Research Papers

1. Kumar, Pradeep, Dipti, Kumar, Sunil and **Singh, Rana Pratap (2022).** Severe contamination of carcinogenic heavy metals and metalloid in agroecosystems and their associated health risk assessment. ***Environmental Pollution,*** **in press,** DOI: https://doi.org/10.1016//j.envpol.2022.118953. **[Impact Factor Thomson and Reuters: 8.071]**
2. Maddhesiya, Singh, Kripal, Kumar, Devendra and **Singh, Rana Pratap (2022).** Enhancing productivity of perennial aromatic grasses on marginal lands through plant growth promoting rhizobacteria. ***Land Degradation & Development,*** **In press.** https://doi.org/10.1002/ldr.4244 **[Impact Factor Thomson and Reuters: 4.34]**

3. Mishra, Roli and **Singh, Rana Pratap (2022).** Effect of species diversity levels and microbial consortium on biomass production, net economic gain and fertility of marginal land. ***Land Degradation & Development,*** **In press.** https://doi.org/10.1002/ldr.4195 **[Impact Factor Thomson and Reuters: 4.34]**

4. Singh, Dig Vijay and **Singh, Rana Pratap (2021).** Algal consortia based metal detoxification of municipal wastewater: Implication on photosynthetic performance, lipid production, and defense responses. ***Science of the Total Environment,*** In press, DOI: http://dx.doi.org/10.1016/j.scitotenv.2021.151928. **[Impact Factor Thomson and Reuters: 7.963]**

5. Maddhesiya, Pawan Kumar, Gupta, Sonam, Kumar, Pawan and **Singh, Rana Pratap (2021).** Development of effective bio-inoculants for organic cultivation of *Cymbopogon martini* (Palmarosa). ***Medicinal Plants,*** **13(2);** 345-349, DOI: https://doi.org/10.5958/0975-6892.2021.00040.X

6. Mishra, Roli, Dubey, Priya and **Singh, Rana Pratap (2021).** Assessing the efficacy of climate resilient microbial inoculants for enhanced phytochemical production from Indian licorice (*Abrus precatorius* L.). ***Medicinal Plants,*** **13(2);** 330-338, https://doi.org/10.5958/0975-6892.2021.00038.1.

7. Maddhesiya, Pawan Kumar, Singh, Kripal and **Singh, Rana Pratap** (2020). "Effects of perennial aromatic grass species richness and microbial consortium on soil properties of marginal lands and biomass production" ***Land Degradation & Development,*** in press.

8. Kumar, Mahesh and **Singh, Rana Pratap** (2019). Plant growth promoting and organic waste degrading activities of a native rhizobacterial strain of (*Alcaligenes faecalis*) for Wheat (*Triticum aestivum* L.) cultivation. ***Indian Journal of Environmental Protection***, 39 (4); 333-338.

9. Baqir, Mohd, Kothari, Richa and **Singh, Rana Pratap** (2019) Characterization and ranking of subtropical trees in a rural plantation forest of Uttar Pradesh, India as fuel wood using fuel wood value index (FVI). ***Envronment, Development and Sustainability,*** **21, 763-776,** http://doi.org/10.1007/s10668-017-0057-z **[Impact Factor: 3.219]**

10. Jaiswal, Neha., Sachdev, Swati., Tallapragada, Sridevi and **Singh, Rana Pratap** (2018). Phytoextraction Potential of Neem (Azadirachta indica) for Cddetoxification from the

Contaminated Soil. ***Climate Change and Environmental Sustainability*** (October 2018) 6(2): 154-159, DOI: 10.5958/2320-642X.2018.00018.2

11. Baqir, Mohd, Bharti, S.K., Kothari, Richa and **Singh, Rana Pratap** (2018). Assessment of an energy-efficient metal chulha for solid biomass fuel and evaluation of its performance. ***International Journal of Environmental Science and Technology*** https://doi.org/10.1007/s13762-018-2028-9

12. Sachdev, Swati, Singh, Anupriya and **Singh, Rana Pratap** (2018). Optimization of culture conditions for mass production and bio-formulation of *Trichoderma* using response surface methodology. **3*Biotech,*** https://doi.org/10.1007/s13205-018-1360-6

