayan acid Alfisol” by “Anil K Choudhary, J Sharma, VK Dua, Dharmendra Kumar, Name Singh and Sushil Kumar” during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021.

- Review article on “Functional fermented probiotics, prebiotics and synbiotics from non-dairy products: A perspective from nutraceutical.” published in Molecular Nutrition & Food Research (IF 6.575) figure has been recognized as the **Front Cover Page of the Journal**. Volume 66, Issue 14, July 2022.
- Research article on “Impact of Starch Storage Condition on Glycemic Index and Resistant Starch of Cooked Potato (*Solanum tuberosum*) Tubers has been recognized as a “**Top Cited Article 2020-21**” in the journal Starch/Stark
- **Awarded the best paper by the Indian Potato Association (IPA)** in 2022 “Utilization of potato waste for production of bioethanol : A novel technology”. Potato J, 48, 124–133.

## RESEARCH ARTICLES

- **Kumar, D.**, Lal, M. K., Dutt, S., Raigond, P., Changan, S. S., Tiwari, R. K., Chourasia, K. N., Mangal, V., & Singh, B. (2022). Functional Fermented Probiotics, Prebiotics, and Synbiotics from Non-Dairy Products: A Perspective from Nutraceutical. Molecular Nutrition and Food Research, 66(14). <https://doi.org/10.1002/MNFR.202101059>
- **Kumar, D.**, Shukla, L., Singh, S. B., Nain, L., & Singh, S. (2021). Bacterial consortium for efficient degradation of di-ethyl phthalate in soil microcosm. Environmental Sustainability, 4(4), 797–804. <https://doi.org/10.1007/s42398-021-00199-1>
- **Kumar, D.**; Som Dutt, SS Changan, MK Lal, AK Jaiswal, RK Tiwari, Vikas Mangal, Pinky Raigond, and B. S. (2021). Utilization of potato waste for production of bioethanol : A novel technology. Potato J, 48, 124–133.
- **Kumar, D.**, Shukla, L., Singh, S., Bala Singh, S., Kumar Jha, S., & Prakash, G. (2018). Assessment of diverse phthalate esters (PAEs) from irrigated agriculture soil under protected cultivation in IARI, New Delhi. International Journal of Chemical Studies, 6(3), 3432–3435.
- Tiwari, R. K., Kumar, R., Sharma, S., Sagar, V., Aggarwal, R., Naga, K. C., Lal, M. K., Chourasia, K. N., **Kumar, D.**, & Kumar, M. (2020). Potato dry rot disease: current status, pathogenomics and management. In 3 Biotech (Vol. 10, Issue 11, pp.

1–18). Springer Science and Business Media Deutschland GmbH.  
<https://doi.org/10.1007/s13205-020-02496-8>

- Tiwari, R. K., Lal, M. K., Kumar, R., Chourasia, K. N., Naga, K. C., **Kumar, D.**, Das, S. K., & Zinta, G. (2020). Mechanistic insights on melatonin-mediated drought stress mitigation in plants. *Physiologia Plantarum*, 172(2), 1212–1226. <https://doi.org/10.1111/ppl.13307>
- Singh, R., Kumar, S., Kumar, H., Kumar, M., Kumar, A., & **Kumar, D.** (2017). Effect of irrigation and integrated nutrient management on growth and yield of chickpea (*Cicer Arietinum* L.). *Plant Archives*, 17(2), 1319–1323.
- Singh, D., Thapa, S., Mahawar, H., **Kumar, D.**, Geat, N., & Singh, S. K. (2022). Prospecting potential of endophytes for modulation of biosynthesis of therapeutic bioactive secondary metabolites and plant growth promotion of medicinal and aromatic plants. *Antonie van Leeuwenhoek*, 115(6), 699–730. <https://doi.org/10.1007/S10482-022-01736-6/FIGURES/3>
- Singh, A., Raigond, P., Lal, M. K., Singh, B., Thakur, N., Changan, S. S., **Kumar, D.**, & Dutt, S. (2020). Effect of cooking methods on glycemic index and in vitro bioaccessibility of potato (*Solanum tuberosum* L.) carbohydrates. *Lwt*, 127(April), 109363. <https://doi.org/10.1016/j.lwt.2020.109363>
- Raigond, P., Parmar, V., Thakur, A., Lal, M. K., Changan, S. S., **Kumar, D.**, Dutt, S., & Singh, B. (2021). Composition of Different Carbohydrate Fractions in Potatoes: Effect of Cooking and Cooling. *Starch - Stärke*, 2100015. <https://doi.org/10.1002/star.202100015>
- Raigond, P., Rawal, S., Parmar, V., Thakur, A., Bandana, Mishra, T., Dutt, S., Jaiswal, A., Lal, M. K., Changan, S. S., **Kumar, D.**, & Singh, B. (2022). Nutritional, Processing and Sensorial Attributes of Organic and Inorganic Indian Potatoes. *Potato Research*, 65(4), 1051–1073. <https://doi.org/10.1007/s11540-022-09564-x>
- **Kumar, D.**, Kaushik, R., & Singh, S. (2016). Molecular and biochemical profiling of pentachlorophenol utilizing bacteria from pulp and paper mill effluent irrigated soil in Northern India. *Journal of Pure and Applied Microbiology*, 10(3), 2045–2055.
- **Kumar, D.**, Lal, M. K., Dutt, S., Raigond, P., Changan, S. S., Tiwari, R. K., Chourasia, K. N., Mangal, V., & Singh, B. (2022). Front Cover: Functional Fermented Probiotics, Prebiotics, and Synbiotics from Non-Dairy Products: A

