

Publications 2020-2021

Department of Agriculture

1. **Pallavi** and Alankar Singh (2020). Using Parameters Genetic model genetic analysis of micronutrients in cowpea [*Vigna unguiculata*(L.)Walp.]. The Pharma Innovation Journal, 9(9): 495-496.4.
2. **Pallavi**, Alankar Singh and YV Singh (2020). Analysis of heterotic response for zinc and iron content in cowpea (*Vigna unguiculata*(L). Walp). The Pharma Innovation Journal; 9(9): 497-499.3.
3. **Pallavi**, Alankar Singh and Sumit Chaudhary (2020). Diallel analysis for combining ability in cowpea (*Vigna unguiculata* (L.) Walp). The Pharma Innovation Journal; 9(9): 500-502.
4. **Pallavi**, Alankar Singh and Sumit Chaudhary (2020). Study of nature and magnitude of heterotic response in cowpea (*Vigna unguiculata* (L). Walp) for yield and its attributing components. Journal of Pharmacognosy and Phytochemistry; 9(5): 1772-1774.
5. Tiwari, S., DS Sahu, **Manoj Kumar Bansala**, Balveer Singh, Nazim Ali, Rajbir Singh and Rajkumar (2020). Feeding effect of different levels of fenugreek powder and vitamin E on carcass quality of broilers. International Journal of Chemical Studies; 8(4): 3514-3517.
6. Chauhan, H.S., Raj kumar, Kumar, S., Kumar, A., Sahu, D.S., **Bansala, M.K.** and B.G. Desai (2020). Impact of selenium and zinc supplementation on semen attributes of Murrah buffalo bulls. Journal of Entomology and Zoology Studies, 8(5): 1347-1350.
7. Kumar, S., **Bansala, M.K.**, Sahu, D.S, Tomer, K Kumar, D. and Rajkumar (2020) Effect of different sources of digestible crude protein in buffalo calves. Journal of Entomology and Zoology Studies, 8(6): 473-477.

Department of Biochemistry

1. Tyagi, V., Farooq, U., & **Awasthi, G.** Phytochemical Analysis and Evaluation of Anti-inflammatory Activity of *Bignonia venusta* (Ker Gawl.) Miers Flower Extracts. 1(28): 34-40.

2. Awasthi, D. K. and **G. Awasthi** (2020) Autocoids: A Brief Review. World Journal of Pharmaceutical and Medical Research, 6(12): 369-377.
3. Rashmi, **Awasthi, G.** and D.K. Awasthi (2020) Lipid Profiling in Mathura Population. Review World Journal of Pharmaceutical and Medical Research, 6(12), 378-385.

Books

1. Awasthi, D.K. and G. Awasthi (2020) Biomedical Application of Silver Nanoparticles. Lambert Academic Publishing Mauritius(978-620-2-67721-9); Pp: 1-54.
2. Awasthi, D.K. and Gyanendra Awasthi (2020) Medical Applications of Titanium oxide. Lambert Academic Mauritius (978-620-2-91789-6); Pp: 1-65.
3. Awasthi, D.K. Awasthi, G. & and Priyankaraj (2020) A Review on Cytochromes Lambert Academic Mauritius (978-620-3-02991-8). Pp 1-105.

Department of Biotechnology

1. Jaiswal KK, Kumar V, Vlaskin MS, Sharma N, Rautela I, **Nanda M**, Arora N, Singh A, Chauhan PK. Microalgae fuel cell for wastewater treatment: Recent advances and challenges. Journal of Water Process Engineering. 2020 Dec 1;38:101549. (IF 3.465)
2. Pandey S, Kumar V, Vlaskin MS, **Nanda M**. Sustainability of Ageratum conyzoides (billy goat weed) for bioethanol and recycling of residues for gaseous fuel production. Engineering Reports.:e12284.DOI: 10.1002/eng2.12284
3. Jaiswal KK, Kumar V, Vlaskin MS, **Nanda M**. Impact of glyphosate herbicide stress on metabolic growth and lipid induction in Chlorella sorokiniana UUIND6 for biodiesel production. Algal Research. 2020 Oct 1;51:102071. (IF 4.008)
4. Kumar V, Arora N, Pandey S, Jaiswal KK, **Nanda M**, Vlaskin MS, Chauhan PK. Microwave-assisted pretreatment of harmful algal blooms for microbial oil-centered biorefinery approach. Biomass Conversion and Biorefinery. 2020 Aug 28:1-9. (IF 2.602)
5. Kumar, V., Sharma, N., Jaiswal, K.K., Vlaskin, M.S., **Nanda, M.**, Tripathi, M.K. and Kumar, S. (2021) Microalgae with a truncated light-harvesting antenna to maximize