13. Sachdev, Swati and **Singh, Rana Pratap** (2018). Isolation, characterization and screening of Native Microbial Isolates for biocontrol of fungal pathogens of tomato. ***Climate Change and Environmental Sustainability,*** 6 (1), 46-58, DOI: 10.5958/2320-642X.2018.00006.6

14. Baqir, Mohd, Kothari, Richa and **Singh, Rana Pratap** (2018) Fuel wood consumption, and its influence on forest biomass carbon stock and emission of carbon dioxide. A case study of Kahinaur, district Mau, Uttar Pradesh, India. ***Biofuels*** Accepted https://doi.org/10.1080/17597269.2018.1442666

15. Baqir, Mohd, Kothari, Richa and **Singh, Rana Pratap** (2017) Characterization and ranking of subtropical trees in a rural plantation forest of Uttar Pradesh, India as fuel wood using fuel wood value index (FVI). ***Envronment, Development and Sustainability, Accepted,*** http://doi.org/10.1007/s10668-017-0057-z

16. Baqir, Mohd, Mishra, Ashish K., Kothari, Richa and **Singh, Rana Pratap** (2017) Calorific value and fuel wood consumption patterns of a plantation forest at Kahinure (Distt Mau), Uttar Pradesh, India by villagers. ***Climate Change and Environmental Sustainability, 5(1), 35-41.***

17. Kumar, Mahesh and **Singh, Rana Pratap** (2017). Enhancement in growth promotion and production of wheat (*Triticum aestivum* L.) by application of a native strain of *Trichoderma virens* (T2) in pot condition. ***International Journal of Science, Technology and Society***, **3(2), 62-67.**

18. Singh, Ashima., Singh, Kripal., Wasnik, Kundan., Singh, Rana Pratap. (2017). Vermicompost and Farmyard manure increase sodic soil fertility and productivity of green vegetable. ***International Journal of Advanced Research (INT. J. ADV. RES.)*** 5(2). 2623-2632 **[Impact Factor: SJIF=6.118]**

19. Rai, A., Kumar, S., Bauddh, K., Singh, N., **Singh, Rana Pratap** (2017). Improvement in growth and alkaloid content of Rauwolfia serpentina on application of organic matrix entrapped biofertilizers (Azotobacterchroococcum, Azospirillumbrasilense and Pseudomonas putida). ***Journal of Plant Nutrition***, **40 (16)**, 2237-2247 **[Impact Factor: ISI=0.536]**

20. Sachdev, Swati and **Singh, Rana Pratap** (2016). Studies on trends in use of pesticides and fertilizers for tomato cultivation in the vicinity of Lucknow India. ***International Journal of Science, Technology and Society,*** *2 (1&2)*, 49-54. DOI: 10.18091/ijsts.v2i1-2.7542.