Perspective from Nutraceutical. *Molecular Nutrition & Food Research*, 66(14), 2270037. <https://doi.org/10.1002/MNFR.202270037>

- Milan Kumar Lal, Rahul Kumar Tiwari, Arvind Jaiswal, S. S. C., **Dharmendra Kumar**, Awadhesh Kumar, Vinod Kumar, Jagdev Sharma, P. R., & Singh, S. D. and B. (2021). An emerging concept of phosphorus nutrition in potato under elevated carbon dioxide (CO<sub>2</sub>) condition. *Potato Journal*, 48(1), 81–88.
- Mangal, V., Lal, M. K., Tiwari, R. K., Altaf, M. A., Sood, S., **Kumar, D.**, Bharadwaj, V., Singh, B., Singh, R. K., & Aftab, T. (2023). Molecular Insights into the Role of Reactive Oxygen, Nitrogen and Sulphur Species in Conferring Salinity Stress Tolerance in Plants. *Journal of Plant Growth Regulation*, 42(2), 554–574. <https://doi.org/10.1007/s00344-022-10591-8>
- Lal, M. K., Kumar, A., Raigond, P., Dutt, S., Changan, S. S., Chourasia, K. N., Tiwari, R. K., **Kumar, D.**, Sharma, S., Chakrabarti, S. K., & Singh, B. (2021). Impact of Starch Storage Condition on Glycemic Index and Resistant Starch of Cooked Potato (*Solanum tuberosum*) Tubers. *Starch/Staerke*, 73(1–2), 1–8. <https://doi.org/10.1002/star.201900281>
- Lal, M. K., Tiwari, R. K., Kumar, A., Dey, A., Kumar, R., **Kumar, D.**, Jaiswal, A., Changan, S. S., Raigond, P., Dutt, S., Luthra, S. K., Mandal, S., Singh, M. P., Paul, V., & Singh, B. (2022). Mechanistic Concept of Physiological, Biochemical, and Molecular Responses of the Potato Crop to Heat and Drought Stress. *Plants*, 11(21). <https://doi.org/10.3390/plants11212857>
- Lal, M. K., Tiwari, R. K., Kumar, R., Naga, K. C., Kumar, A., Singh, B., Raigond, P., Dutt, S., Chourasia, K. N., **Kumar, D.**, Parmar, V., & Changan, S. S. (2021). Effect of potato apical leaf curl disease on glycemic index and resistant starch of potato (*Solanum tuberosum* L.) tubers. *Food Chemistry*, 359(April), 129939. <https://doi.org/10.1016/j.foodchem.2021.129939>
- Chourasia, K. N., More, S. J., Kumar, A., **Kumar, D.**, Singh, B., Bhardwaj, V., Kumar, A., Das, S. K., Singh, R. K., Zinta, G., Tiwari, R. K., & Lal, M. K. (2022). Salinity responses and tolerance mechanisms in underground vegetable crops: an integrative review. *Planta* 2022 255:3, 255(3), 1–25. <https://doi.org/10.1007/S00425-022-03845-Y>
- Chourasia, K. N., Lal, M. K., Tiwari, R. K., Dev, D., Kardile, H. B., Patil, V. U., Kumar, A., Vanishree, G., **Kumar, D.**, Bhardwaj, V., Meena, J. K., Mangal, V.,