- photosynthetic efficiency and biomass productivity: Recent advances and current challenges. *Process Biochemistry*, 104: 83-9. (IF 3.757)
6. Jaiswal, K.K., Kumar, V., Vlaskin, M.S., **Nanda, M.**, Verma, M., Ahmad, W. and Kim, H. (2021) Hydropyrolysis of freshwater macroalgal bloom for bio-oil and biochar production: Kinetics and isotherm for removal of multiple heavy metals. *Environmental Technology & Innovation*, 22, p.101440. (IF 5.263)
 7. Kumar, V., Jaiswal, K.K., Verma, M., Vlaskin, M.S., **Nanda, M.**, Chauhan, P.K., Singh, A. and Kim, H. (2021) Algae-based sustainable approach for simultaneous removal of micropollutants, and bacteria from urban wastewater and its real-time reuse for aquaculture. *Science of The Total Environment*, 774, p.145556. (IF 7.963)
 8. **Nanda, M.**, Chand, B., Bisht, T., Kumar, V. and Vlaskin, M.S.(2021) Microalgal Cd resistance and its exertions on pigments, biomass and lipid profiles. *Bioremediation Journal*, pp.1-9. (IF 1.909)
 9. Kumar, V., Jaiswal, K.K., Vlaskin, M.S., **Nanda, M.**, Tripathi, M.K., Gururani, P., Kumar, S. and Joshi, H.C.(2021) Hydrothermal liquefaction of municipal wastewater sludge and nutrient recovery from the aqueous phase. *Biofuels*, pp.1-6.(IF 2.956)
 10. Jaiswal, K.K., Kumar, V., Verma, R., Verma, M., Kumar, A., Vlaskin, M.S., **Nanda, M.** and Kim, H., 2021. Graphitic bio-char and bio-oil synthesis via hydrothermal carbonization-co-liquefaction of microalgae biomass (oiled/de-oiled) and multiple heavy metals remediations. *Journal of Hazardous Materials*, 409, p.124987. (IF 10.588)
 11. **Nanda, M.**, Chand, B., Kharayat, S., Bisht, T., Nautiyal, N., Deshwal, S., & Kumar, V(2021) Integration of microalgal bioremediation and biofuel production: A ‘clean up’ strategy with potential for sustainable energy resources. *Current Research in Green and Sustainable Chemistry*, 100128.
 12. **Gulati, D** and Das, N. (2021) Microbiological quality of spices marketed in Uttarakhand, india. . *J.Bio.Innov* 10(3): 750-759.
 13. **Deepti, G.** and Monika, G. (2021)Decolorization of dyes direct red 31 (dr 31); direct blue 71 (db 71) and direct black 19 (db 19) by newly isolated *bacillus sp.* Dm1. . *J.Bio.Innov* 10(3): 728-740.

14. VARNIKA, V., SHARMA, R., SINGH, A., **SHALINI, S.** and SHARMA, N. (2020) Micropropagation and Screening of Phytocompounds Present among in vitro Raised and Wild Plants of Rauvolfia serpentine. *Walailak Journal of Science and Technology (WJST)*, 17(11), pp.1177-1193. (**Scopus**).