21. Kuldeep Bauddh, Amit Kumar, Sudhakar Srivastava, Rana P Singh, RD Tripathi (2016). A study on the effect of cadmium on the antioxidative defense system and alteration in different functional groups in castor bean and Indian mustard. ***Archives of Agronomy and Soil Science***. 62(6), 877-891. **[Impact Factor: ISI=1.118]**
22. Shah, Abdul Barey and **Singh, Rana Pratap** (2016). Monitoring of Hazardous Inorganic Pollutants and Heavy Metals in Potable Water at the Source of Supply and Consumers end of a Tropical Urban Municipality. ***International Journal of Environmental Research*** Volume 10 (1), 149-158 **[Impact Factor: ISI=1.818]**
23. Bauddh, K., Singh K., Singh B., **Singh, Rana Pratap** (2015). *Riccinus communis*: A robust plant for bio-energy and phytoremediation of toxic metals from contaminated soil. ***Ecological Engineering***, 84, 640-652. **[Impact Factor: ISI=3.223]**
24. Tripathi, P., **Singh, Rana Pratap**, Sharma, Y.K., Tripathi, R.D. (2015). Arsenite stress variably stimulates prooxidant enzymes, anatomical deformities, photosynthetic pigment reduction and antioxidants in arsenic tolerant and sensitive rice seedlings. ***Environmental Toxicology and Chemistry*** 34, 1562-1571. **[Impact Factor: ISI=2.763]**
25. Kumar, Manoj, Bauddh, Kuldeep, Sainger, Manish, Sainger, Poonam Ahlawat, **Singh, Rana Pratap** (2015). Enhancing Efficacy of Azotobactor and Bacillus by Entrapping in Organic Matrix for Rice Cultivation. ***Agroecology and Sustainable Food System*** 39.8: 907-923. DOI: 10.1080/21683565.2015.1050146 **[Impact Factor ISI= 0.926]**
26. Bauddh, Kuldeep, Kumar, Amit, Srivastava, Sudhakar, Tripathi, R.D., **Singh, Rana Pratap** (2015) A Study on the effect of cadmium on the antioxidative defence system and alteration in different functional groups in castor bean and Indian mustard. ***Archives of Agronomy and Soil Science***. doi.org/10.1080/03650340.2015.1083554 Accepted online: 14th August, 2015. Published online: 1st September, 2015. **[Impact Factor ISI= 1.118]**
27. Sharma P., Singh G., Sharma K. and **Singh, Rana Pratap** (2015). Integrated resource management improves soil glucosidease, urease, and phosphatase activities and soil fertility during rice cultivation in Indo-Gangetic plains. ***Cogent Food and Agriculture.*** **Dx/doi.org/10**.1080/23311932.2015.1030905.
28. Bauddh K., Singh K. and **Rana R.P.**(2015). *Ricinus communis* L.A Value Added Crop for Remediation of Cadmium Contaminated Soil. **Bulletin of Environmental Contamination and Toxicology, Springer.** Published online: 13th October, 2015. DOI 10.1007/s00128-015-1669-3 **[Impact Factor ISI= 1.191]**
29. Minj R.P & **Singh, Rana Pratap (2015).** Enhanced Dose of *Azotobactor chroococcum* and *Bacillus subtilis,* Co-immobilised in Vermicompost Based Organic Granules, Increase Biomass Yield and harvest Index of wheat (*Triticum aestivum* L). **Climate Change and Environmental Sustainability** (October 2015) 3(2): 157-162 **[Impact Factor NAAS= 4.86]**
30. Shah, A.B., Rai U.N., **Singh, Rana Pratap** (2015). Correlations between some hazardous inorganic pollutants in the Gomti River and their accumulation in selected macrophytes under aquatic ecosystem. ***Bulletin of Environmental Contamination and Toxicology***. Volume 94, (Issue 6),783–790 DOI 10.1007/s00128-015-1546-0 **[Impact Factor ISI= 1.216]**

31. Shah, Abdul Barey, Rai, U. N., **Singh, Rana Pratap** (2015). Intermittent circulation of multi-metal contaminated water for enhancing the phytoremediation efficacy of *Pistia stratiotes* and *Hydrilla Verticellata* under mono and mixed culture: Mechanism of metal sorption by SEM and FTIR studies. ***Ecological Engineering*** **[Impact Factor ISI= 3.405]**

32. Shah, Abdul Barey, Rai, U. N., **Singh, Rana Pratap** (2015). Integrated approach for the treatment of medals contaminated water using different consortia of aquatic marcophytes and production of compost from the plant biomass by vermicomposting. ***Journal of Environmental Management*** **[Impact Factor ISI= 3.5]**

33. Kumar M., Bauddh K., Sainger M., Sainger AP., **Singh, Rana Pratap (2015**). Increase in Growth, productivity and nutritional status of Wheat **(***Triticum aestivum* L) and enrichment in soil microbial population applied with biofertilizers entrapped with organic matrix. **Journal of Plant Nutrition, 38:260-276 [Impact Factor: ISI=0.536]** DOI 10.1080/01904167.2014.957391.

34. Ashok, V., Kumar, S., **Singh, Rana Pratap** (2015). Enhanced growth and yield of Rice (Oryza sativa L.) and soil enrichment is mediated by enhanced availability of N and P in soil and plant leaves on application of organic matrix entrapped urea and DAP. ***International Journal of Plant and Environment***, 1, 57-67.