Shelake, R. M., Kim, J.-Y., & Pramanik, D. (2021). Salinity Stress in Potato: Understanding Physiological, Biochemical and Molecular Responses. *Life*, 11(6), 545. <https://doi.org/10.3390/LIFE11060545>

- Lal, M. K., Tiwari, R. K., Kumar, A., Kumar, R., **Kumar, D.**, Jaiswal, A., Changan, S. S., Dutt, S., Popović-Djordjević, J., Singh, B., & Simal-Gandara, J. (2024). Methodological Breakdown of Potato Peel's Influence on Starch Digestibility, In Vitro Glycemic Response and Pasting Properties of Potato. *American Journal of Potato Research*, 1–11. <https://doi.org/10.1007/S12230-024-09942-W/FIGURES/4>
- Tiwari, R. K., Lal, M. K., Naga, K. C., Kumar, R., Chourasia, K. N., S, S., **Kumar, D.**, & Sharma, S. (2020). Emerging roles of melatonin in mitigating abiotic and biotic stresses of horticultural crops. In *Scientia Horticulturae* (Vol. 272, p. 109592). Elsevier B.V. <https://doi.org/10.1016/j.scienta.2020.109592>
- **Kumar, D.**, Kaushik, R., Lata, & Saxena, A. K. (2015). Biotransformation of Pentachlorophenol to intermediary metabolites by bacteria isolated from pulp and paper mill effluent irrigated cultivable land. *Journal of Pure and Applied Microbiology*, 9 (Special Edition 2), 201–208.
- Tiwari, R. K., Sharma, S., Kumar, R., Lal, M. K., Naga, K. C., **Kumar, D.**, & Sagar, V. (2021). Morpho-molecular identification of potato silver scurf caused by *Helminthosporium solani* and standardization of spore inundation technique. *Potato Journal*, 48(1), 59–66.

## BOOK CHAPTERS

1. **Kumar, D.**, Dutt, S., Raigond, P., Changan, S. S., Lal, M. K., Sharma, D., & Singh, B. (2020). Potato Probiotics for Human Health. In *Potato* 271–287. Springer Singapore. [https://doi.org/10.1007/978-981-15-7662-1\\_15](https://doi.org/10.1007/978-981-15-7662-1_15)
2. **Kumar, D.**, Dutt, S., Raigond, P., Changan, S. S., Lal, M. K., Tiwari, R. K., Chourasia, K. N., & Singh, B. (2021). Different Biofertilizers and Their Application for Sustainable Development. *Microbial Technology for Sustainable Environment*, 31–48. Springer, Singapore. [https://doi.org/10.1007/978-981-16-3840-4\\_3](https://doi.org/10.1007/978-981-16-3840-4_3)
3. **Kumar, D.**, Dutt, S., Raigond, P., Changan, S. S., Kumar Lal, M., Tiwari, R. K., Chourasia, K. N., & Singh, B. (2021). Beneficial Microorganisms in Crop Growth,

Soil Health, and Sustainable Environmental Management : Current Status and Future Perspectives. *Plant-Microbial Interactions and Smart Agricultural Biotechnology*, 11–32. CRC Press. <https://doi.org/10.1201/9781003213864-2>

