

Research papers:

1. Verma, A. K., Gaur, A. K., Pant, A. K., Mishra, D. P., & Garg, G. K. (1998). Callus Induction and suspension Culture Development from Leaf Buds of Poplar (*Populus deltoides*). *Physiology And Molecular Biology Of Plants*, 4, 29-32. (Impact factor 2.0) (NAAS 7.35)
2. Verma, A. K., Chaudhary, U., Kumar, R., Pant, A. K., Gaur, A. K., & Lakhchaura, B. D. (2000). Anthocyanin, bisabolol and phenylammonialyase activity in cell cultures of *Populus deltoides*. *Indian Journal Of Experimental Biology* 38: 1050-1053 (Impact Factor 1.165) (NAAS 7.71)
3. Verma, A. K., & Chand, L. (2001). Regeneration of Pigeonpea (*Cajanus cajan* L.) from Cotyledons and Leaf Tissues Through Somatic Embryogenesis. *Journal Of Plant Biology-New Delhi*, 28(3), 265-270.
4. Verma, A. K., Vikram, A., Gaur, A. K., & Chand, L. (2003). Isoperoxidases are Lined with Differentiation in Callus Cultures of *Cajanus cajan* L. *Physiology And Molecular Biology Of Plants*, 9, 269-272.. (Impact factor 0.9) (NAAS 7.35)
5. Verma, A. K., & Chand, L. (2005). Agrobacterium-mediated transformation of Pigeonpea (*Cajanus cajan* L.) with uidA and cryIA (b) genes. *Physiology and Molecular Biology of Plants*, 11(1), 99-109. (Impact factor 0.9) (NAAS 7.35)
6. Gupta, S., Verma, A. K., & Chand, L. (2006). Isolation and characterization of gene encoding vicilin (7S) protein from cDNA clones of immature seeds of pigeon pea [*Cajanus cajan* (L.) Millsp.]. *Indian Journal of Biotechnology*. 5: 32-36. (Impact Factor 0.386) (NAAS 6.25)
7. Gupta, S., Mishra, A., Verma, A. K., Pandey, R., & Chand, L. (2009). Heterologous Expression of Legumin Gene in *E. coli* Isolated from cDNA Clones of Immature Seeds of Pigeonpea (*Cajanus cajan* L.). *Applied Biochemistry and Biotechnology*, 157(3), 377-394. .(Impact factor 1.239) (NAAS 7.61)
8. Singh, S., Dubey, A., Tiwari, L., & Verma, A. K. (2009). Microbial profile of stored jaggery: A traditional Indian sweetener. *Sugar Tech*, 11(2), 213-216. (NAAS Rating 5.0) (Impact Factor; 0.576)
9. Dubey, A., Singh, B. R., Tandon, S. and Verma, A. K. (2009) Effect of Apple pomace on wheat flour. National conference on engineering for food &Bio-processing (Feb 27th –March 1, 2009), Pantnagar, Proceeding pp 159-162.
10. Gupta, Nidhi, Verma, A. K., Dubey, A. and Tewari, Lakshmi (2009) Comparative evaluation of Microbial Isolatiotes of Phoenix dactylifera for alcohol tolerance and bioethanol production from sugarcane juice. National conference on engineering for food &Bio-processing (Feb 27th – March 1, 2009), Pantnagar, Proceeding pp 180-186.
11. Chand, K., Singh, A., Verma, A. K., & Lohani, U. C. (2011). Quality evaluation of jaggery chocolate under various storage conditions. *Sugar Tech*, 13(2), 150. (NAAS Rating 5.0) (Impact Factor; 0.576)
12. Kumar, V., Singh, P., Sangwan, P., Verma, A. K., & Agarwal, S. (2011). Phytase producing bacteria from Himalayan soil and their tricalcium phosphate solubilizing abilities. *Annals of Biology*, 27(2), 121-128. (NAAS Rating 3.8)
13. Gupta, S., & Verma, A. K. (2012). Comparative study of different protocols for isolation of RNA from polysaccharides and polyphenolics rich plant tissues. *International Journal of Plant Physiology and Biochemistry*, 4(2), 23-26.
14. Agrawal, R., Singh, R., Verma, A., Panwar, P., & Verma, A. K. (2012). Partial purification and characterization of alkaline protease from *Bacillus* sp. isolated from soil. *World J. Agric. Sci*, 8(1), 129-133.