35. Kumar, A., Tripathi, R.D., **Singh, Rana Pratap**, Singh, P.K., Awasthi, S., Chakrabarty, D., Trivedi, P.K. (2014). Selenium ameliorates arsenic induced oxidative stress through modulation of antioxidant enzymes and thiols in rice (*Oryza sativa* L.). ***Ecotoxicology,*** 23, 1153-63. **[Impact Factor: ISI=2.329]**

36. Kumar, S., Bauddh, K., Barman, S.C., **Singh, Rana Pratap** (2014). Amendments of microbial biofertilizers and organic substances reduces requirement of urea and DAP with enhanced nutrient availability and productivity of wheat (*Triticumaestivum* L.). ***Ecological Engineering***, 71, 432-437. **[Impact Factor: ISI=3.136]**

37. Pandey, V.C., Singh, N., **Singh, Rana Pratap**, Singh, D.P. (2014). Rhizoremediation potential of spontaneously grown *Typhalandifolia* on fly ash basins: Study from the field. ***Ecological Engineering***, 71, 722-727 **[Impact Factor: ISI=3.136]**

38. Sainger, M., Sharma, A., Bauddh, K., Sainger, P.A., **Singh, Rana Pratap** (2014). Remediation of Nickel contaminated soil by *Brassica juncea* L. cv. T-59 and effect of the metal on some metabolic aspects of the plant. ***Bioremediation Journal***, 18(2), 100-110. **[Impact Factor: ISI=0.714]**

39. Pandey, V.C., Singh, N., **Singh, Rana Pratap**, Singh, D.P. (2014). Rhizoremediation potential of spontaneously grown *Typha landifolia* on fly ash basins: Study from the field. ***Ecological Engineering***, 71, 722-727. **[Impact Factor: ISI=3.136]**

40. Bauddh, K. and **Singh, Rana Pratap** (2014). Effect of organic and inorganic amendments on bioaccumulation and partitioning of Cd in *Brassica juncea* and *Riccinus communis*. ***Ecological Engineering***, 74, 93-100. **[Impact Factor: ISI=3.136]**

41. Kumar, **S,** Bauddh, K. Barman, S.C., **Singh, Rana Pratap(2014):** Organic matrix entrapped bio-fertilizers increase growth, productivity and yield of *Triticum aestivum* L. and mobilization of NO_3^-, NO_2^-, NH_4^+ and PO_4^{-3} from soil to plant leaves. ***Journal of Agricultural Science and Technology,*** 16(2): 315-329 **[Impact Factor: ISI: 0.685]**

42. Ashok, V., Kumar, S., **Singh, Rana Pratap** (2014). Response of Organic Matrix Entrapped biofertilizers on Growth, Yield and soil properties of Rice (*Oryza sativa* L.). ***Asian J. Agric. Food Sci***. 2(3), 211- 220.

43. Singh K.,Pandey V.C., **Singh, Rana Pratap**(2013). *Cynodon dactylon:* An efficient perennial grass to revegetatesodic lands. ***Ecological Engineering*** 54: 32– 38 **[Impact Factor: ISI=3.136].**

44. Tripathi, P., Tripathia R. D., **Singh R. P**., Dwivedi S., Goutam D., Shria M., Trivedi P. K., Chakrabarty D. (2013). Silicon mediates arsenic tolerance in rice (*Oryza sativa* L.) through lowering of arsenic uptake and improved antioxidant defence system. ***Ecological Engineering*** 52: 96– 103 **[Impact Factor: ISI=3.136].**

45. Singh K., Pandey V.C., **Singh, Rana Pratap**(2013). *Cynodon dactylon:* An efficient perennial grass to revegetate sodic lands. ***Ecological Engineering*** 54: 32– 38 **[Impact Factor: ISI=3.136].**

46. Kumar M., Bauddh K., **Kumar S.** Sainger M., Sainger, P.A. and **Singh, Rana Pratap,** (2013). Increase in growth, productivity and nutritional status of wheat (Triticum aestivum L. cv. WH-711) and enrichment in soil fertility applied with organic matrix entrapped urea. ***J. Environ. Biol.*** 34:1-9. **[Impact Factor: ISI=0.55].**

47. **Kumar Sanjeev,** Bauddh, K., Barman, S.C., **Singh, Rana Pratap** (**2013**). Evaluation of conventional and organic matrix entrapped urea and di-ammonium phosphate for growth and productivity of *Triticum aestivum L*. and mobilization of NO_3^-, NO_2^-, NH_4^+ and PO_4^{-3} from soil to plant leaves. ***International Journal of Agronomy and Plant Production***, 4(6), 1357-1368**. [Impact Factor: ISI= 0.467; NAAS= 5.5**]