4. **Kumar, D.**, Dutt, S., Changan, S. S., Lal, M. K., Tiwari, R. K., Kumar, R., Naga, K. C., Kumar, A., Nayak, L., Mangal, V., & Singh, B. (2024). Role of soil microbes in modulating the physiological attributes of plants under extreme environmental conditions. *Improving Stress Resilience in Plants*, 15–34. <https://doi.org/10.1016/B978-0-443-18927-2.00013-3>
5. Nayak, L., Lal, M. K., Tiwari, R. K., Kumar, R., **Kumar, D.**, Altaf, M. A., & Kumar, A. (2024). Modulation in phytohormone metabolism in plants under stress conditions. *Improving Stress Resilience in Plants*, 297–319. <https://doi.org/10.1016/B978-0-443-18927-2.00021-2>
6. Sharma, D., Gahtyari, N. C., Chhabra, R., & **Kumar, D.** (2020). Role of Microbes in Improving Plant Growth and Soil Health for Sustainable Agriculture. 207–256. Springer Nature, Singapore. [https://doi.org/10.1007/978-981-15-3208-5\\_9](https://doi.org/10.1007/978-981-15-3208-5_9)
7. Changan, S. S., Taylor, M. A., Raigond, P., Dutt, S., **Kumar, D.**, Lal, M. K., Kumar, M., Tomar, M., & Singh, B. (2020). Potato Carotenoids. In *Potato* (pp. 151–171). Springer Singapore. [https://doi.org/10.1007/978-981-15-7662-1\\_9](https://doi.org/10.1007/978-981-15-7662-1_9)
8. Lal, M. K., Kumar, A., Kardile, H. B., Raigond, P., Changan, S. S., Thakur, N., Dutt, S., Tiwari, R. K., Chourasia, K. N., **Kumar, D.**, & Singh, B. (2020). Biofortification of Vegetables. In *Advances in Agri-Food Biotechnology* (pp. 105–129). Springer Singapore. [https://doi.org/10.1007/978-981-15-2874-3\\_5](https://doi.org/10.1007/978-981-15-2874-3_5)
9. Lal, M. K., Kumar, A., Kumar, A., Jena, R., Raigond, P., **Kumar, D.**, Thakur, N., & Singh, B. (2020). Minerals in Potato. In *Potato* (pp. 87–112). Springer Singapore. [https://doi.org/10.1007/978-981-15-7662-1\\_6](https://doi.org/10.1007/978-981-15-7662-1_6)
10. Singh, B., Raigond, P., Jaiswal, A; & **Kumar, D.** (2020). Potato Post-Harvest Management strategies. (pp.343-361). (NIPA, New Delhi).
11. Arvind Jaiswal, Pinky Raigond, S. S. Changan., & Milan Kumar Lal, **Kumar D.**, and B. Singh. (2021). Value Addition in Potatoes. In C. S. K. Vinay Bhardwaj (Ed.), *Potato in Sub-tropics: A Saga of Success*. International Books & Periodical Supply Service.
12. Milan Kumar Lal, Arvind Kumar Jaiswal, Pinky Raigond, B., Singh, Nitasha Thakur, Som Dutt, S. S. Changan., **Kumar D.**, R. K. T. K. N. C., & Naga, K. C. (2021). Post-



Harvest Management, Value Addition and Processing of Potato. In *Recent Advances in Root and Tuber Crops*. Brillion Publishing

13. Rahul Kumar Tiwari, Ravinder Kumar, Kailash Chandra Naga, VinaySagar, **Kumar D**, Milan Kumar Lal, Kumar Nishant Chourasia, S. S. (2021). Recent Advancements in Integrated Management of Potato Diseases. In *Brillion Publishing, New Delhi*
14. Singh P, Kumar S, Srivastava S, Nagargade M, **Kumar D**, Sinha PK (2022) Endophytes for Sustainable Sugar Beet Production. Sugar Beet Cultiv Manag Process 777–792 . [https://doi.org/10.1007/978-981-19-2730-0\\_38](https://doi.org/10.1007/978-981-19-2730-0_38)

## POSTER/ORAL/ABSTRACT IN CONFERENCES/SYMPOSIA

1. **Poster presentation** on the topic entitled “Assessment of diverse phthalate esters from IARI farm under protected cultivation”. By **Dharmendra Kumar**, Shukla L, Singh S and Singh SB. 3<sup>rd</sup> International IUPAC Conference on APCHNE: New Chemistries for Phytomedicines and Crop Protection Chemicals, New Delhi, India 2016.
2. **Poster presentation** on the topic entitled “Potato as a bioenergy crop for fuel ethanol production: Perspectives and challenges” by **Dharmendra Kumar**, Som Dutt, Pinky Raigond, Sushil Sudhakar Changan, Milan Kumar Lal, Kumar Nishant Chourasia, Rahul Kumar Tiwari, Preeti Singh, Subhash S and Brajesh Singh, published at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
3. **Poster presentation** on the topic entitled “Interactive Effect of Potato Apical Leaf Curl disease on Resistant starch and Glycemic index of Potato (*Solanum tuberosum* L.)” Milan Kumar Lal, Rahul Kumar Tiwari, Ravinder Kumar, Arvind Jaiswal, Awadshesh Kumar, **Dharmendra Kumar**, Sushil Sudhakar Changan, Asha Thakur, Vandana Parmar, Vinod Kumar, Som Dutt, Vijay Paul, Sudhir Kumar, Madan Pal Singh, Brajesh Singh during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021.
4. **Poster presentation** on the topic entitled “Application of high-throughput plant phenomics technique for potato” Sushil S. Changan, Jagadish Rane, Mahesh Kumar, Brajesh Singh, Som Dutt, Pinky Raigond, **Dharmendra kumar** and Milan Kumar Lal at International Plant Physiology Virtual Conference-2020, Prospects of Plant Physiology for Climate Proofing Agriculture December, 6-7, 2020, New Delhi.