15. Agrawal, R., Satilewal, A., Chaudhary, M., Verma, A., Singh, R., **Verma, A. K.**, & Singh, K. P. (2012). Rapid detection of cadmium-resistant plant growth promitory rhizobacteria: a perspective of ELISA and QCM-based immunosensor. *J. Microbiol. Biotechnol.*, 22(6), 849-855. (**NAAS Rating 7.5**). (**Impact Factor 1.525**)
16. **Verma, A. K.**, Singh, S., Singh, S., & Dubey, A. (2012). 16S rDNA Sequence Based Characterization of Bacteria in Stored Jaggery in Indian Jaggery Manufacturing Units. *Sugar Tech*, 14(4), 422-427. (**NAAS Rating 5.0**) (**Impact Factor; 0.576**)
17. Kumar, V., Singh, G., **Verma, A. K.**, & Agrawal, S. (2012). *In Silico* characterization of histidine acid phytase sequences. *Enzyme research*, 2012.
18. Agrawal, R., Satilewal, A., & **Verma, A. K.** (2013). Development of a β -glucosidase hyperproducing mutant by combined chemical and UV mutagenesis. *3 Biotech*, 3(5), 381-388. (**Impact Factor 1.361**) (**NAAS 6.99**)
19. Deepak Kumar, Vinod Kumar, **A. K. Verma** and Ashutosh Dubey (2013) Kinetic characterization and immobilization of partially purified extracellular alkaline protease from rhizospheric soil bacterium *Bacillus subtilis* strain EN4. *Journal of pure and applied microbiology*, Volume 7 No. 1, 727-732 (**NAAS Rating 6.4**) (**Impact factor 0.073**)
20. **Verma, A. K.**, Saini, S., Nishad, S., Kumar, V., Singh, S., & Dubey, A. (2013). Production, purification and characterization of beta-glucosidase from *Bacillus subtilis* strain PS isolated from sugarcane bagasse. *Journal of pure and applied microbiology*, 7(1), 803-810. (**NAAS Rating 6.4**) (**Impact factor 0.073**)
21. Agrawal, R., Satilewal, A., & **Verma, A. K.** (2013). Production of an extracellular cellobiase in solid state fermentation. *The Journal of Microbiology, Biotechnology and Food Sciences*, 2(4), 2339-2350.
22. Kumar, V., Singh, P., Jorquera, M. A., Sangwan, P., Kumar, P., **Verma, A. K.**, & Agrawal, S. (2013). Isolation of phytase-producing bacteria from Himalayan soils and their effect on growth and phosphorus uptake of Indian mustard (*Brassica juncea*). *World Journal of Microbiology and Biotechnology*, 29(8), 1361-1369. (**NAAS rating :7.5**) (**Impact Factor; 1.779**)
23. Raypa, P., **Verma, A. K.**, Dubey, A., & Tewari, S. K. (2013). In vitro Establishment of a Threatened Plant Species *Adina Cordifolia*. *Octa Journal of Biosciences*, 1(2)..
24. Kumar, D., Kumar, V., **Verma, A. K.**, Singh, P., & Dubey, A. (2014). Characterization and immobilization of partially purified alkaline protease extracted from rhizospheric soil bacterium, *Bacillus megaterium* strain EN-2 and *Bacillus subtilis* strain EN-3. *African Journal of Microbiology Research*, 8(1), 33-39.
25. Chand, K., **Verma, A. K.**, Kumar, A., & Shahi, N. C. (2014). Effect of edible coating on quality parameters of jaggery during storage. *Sugar Tech*, 16(1), 80-85. (**NAAS Rating 5.0**) (**Impact Factor; 0.576**)
26. Keerti, Gupta, A., Kumar, V., Dubey, A., & **Verma, A. K.** (2014). Kinetic characterization and effect of immobilized thermostable β -glucosidase in alginate gel beads on sugarcane juice. *ISRN biochemistry*, 2014.
27. Kumar, V., Sangwan, P., **Verma, A. K.**, & Agrawal, S. (2014). Molecular and biochemical characteristics of recombinant β -propeller Phytase from *Bacillus licheniformis* strain PB-13 with potential application in aquafeed. *Applied biochemistry and biotechnology*, 173(2), 646-659. (**Impact factor 1.239**) (**NAAS 7.61**)
28. Kumar, V., Singh, G., Sangwan, P., **Verma, A. K.**, & Agrawal, S. (2014). Cloning, Sequencing, and *In Silico* Analysis of-Propeller Phytase *Bacillus licheniformis* Strain PB-13. *Biotechnology research international*, 2014..