48. Tripathi, P., Tripathi, R.D., **Singh, Rana Pratap,** Dwivendi, S. Chakraborty, D., Trivedi, P.K., and Adhikari, B. (2013). Arsenite tolerance in rice (Oryza sativa L.) involves coordinated role of metabolic pathways of thiols and amino acids. ***Environ Sci Pollut Res.***20(2):884-896. DOI 10.1007/s11356-012-1205-5. **[Impact Factor: ISI=2.651]**

49. Sharma, P., Singh, G. and **Singh, Rana Pratap** (2013). Conservation tillage, optimal water supply enhance microbial enzyme (glucosidase, urease and phoshphatase) activities in field under wheat cultivation during various nitrogen management practices. ***Archives of Agronomy and Soil Science,*** 59; 911-928 **[Impact Factor: ISI=0.515]** DOI:10.1080/0350340.2012.690143.

50. Chandra, S., Rawat, S.K., Garg, S.K. and **Singh, Rana Pratap** (2013). Responses of *Trapa natans* against the soaring concentrations of Nitrate and Phosphate in tropical river Gomti in Lucknow city, India. ***Journal of Recent Advances in Applied Sciences (JRAAS),*** 28,78-81.

51. Rawat, S.K., Singh, R.K. Bansode, F.W., Singh P. and **Singh, Rana Pratap** (2013). Nitrate induced toxicity on some haematological parameters of Charles Foster rats. ***Journal of Recent Advances in Applied Sciences (JRAAS),*** 28, 35-38.

52. Tripathi, P. Mishra, A., Dwivendi, S. Chakraborty, D., Trivedi, P.K., **Singh, Rana Pratap** and Tripathi, R.D. (2012). Differential response of oxidative stress and thiol metabolism in contrasting rice genotypes for arsenic tolerance. ***Ecotoxicology and Environmental Safety***, 79: 189-198. **Impact Factor: ISI=2.482]**

53. Pandey V.C., Singh, K., Singh J.S., Kumar A., Singh B. and **Singh, Rana Pratap,** (2012). *Jatrophacurcas*: A potential biofuel plant for sustainable environmental development. ***Renewable and Sustainable Energy Reviews.*** 16, 2870-2883 **[Impact Factor: ISI=7.896 (Five year); SJR = 3.120, 6.798]**.

54. Pandey, V.C., Singh, K., **Singh, Rana Pratap** and Singh, B. (2012). Naturally growing Saccharummunja L. on the fly ash lagoons: a potential ecological engineer for the revegetation and re-stabilization. ***Ecological Engineering,*** 40, 95-99. **[Impact Factor: ISI=3.106]**

55. Bauddh, K. and **Singh, Rana Pratap** (2012). Cadmium tolerance and its phytoremediation by two oil yielding plants Ricinuscommunis (L.) and Brassica juncea (L.) from the contaminated soil. ***International Journal of Phytoremediation.*** 14: 772-785. **[Impact Factor: ISI=1.466].**

56. Bauddh, K. and **Singh, Rana Pratap** (2012). Growth, tolerance efficiency and phytoremediation potential of Ricinuscommunis (L.) and Brassica juncea (L.) in salinity and drought affected cadmium contaminated soil. ***Ecotoxicology and Environmental Safety,*** 85, 13-22 [**Impact Factor: ISI=2.482]**

57. Singh R., Misra V., Mudiam M. K. R , Chauhan L.K.S., **Singh, Rana Pratap**(2012). Degradation of HCH spiked soil using stabilized Pd/Fe0 bimetallic nanoparticles: Pathways, kinetics and effect of reaction conditions. ***Journal of Hazardous Materials*** 237– 238: 355– 364. **[Impact Factor: ISI=4.331]**.