5. **Poster presentation** on the topic entitled “Application of high throughput plant phenomics techniques for potato” by Sushil S. Changan, Brajesh Singh, Som Dutt, Pinky Raigond, **Dharmendra Kumar** and Milan Kumar Lal, published at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
6. **Poster presentation** on the topic entitled “High throughput method development for Glycemic Index and Resistant Starch content of Potato (*Solanum tuberosum*) tubers” by Milan Kumar Lal, Pinky Raigond, Awadhesh Kumar, Som Dutt, Sushil Sudhakar Changan, **Dharmendra Kumar**, Nitasha Thakur, Swarup Kumar Chakrabarti and Brajesh Singh, published at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
7. **Poster presentation** on the topic entitled “Development of throughput protocol for in vitro estimation of Glycemic Index in potato (*Solanum tuberosum*) tubers” by Milan Kumar Lal, Awadhesh Kumar, Pinky Raigond, Som Dutt, Sushil Sudhakar Changan, **Dharmendra Kumar**, Kumar Nishant Chourasia, Swarup Kumar Chakrabarti and Brajesh Singh, published at 2<sup>nd</sup> International Conference Recent advances in agricultural, environmental & applied sciences for global development, DR Yashwant Singh Parmar University of Horticulture and forestry, Solan, HP, India on 27-29 september 2019.
8. **Poster presentation** on the topic entitled “Genome-wide identification and expression analysis of ABA receptor (StPYL) family genes in potato (*Solanum tuberosum* L.) under cold stress” by Kumar Nishant Chourasia, H.B. Kardile, Vinay Bhardwaj, V.U. Patil, Salej Sood, Sundaresha S., M.K. Lal, R.K. Tiwari, **Dharmendra Kumar**, Subhash S., G.Vanishree, Preeti Singh, Brajesh Singh and S.K. Chakrabarti published at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
9. **Poster presentation** on the topic entitled “Isolation and characterization of endophytic bacteria from potato tuber and roots” by Preeti Singh, Hemant B. Kardile, Sanjay Rawal, Nirmal Kant Sharma, V.K. Dua, Jagdev Sharma, **Dharmendra Kumar** and Kumar Nishant Chourasia at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
10. **Oral presentation** on the topic entitled “Fermentation technology for waste utilization and value addition to potatoes” **Dharmendra Kumar**, Som Dutt, Sushil Sudhakar Changan, Milan Kumar Lal, Rahul Kumar Tiwari, Vikas Mangal and

Brajesh Singh during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021

- 11. Oral presentation** on the topic entitled “Saccharification and Fermentation of cull potatoes for the production of sugars and bioethanol technology” **Dharmendra Kumar**, Som Dutt, Sushil Sudhakar Changan, Milan Kumar Lal, and Brajesh Singh during in the 62<sup>nd</sup> Annual International Conference of the Association of Microbiologists of India (AMI) “Microbiology and Society: Current Trends and Future Prospects” (MSCTFP-2022) at Mysore, Karnataka from 21-23 September 2022.
- 12. Oral presentation** on the topic entitled “Vacuum Impregnation: A novel tool for the development of ascorbic acid fortified potato and its products” Sushil S Changan, Vandana Parmar, Asha Thakur, **Dharmendra Kumar**, Milan Kumar Lal, Arvind Jaiswal, Pinky Raigond, Som Dutt, and Brajesh Singh during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021
- 13. Oral presentation** on the topic entitled “Extrinsic and Intrinsic factor regulating the glycemic response of potato” Milan Kumar Lal, Arvind Jaiswal, Awadhesh Kumar, Rahul Kumar Tiwari, Ravinder Kumar, **Dharmendra Kumar**, Sushil Sudhakar Changan, Asha Thakur, Vandana Parmar, Vinod Kumar, Som Dutt, Vijay Paul, Sudhir Kumar, Madan Pal Singh, and Brajesh Singh during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021
- 14. Oral presentation** on the topic entitled “Phosphorus economy and yield enhancement in potato through co-inoculation of AM-fungi and PSB in a Himalayan acid Alfisol” by “Anil K Choudhary, J Sharma, VK Dua, **Dharmendra Kumar**, Name Singh and Sushil Kumar” during International Potato e-Conference at ICAR-CPRI, Shimla, Nov. 23-26, 2021
- 15. Oral presentation** on “Genome-wide landscape of carotenoids biosynthesis pathway genes in potato” by Som Dutt, Anshul Sharma Manjul, Pinky Raigond, Kalpana, Shivangi Varshney, Sarika Sahu, AR Rao, Anil Rai, Sushil Sudhakar Changan, **Dharmendra Kumar**, Milan Kumar Lal, Brajesh Singh, Swarup Kumar Chakrabarti at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
- 16. Oral presentation** on the topic entitled “Development Of dsRNA Based Potato Sprout Suppressant” Sushil S. Changan, Sundaresha, Som Dutt, Pinky Raigond, **Dharmendra Kumar**, Milan Kumar Lal, Brajesh Singh during the International