29. Sharma, D., Kumbhar, B. K., **Verma, A. K.**, & Tewari, L. (2014). Optimization of critical growth parameters for enhancing extracellular lipase production by alkalophilic *Bacillus* sp. *Biocatalysis and Agricultural Biotechnology*, 3(4), 205-211.
30. **Verma, A. K.**, Parinati, R., Nishad, S., & Shalini, S. (2014). Extracellular production, partial purification and biochemical characterization of a β -glucosidase from *Bacillus subtilis* strain Ps identified in sugarcane bagasse. *World Journal of Agricultural Sciences*, 10(6), 269-278.
31. Neha Trivedi, **A. K. Verma**, Ashutosh Dubey (2015) 16S rDNA Based Identification Of Butachlor Degrading Soil Bacterial Isolates From Rice Field In Uttarakhand Terai Region . *Journal of Environmental and Applied Bioresearch*. Vol. 03, No. 02, pp. 73 – 78 (**Impact Factor 1.324**)
32. Bhawna Tyagi, Ashutosh Dubey, **A.K. Verma**, Salil Tiwari (2015) Antibacterial Activity of Phenolics compounds against Pathogenic Bacteria. *Int. J. Pharm. Sci. Rev. Res.*, 35(1),: 16-18. **Impact factor (as of 31st December 2013) = 2.191**
33. Neelam Aryaa, OM Prakasha, **A. K. Verma**, Vivekanand, A. K. Pant (2015) Variation In Antioxidant Potential Of Curcuma Longa L. Collected From Different Ecological Niches Of Western Himalayan Region. *International Journal of Pharmacy and Pharmaceutical Sciences* 7: (7) 85-90
34. Agrawal, R., **Verma, A. K.**, & Satlewal, A. (2016). Application of nanoparticle-immobilized thermostable β -glucosidase for improving the sugarcane juice properties. *Innovative Food Science & Emerging Technologies*, 33, 472-482.. (**Impact Factor: 3.273**) (**NAAS 9.0**)
35. Chamoli, S., Kumar, P., Navani, N. K., & **Verma, A. K.** (2016). Secretory expression, characterization and docking study of glucose-tolerant β -glucosidase from *B. subtilis*. *International journal of biological macromolecules*, 85, 425-433. (**Impact Factor: 3.096**) (**NAAS 9.14**)
36. Singh, G., **Verma, A. K.**, & Kumar, V. (2016). Catalytic properties, functional attributes and industrial applications of β -glucosidases. *3 Biotech*, 6(1), 3. (**Impact Factor 1.361**) (**NAAS 6.99**) **Review**
37. Panwar, P., Dubey, A., & **Verma, A. K.** (2016). Evaluation of nutraceutical and antinutritional properties in barnyard and finger millet varieties grown in Himalayan region. *Journal of food science and technology*, 53(6), 2779-2787. (**NAAS 7.5**) (**Impact Factor 1.241**)
38. Verma A. K. & Singh Deepa (2016) Abiotic Stress and Crop Improvement: Current Scenario. *Advances in Plants & Agriculture Research* 4(4): 00149. DOI: 10.15406/apar.2016.04.00149.
39. Baral, P., Dubey, A., Tewari, S., Vasmatkar, P., & **Verma, A. K.** (2016) Total Polyphenolic Contents and Antioxidant Activity of Leaf, Bark and Root of *Adina cordifolia* Benth. & Hook. Global **Impact Factor** 0.701
40. Agrawal, R., Srivastava, A., & **Verma, A. K.** (2016). Immobilization of β -glucosidase onto silicon oxide nanoparticles and augment of phenolics in sugarcane juice. *Journal of food science and technology*, 53(7), 3002-3012.. (**NAAS 7.5**) (**Impact Factor 1.241**)
41. Chand, K., Pant, M., **Verma, A. K.**, & Shahi, N. C. (2017). Optimization of enzymatic saccharification for quality bio-oil from rice straw. *IJCS*, 5(1), 233-239. (**NAAS Rating: 5.31**) (**Impact Factor: GIF: 0.565, RJIF: 4.86**)
42. Agrawal, R., Satlewal, A., and **Verma, A. K.** (2017). Utilization of *Citrus sinensis* waste for the production of β -glucosidase by solid-state fermentation using a *Bacillus subtilis* mutant. *Environmental Engineering and Management Journal. July 2017, Vol.16, No. 7, 1465-1471* (**Impact Factor: 0.806**).