58. Pandey, V.C., Singh, K., **Singh, Rana Pratap** and Singh, B. (2012). Naturally growing *Saccharum munja L.* on the fly ash lagoons: a potential ecological engineer for the revegetation and re-stabilization. ***Ecological Engineering***, 40, 95-99. **[Impact Factor: ISI=3.106]**

59. Bauddh, K. and **Singh, Rana Pratap** (2012). Growth, tolerance efficiency and phytoremediation potential of *Ricinus communis* (L.) and *Brassica juncea* (L.) in salinity and drought affected cadmium contaminated soil. ***Ecotoxicology and Environmental Safety*****85;13-22**. **[Impact Factor: ISI=2.482]**

60. Bauddh, K. and **Singh, Rana Pratap** (2012). Cadmium tolerance and its phytoremediation by two oil yielding plants *Ricinus communis* (L.) and *Brassica juncea* (L.) from the contaminated soil.***International Journal of Phytoremediation***. 14: 772-785. DOI10.1080/15226514.2011.619238. **[Impact Factor: ISI=1.466].**

61. Chandra, S., Rawat, S.K., **Singh, Rana Pratap** and Garg, S.K. (2012). Water quality monitoring: to access the temporal and mansoonal variation in pollution level of River gomti and some ponds in vicinity of Lucknow city (India). ***Advances in Bioresearch*** 3(4): 76-83.

62. Ghavri, S.V. and **Singh, Rana Pratap**(2012).Growth, Biomass Production and Remediation of Copper Contamination by *Jatropha curcas* (L.) in Industrial Wasteland Soil. ***J. Environ. Biol.***33, 207-214. **[Impact Factor: ISI=0.640]**

63. Rawat, S.K., Singh, R.K. and **Singh, Rana Pratap** (2012). Remediation of nitrite in ground and surface waters using aquatic macrophytes, ***J. Environ. Biol*.** 33, 51-56. **[Impact Factor: ISI=0.640].**

64. Kumar M., Bauddh K.,Sainger M., Sainger, P.A., Singh J.S. and **Singh, Rana Pratap,** (2012). Increase in growth, productivity and nutritional status of rice (*Oryza sativa* L. cv Bastmati) and enrichment in soil fertility applied with an organic matrix entrapped urea. ***Journal of Crop Science and Biotechnology***, 15(2), 137-144.

65. Chandra, S., Rawat, S.K., Garg, S.K. and ***Singh, Rana Pratap*** (2012). Nitrate, nitrite ammonium and phosphate in various drinking and surface water sources of Uttar Pradesh and Madhya Pradesh, India. ***International Journal of Plant, Animal and Environmental Sciences*** (IJPAES), 2, 237-240

66. Shah, Abdul Barey, **Singh Rana Pratap** (2012). Phytoremediation of inorganic pollutants from aquatic ecosystems. ***Our Earth*** Volume 9 (2), 1-7.

67. Singh, J. S. Abhilash, P.C, Singh H.B., **Singh, Rana Pratap** and Singh D.P. (2011). Genetically engineered bacteria: An emerging tool for environmental remediation and future research perspectives. **Gene** 480, 1–9

68. Sainger, P.A., Dhankhar, R., Sainger, M., Kaushik, A. and **Singh, Rana Pratap**(2011). Assessment of heavy metal tolerance in native plant species from soils contaminated with electroplating effluent. **Ecotoxicology and Environmental Safety** 74, 2284–2291.

69. Singh, R. Misra V. and **Singh, Rana Pratap** (2011). Removal of Cr(VI) by nano scale Zero-valent iron (nZVI) from soil contaminated with tannery wastes. **Bulletin Environmental Contamination and Toxicology** 88: 210-214. **[Impact Factor: ISI=1.216]**

70. Saxena A., Dubey, C., Gupta, R., Singh, P., Bansode, F.W., Rawat S.K., **Singh, Rana Pratap** and Singh R.K. (2011). Toxic assessment of potassium nitrate in Charles Foster rats with emphasis on histopathology of vital organs. ***Research J. Chemistry and Environment***. 15(3), 77-89. **[Impact Factor: ISI=0.42]**

71. Pandey, V.C., Singh, K., Singh, B. and **Singh, Rana Pratap** (2011). New approaches to enhance eco-restoration efficiency of degraded sodic lands: Critical research needs and future prospects. ***Ecological Restoration,***29(4), 322-325.