Department of Forestry

1. Puspwan, K.S., **Singh, V.** and Pandey, B.N., 2020. Consumption Pattern Of Fuelwood And Fodder In Western Nayar Watershed At Puari Districtt Of Garhwal Himalaya, Uttarakhand, India. *Recent Adv Biol Med*, 7(1), p.24842.
2. Rashmi T. Chamoli, Vikaspal SinghandA.K. Uniyal. Effect of different doses of nitrogen and phosphorus Fertilizers on nitrogenase activity in nodule of albizia Lebbeck benth. *Indian Journal of Plant Sciences*, 10:1-5.
3. Tuikhang Momsongak Koireng, Vikaspal Singh*, Anil Kumar Uniyal, Rashmi and T. Chamoli. Study of Land-Use Pattern Under Different Agroforestry System in a Part of Manipur, North- East India. *Envis Bulletin Himalayan Ecology*, 28:1-3.

Department of Horticulture

1. **Singh M**, Singh R, Mishra P, Sengar R.S., and Shah, U.P. (2020). *In-vitro* compatibility of *Trichoderma harzianum* with systemic fungicides. *International Journal of Chemical Studies*; 9(1):2884-2888. ISSN: 2349–8528.
2. **Singh M**; Singh R, Singh P and Madhu, G S (2021). *In vitro* compatibility of *Pseudomonas fluorescens* with systemic weedicides. *The Pharma Innovation Journal*; 10(3): 920-923. ISSN (E): 2277- 7695.
3. **Singh M**, Singh R and Nagar D (2021). *In vitro* compatibility of *Pseudomonas fluorescens* with different systemic fungicides. *The Pharma Innovation Journal*; 10(3): 874-877. ISSN (E): 2277- 7695.

Chapters in Books:

1. **Singh M**, Nagar D and Kala D C (2021). Plant growth promoting Rhizobacteria (PGPR) and its role in resistance against biotic stresses in plants: *In Current Research and Innovations in Plant Pathology. 14: 1-5*. ISBN: 978-93-90846-84-9
2. Singh R, Tomer A, Chandel S S, **Singh M**. (2021). Pearl millet (Bajra): Common diseases: *In: "Diseases of Nationally Important Field Crop"* pp: 189-200. ISBN-978-81-70198-96-9.

Department of Microbiology

1. Singla D, Singh A, Dhull Sb, Kumar P, Malik T, Kumar P, Taro starch: Isolation, morphology, modification and novel applications concern - A review, *International Journal of Biological Macromolecules*, 2020, 163, 1283-1290. **(IF 5.162)**
2. Kumar J, **Kumar P**, & Kushwaha RKS, Recycling Of Chicken Feather Protein Into Compost By *Chrysosporium Indicum* Jk14 And Their Effect On The Growth Promotion Of Zea Mays, *Plant Cell Biotechnology and Molecular Biology*, 2020, 21, 37-38, 75-80.
3. **Kumar P**, Pahal V, Gupta A, Vadhan R, Chandra H, Dubey RC, Effect of silver nanoparticles and *Bacillus cereus* LPR2 on the growth of Zea mays, *Nature Scientific Reports*, 2020, 10, 20409. **(IF 3.998)**
4. **Kumar P**, Aeron A, Shaw N, Singh A, Bajpai VK, Pant S, Dubey RC, Seed bio-priming with tri-species consortia of phosphate solubilizing rhizobacteria (PSR) and its effect on plant growth promotion, *Heliyon*, 2020, 6, 12, e05701.
5. Sharma A, Rawat K, Jattan P, Kumar P, Tokusoglu O, **Kumar P**, Vural H, Singh A, Formula refining through composite blend of soya, alfalfa, and wheat flour; A vegan meat approach, *J Food Process Preserv.* 2021, 00:e15235 **(IF 1.405)**
6. Saini N, Gaurav N, Kumar A, Pant HC, Rautela I, & **Kumar P**, Mass Clonal Propagation Of *Mucuna Pruriens* (Fabaceae) And An Assesment Of Its Phytochemical Properties. *Plant Cell Biotechnology And Molecular Biology*, 2021, 22, 33-34, 274-287. **(IF 4.88)**

Chapters in Books:

1. Malik, T. and Rawat, S., 2021. Biotechnological Interventions for Production of Flavour and Fragrance Compounds. In *Sustainable Bioeconomy* (pp. 131-170). Springer, Singapore.
2. Kumar, J., Kumar, P. and Kushwaha, R.K.S., 2021. Significance of keratinophiles in biofertilizer development from keratinous waste: upcoming perspective. In *Biofertilizers* (pp. 95-101). Woodhead Publishing.