43. Sandip Mandal, T. K. Bhattacharya **A. K. Verma** Juma Haydary (2017) Optimization of process parameters for bio-oil synthesis from pine needles (*Pinus roxburghii*) using response surface methodology. *Chem. Pap.* (**Impact Factor 1.258**)
44. ANAND KUMAR, KHAN CHAND, N C SHAHI, ANIL KUMAR And **A K VERMA** (2017) Optimization of coating materials on jaggery for augmentation of storage quality. *Indian Journal of Agricultural Sciences* 87(10): 1391–7 **NAAS 6.22**

- 45.** Ranjna Sirohi, Anupama Singh, Ayon Tarafdar, Navin Chandra Shahi, Ashok Kumar Verma,, Anurag Kushwaha **(2018)** Cellulase Production from Pre-treated Pea Hulls Using *Trichoderma reesei* Under Submerged Fermentation. *Waste and Biomass Valorization* <https://doi.org/10.1007/s12649-018-0271-4>. **Impact Factor 1.337 NAAS 7.34**
- 46.** Panwar, P., **Verma, A. K. and Dubey, A.**, **(2018)** Purification, developmental expression, and in silico characterization of α -amylase inhibitor from *Echinochloa frumentacea*. **3Biotech** 8:227, 2-16 Impact Factor **1.497**
- 47.** Archana Singh, Ashutosh Dubey, Vivek Chandra Verma, Brijesh Lekhak and **A.K. Verma (2018)** Enhanced Saccharification in Sugarcane Leaves by Combined Pretreatment of Ionic Liquid and Aqueous Ammonia. **Int.J.Curr.Microbiol.App.Sci** (2018) 7(5): 3522-3532. **NAAS 5.38**,
- 48.** Dipti Singh. Ashutosh Dubey. A.K. Verma. Evaluation of morphological and physiological parameters during drought stress in Barnyard millet growing in Kumaun region of Himalayan. **Res. J. Chem. Env. Sci.** Vol 6[3] June 2018. 64-85 **NAAS 4.64, SCI impact factor of 0.636**
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- 50.** Gopal Singh, Vinod Kumar, Ashutosh dubey, Sanjeev Agrawal, A. K. Verma (2018) Cloning, sequencing and in silico analysis of β -Glucosidase from *Bacillus subtilis* strain PS. *Indian Journal Of Biotechnology*, 17 : 431-440. **Impact Factor** 0.368 NAAS 6.29
- 51.** Apoorva Karki, Gohar Taj, AK Verma, Salil Tewari and Ashutosh Dubey **(2018)** *In silico* Phylogenetic Similarity Analysis of Anti-Oxidative Enzymes Amongst Poaceae Family Plants. **Journal of Applied Bioinformatics & Computational Biology** 2018, 7:3 1-7. **Impact Factor: 1.0**
- 52.** Pratima Raypa , A.K. Verma , Salil Tewari and Ashutosh Dubey **(2018)** Analysis of Medicinally Important Phytocompounds from *Adina cordifolia* Leaves. **Int.J.Curr.Microbiol.App.Sci** 7(11): 3007-3019. **NAAS 5.38**
- 53.** Owais Yousuf, Anupama Singh, N C Shahi, Anil Kumar, **A K Verma (2018)** Ultrasound Assisted Extraction of Pectin from Orange Peel. *Bulletin of Environment, Pharmacology and Life Sciences*. 7: 12, 48-54.
- 54.** Chauhan Leela, Omre P.K., Singh T.P. Singh, Kumar Anil and **Verma, A.K. (2018)** Utilization of Pine Needles for Development of Biobased Packaging Material. **Int.J.Curr.Microbiol. App.Sci** (2018) 7(10): 1274-1279. **NAAS 5.38**
- 55.** Vivek Chandra Verma, Anil Kumar, M.G.H. Zaidi, **A.K. Verma**, J.P. Jaiswal, D.K. Singh, Archana Singh and Sanjeev Agrawal **(2018)** Starch Isolation from Different Cereals with Variable Amylose/Amylopectin Ratio and Its Morphological Study Using SEM and FT-IR **Int.J.Curr.Microbiol.App.Sci** 7(10): 211-228 **NAAS 5.38**
- 56.** Owais Yousuf1, Anupama Singh, N. C. Shahi, Anil Kumar and **A. K. Verma (2019)** Microwave Assisted Extraction: A Technological Alternative for Valorization of Orange Peel for Pectin Extraction. **International Research Journal of Pure & Applied Chemistry** 17(3): 1-10 **NAAS 5.40**
- 57.** Sharma, H. K., Bhattacharya, T. K., Singh, R. P., & Verma, A. K. (2020). Traditional vs. modified approach of pine needle char beehive block production. *Biomass Conversion and Biorefinery*, 1-14.