72. Singh, R. Misra V. and **Singh, Rana Pratap** (2011). Removal of hexavalent chromium from contaminated ground water using zero-valent iron nanoparticles. **Environ Monit Assess**. 184: 3684-3651. DOI 10.1007/s10661-011-2213-5. **[Impact Factor: ISI=1.679; NAAS=7.5].**

73. Singh, R. Misra V. and **Singh, Rana Pratap (**2011). Synthesis, characterization and role of zero-valent iron nanoparticle in removal of hexavalent chromium from chromium-spiked soil. ***J***

Nanopart Res. 13: 4063-4073. DOI 10.1007/s11051-011-0350-y. **[Impact Factor: ISI=2.278; NAAS=7.9].**

74. Bauddh, K. and **Singh, Rana Pratap** (2011). Differential toxicity of cadmium to mustard (*Brassica juncia* L.) genotypes is not maintained at higher metal level. ***Journal of Environmental Biology***. 33, 355-362**[Impact Factor: ISI=0.64; NAAS=6.0]**

75. Sharma, P., Singh, G. and **Singh, Rana Pratap** (2011). Conservation tillage, optimal water and organic nutrient supply enhance soil microbial activities during wheat (*Triticum aestivum l.*) cultivation, ***Brazilian Journal of Microbiology*** 42, 531-542. **[Impact Factor: ISI=0.62]**

76. Sharma, V. and **Singh, Rana Pratap** (2011). Organic matrix based slow release fertilizers enhances plant growth, nitrate assimilation and seed yield of Indian mustard (*Brassica juncea* L.), ***Journal of Environmental Biology***, 32, 619-624. **[Impact Factor: ISI=0.64; NAAS=6.0]**

77. Rawat, S., Upreti, D.K. and **Singh, Rana Pratap** (2011). Estimation of epiphytic lichen litter fall biomass in three temperate forests of Chamoli district, Uttarakhand India, ***International Journal of Tropical Ecology.*****52**(2): 193-200. **[NAAS=3.9]**

78. Ghavri, S.V. and **Singh, Rana Pratap**(2010).Phytotranslocation of Fe by biodiesel plant *Jatropha curcas L.* grown on iron rich wasteland soil. ***Braz. J. Plant Physiol.,*** 22(4): 235-243.

79. Ghavri, S.V., Rawat, S.K., **Singh, Rana Pratap (**2010).comparative study of growth and survival rate of *Jatropha curcas* clones (BTP-A, BTP-N and BTP-K) in the contaminated wasteland soil from Sandila Industrial Area (SIA). ***Poll Res.*** 29 (3): 519-522. **[NAAS=3.3]**

80. Singh J.S., Pandey V.C., Singh D.P. and **Singh, Rana Pratap** (2010). Influence of pyrite and farmyard manure on population dynamics of soil methanotroph and rice yield in saline rain-fed paddy field. ***Agriculture, Ecosystem and Environment*** 139, 74-79. **[Impact Factor: ISI=3.203; NAAS=7.9]**

81. Sharma A., Sainger, N., Dwivedi, S., Srivastava, S., Tripathi, R.D. and **Singh, Rana Pratap** (2010). Genotypic variation in Brassica juncia L. Czern cultivars in growth, nitrate assimilation, antioxidant responces and phytoremediation potential during cadmium stress. ***J. Environ. Biol***.31, 773-780. **[Impact Factor: ISI=0.64; NAAS=6.0]**

82. Rawat, S.K., Singh, R.K. and **Singh, Rana Pratap** (2010). Seasonal variation of nitrate level in ground and surface waters of Lucknow and its remediation using certain aquatic macrophytes. ***International Journal of Lakes and Rivers,*** 3(1) 25-35.

83. Baudhh K. and **Singh, Rana Pratap** (2009). Genotypic differences in nickel (Ni) toxicity in Indian mustard (*Brassica juncia*, L.). ***Pollution Research*** 28, 699-704. **[Impact Factor NAAS=3.3].**

84. Bhaskar, P., Baudhh, K. and **Singh, Rana Pratap** (2009). Differential response of two high yielding cultivars of Indian mustard (Brassica juncia, L.) to NaCl salinity during seed germination and early seedling growth. ***Journal of Ecophysiology and Occupational Health***., 9, 137-144.