Department of Pharmaceutical Chemistry & Chemistry

1. Kumar S, Kumar V, **Kumar D**, Sanghi A and Jan F, Evaluation of anthelmintic activity of bioactive peptides derived from enzyme treated goat milk Casein, Journal of Entomology and Zoology Studies 2020, 8, 4, 1012-1015
2. Arora S, Gusaina M, Gunupurua R, Kaushik R, Sinha P and **Kumar D**, Cinnamon: A Clinical Approach as Multifarious Natural Remedy With Absolute Immunity, European Journal of Molecular & Clinical Medicine, 2021, 8, 3, 2331-2345.
3. Shefali Arora Mahak Gusain Ravi Gunupuru Rohit Kaushik Pushpendu Sinha **Deepak Kumar** Shefali Arora Mahak Gusain Ravi Gunupuru Rohit Kaushik Pushpendu Sinha Deepak Kumar Shefali Arora Mahak Gusain Ravi Gunupuru Rohit Kaushik Pushpendu Sinha Deepak Kumar
4. Arora S, Latwal M, Bahukhandi KD, **Kumar D**, Vemulapalli T, Egutoori S and Siddiqui NA, Greener Approach to Metallic Nanoparticles: A Review, Nature Environment and Pollution Technology; 2021, 20, 2, 481-490.
5. Kawra Monika, Saklani Sarla and **Parcha Versha, 2021** Isolation and identification of an antioxidant constituent From *satyrium nepalense* (himalayan orchid), **Res. J. Chem. Environ**, 25 (4), 201-205 (IF .21) .
6. Manoj Kumar Sarangi , M. E. Bhanoji Rao and **Versha Parcha.**, 2020: Smart polymers for colon targeted drug delivery systems: a Review International journal of polymeric material and polymeric biomaterials *doi*: 10.1080/00914037.2020.1785455 (IF 1.982).
7. Monika Kawra, Sarla Saklani and **Versha Parcha.**, 2020: Preliminary Phytochemical screening and Antioxidant activity of five medicinal plants **Vegetos**. An International

Journal of Plant Research and Biotechnology 33:610-613 doi 0.1007/s42535-020-00141, e-ISSN 2229-447 (IF .167).

8. Manoj Kumar Sarangi., M.E. Bhanoji Rao., **Versha Parcha** and Adesh Upadhyay., **2020** : Tailoring of Colon Targeting with Sodium Alginate-Assam Bora Rice Starch Based Multi Particulate System Containing Naproxen **Starch Starke**, 72,7-8 <http://doi.org/10.1002/star.201900307> (I.F. 1.98).

Department of Physiotherapy

1. Effect of Kinesiophobia on WOMAC, Balance and Range of Motion in Post Total Knee Arthroplasty Patients. IJPBS,vol 13(3), 2020.
2. Vivek Chauhan and Rajesh Modak (2021) COMPARATIVE STUDY BETWEEN PILATES EXERCISES & YOGA IN YOUNG ADULTS WITH NONSPECIFIC LOW BACK PAIN. IJPRA-Vol-6,Issue 3 :487-508
3. Vivek Chauhan and Parul Singhal (2021) NATURE & PATTERN OF NECK & SHOULDER PAIN IN HOME ECONOMIST AT JANSI. IJR-Vol-10,Issue 5.
4. Vivek Chauhan and Akansha (2021) PREVALENCE OF UPPER LIMB MUSCULOSKELETAL PAIN AMONG HOSTEL HOUSEKEEPERS. IJPRA-Vol 6,Issue-2,pp ;327-340.
5. Vivek Chauhan and Tashi Ongmit (2021) PREVALENCE OF MUSCULOSKELETAL PAIN IN OFFICE GOING POPULATION OF GANGTOK. IJPRA-Vol 6,issue 3,pp;104-117.