Conference on “New Paradigms for Agriculture, Food and Sustainability Concerns (NPAFSC-2021)” 26-28 February 2021.

17. **Oral presentation** on “Insulin-like antigens in potatoes: A new hope for developing insulin-rich potatoes for diabetics” by Pinky Raigond, Pooja Bhardwaj, Baswraj Raigond, Brajesh Singh, Som Dutt, Sushil S Changan, Milan Kumar Lal, **Dharmendra Kumar** at International Conference Global Potato Conclave 2020, Mahatma Mandir, Gandhinagar, Gujarat, India on 28-31 January 2020.
18. **Oral presentation** on “Modified protocol on hydrolysis index could be decisive determining the glycemic index in Potato” by Milan Kumar Lal, Awadhesh Kumar, Pinky Raigond, Som Dutt, Sushil S Changan, **Dharmendra Kumar**, Nitasha Thakur, Swarup Kumar Chakrabarti and Brajesh Singh at the National conference of plant physiology-2019, Kerala Agriculture University, Thrissur, Kerala, India on 19-21 December 2019.

## POPULAR ARTICLES

1. **Dharmendra Kumar**, Som Dutt, Pinky Raigond, Sushil Sudhakar Changan, Milan Kumar Lal, Brajesh Singh and S K Chakrabarti (2020) on “Bio-ethanol production from waste potatoes” Newsletter number 78, ICAR-CPRI, Shimla.
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3. **Dharmendra Kumar**, Som Dutt, Pinky Raigond, Sushil S Changan, MK Lal, RK Tiwari and Brajesh Singh (2021). Role of Microbes in Potato and Potato-Based Products Ecofarming e-Magazine for Agriculture and Allied Sciences.
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10. Milan K Lal, Awadhesh Kumar, Pinky Raigond, Som Dutt, Sushil S Changan, Kumar N Chourasia, Rahul K Tiwari, Subhash S, **Dharmendra Kumar**, SK Chakrabarti & Brajesh Singh (2019) on “Development of high throughput protocol for in vitro estimation of glycemic index in Potatoes” Newsletter number 77, ICAR-CPRI, Shimla.
11. Sushil S Changan, Som Dutt, Pinky Raigond, **Dharmendra Kumar**, Milan K Lal & Brajesh Singh (2020) on “Modified LC-MS method for Abscisic acid (ABA) quantification in potato” Newsletter number 80, ICAR-CPRI, Shimla.
12. Sushil S. Changan, Brajesh Singh, Som Dutt, Pinky Raigond, Arvind Jaiswal, **Dharmendra Kumar**, Milan Kumar Lal, Asha Thakur, Vandana Thakur (2021) Modified technique for production of granular coldwater soluble potato starch (CWSPS). Newsletter number 84, ICAR-CPRI, Shimla.
13. Nitasha Thakur, Pinky Raigond, M K Lal, V Parmar, S S Changan, **Dharmendra Kumar**, Som Dutt, Arvind Jaiswal & Brajesh Singh (2020) Blending of guar gum with cooked potatoes help to decrease glycemic index. Newsletter number 82, ICAR-CPRI, Shimla.
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