- 58.** Shivangi Chamoli, Ekta Yadav, Hemansi, Jitendera Kumar Saini, Ashok Kumar Verma, Naveen Kumar Navani, Piyush Kumar (2020) Magnetically recyclable catalytic nanoparticles grafted with *Bacillus subtilis* β -glucosidase for efficient cellobiose hydrolysis. *International Journal of Biological Macromolecules* <https://doi.org/10.1016/j.ijbiomac.2020.08.102>.
- 59.** A.K. Verma, Shobhit Lakhera, Khan Chand, Ashutosh Dubey and T.K. Bhattacharya (2020) Optimization of two steps pretreatment techniques on lignin elimination in wheat straw to

- improve the bio-oil quality. In International Journal of Agricultural Engineering / Volume 13 | International Journal of Agricultural Engineering 13 : (2) 195-211
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61. Dey B J, Verma A. K., Tewari S K, Dubey A (2020) Organogenesis optimization in *Dendrocalamus asper*. *Journal of Non-Timber Forest Products.* 27(1): 50-55.
62. Archana Singh, Ashutosh Dubey, Vivek Chandra Verma and **AK Verma (2021)** Combine pretreatment of lignocellulosic biomass with ionic liquid and aqueous ammonia: Better approach for bioethanol production. *International Journal of Chemical Studies* 2021; 9(1): 2722-2731
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64. Shruti, Megha and **A K Verma (2021)** Astaxanthin: A Promising Nutraceutical for Human Health and Benefits *Food and Scientific Reports* 2 (2), 40-41.
65. Jiya Channotiya, Apoorv Tiwari, Gohar Taj, **A. K. Verma** & Ashutosh Dubey (2021) *In-silico* and Molecular Docking Studies on Germacrene A Synthase enzyme and sesquiterpene lactone (Lactucin) involved in antimalarial activity of *Cichorium intybus*. *Network Modeling Analysis in Health Informatics and Bioinformatics*. 10: 24 <https://doi.org/10.1007/s13721-021-00288-5>.
66. Shruti, AH Ahmad, Sanjeev Agarwal, Ashutosh Dubey and **AK Verma (2021)** Evaluation of *in vitro* anti-inflammatory activity in *Berberis lyceum* Royle of Shivalik range of Himalaya. *The Pharma Innovation Journal* 2021; 10(5): 240-243. NAAS 5.34
67. Dipti Singh, Ashutosh Dubey and **AK Verma (2021)** Assessment of biomolecules and enzymes during drought stress in *Echinochloa frumentacea* grown in Himalaya. *International Journal of Chemical Studies* 2021; 9(2): 29-52
68. Vishaka Sharma, **A.K. Verma**, Prachi Sharma, Dinesh Pandey, Mridula Sharma (2021) Differential proteomic profile of X- and Y- sorted Sahiwal bull semen. *Research in Veterinary Science*. <https://doi.org/10.1016/j.rvsc.2021.11.0>
69. Dhiraj Kumar Yadav, Khan Chand, Navin Chandra Shahi, **Ashok Kumar Verma (2021)** Influence of fermentation conditions on the polyphenols, total flavonoids, and antioxidant properties of wine produced from Burans petals. *Journal of food processing and preservation*. <https://doi.org/10.1111/jfpp.16009>
70. Lekhak, B., Dubey, A., & **Verma, A. K. (2022)**. Molecular Docking of Compounds Present in Pyrolyzed Biomass Products with the Karrikin Receptor and Its Impact on Seed Germination in *Triticum aestivum*. *Journal of Plant Growth Regulation*, 1-16. (**Impact Factor 4.2**)
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72. Kapale, V.P., Patel, C., **Verma, A.K.**, Srivastava, R.M., Pandey, D., Nautiyal, M.K. and Agrawal, S., **2022**. Effect of seed priming with salicylic acid and methyl jasmonate on germination and primary root length of cowpea genotypes. *The Pharma Innovation Journal* 11: 6: 2085-2088
73. Bahuguna, C., Arya, D., Pandey, D., **Verma, A. K.**, & Sharma, M. (2022). Protein profile of serum and urine during early pregnancy in sahiwal cows. *INDIAN JOURNAL OF ANIMAL SCIENCES*, 92(5), 570-575.