85. Rawat, S., Upreti, D.K. and **Singh, Rana Pratap** (2009). Lichen flora of Mundal and adjoining localities towards Ukhimath in Chamoli District of Uttarakhand. ***J. Phytol.* Res**. 22, 47-52.

86. Rawat, S.K. and **Singh, Rana Pratap** (2009). Levels of nitrate, nitrite and ammonium in drinking and surface water sources in Lucknow (India). ***Pollution Research*** 28, 419-423. **[Impact Factor NAAS=4.97]**

87. Rastogi, S. , Rizvi, S.M.H. **Singh, Rana Pratap** and Dwivedi, U.N. (2008). *In vitro* regeneration of *Leucaena leucocephala* by organogenesis and somatic embryogenesis. ***Biologia Plantarum*** 52 (4): 743-748. **[Impact Factor: ISI=1.582; NAAS=7.6]**

88. **Singh, Rana Pratap (2008).** Slow release fertilizers; an alternative mode for eco-friendly plant nutrition to crop plants. Proceeding of Golden Jubilee Conference on Challenges and emerging strategies for improving plant productivity (12-14 Nov, 2008, IARI, New Delhi, India) pp: 43-45

89. Sonia, Saini R. and **Singh, Rana Pratap** and Jaiwal P.K., (2007) *Agrobacterium tumefaciens* mediated transfer of *Phaseolus vulgaris* α-amylase inhibitor-1 gene into mungbean *Vigna radiata* (L.) wilczek using *bar* as selectable marker. ***Plant Cell Report***26: 187-198. **[Impact Factor: ISI=2.279; NAAS=7.7]**

90. Dahiya, S., Usha, Jaiwal, P.K. and **Singh, Rana Pratap(**2004)Efficient nitrogen utilization and high productivity in rice applied with agrowaste based slow (controlled)release fertilizers. ***Physiol. Mol. Biol. Plants*, 10:** 93-98. **[Impact Factor: NAAS=5.2]**

91. Singh, R. P., Tripathi, R.D., Dabas, S. *et al*.(2003) Effect of lead on growth and nitrate assimilation in *Vigna radiata* (L.)Wilzeck seedlings in a salt affected environment.***Chemosphere*.*52:***1245-1250**.[Impact Factor: ISI=3.155; NAAS=7.9]**

92. Rizvi, SMH, Jaiwal PK and **Singh, Rana Pratap** (2002) A possible involvement of proline and cellular polyamines levels in thidiazuron induced somatic embryogenesis in chickpea:In *Role of Plant Tissue Culture in Biodiversity Conservation and Economic Development* (Eds Nandi, SK, Palani LMS&Kumar A.) Hima Vikas Occasional Pub. No. 15. Gyanodaya Prakashan, Nanital. India.pp: 163-175.

93. Sonia, **Singh, Rana Pratap** and Jaiwal, PK (2002) *Agrobacterium* mediated gene transfer in chickpea (*Cicer arietinum*): In *Role of Plant Tissue Culture in Biodiversity Conservation and Economic Development* (Eds Nandi, SK, Palani LMS&Kumar A.) Hima Vikas Occasional Pub. No. 15. Gyanodaya Prakashan, Nanital. India.pp:407-418

94. Sahoo, L, Singh D, Sonia, Sugla, T, **Singh, Rana Pratap** and Jaiwal PK (2001) Genetically modified crop: a bane or boon to green revolution. ***Physiology. Mol. Biol. Plants* 7**: 1-2. **[Impact Factor: NAAS=5.2]**

95. Rizvi, SMH and **Singh, Rana Pratap** (2000) *In vitro* plant regeneration from immature leaflet-derived callus cultures of *Cicer arietinum* L. via organogenesis. ***Plant Cell Biotech. and Mol. Biol*.1**: 109-114 **[Impact Factor: NAAS=4.31].**

96. Sonia, Sahoo, L, Gulati, A, Dahiya, S, **Singh, Rana Pratap**, and Jaiwal, PK, (2000) *In vitro* multiplication of multipurpose tree legume *Tamarindus indica* from cotyledonary nodes. ***Physiol. Mol. Biol. Plants*6**: 21-25 **[Impact Factor: NAAS=5.2].**

97. Choudhary, A and **Singh Rana Pratap**, (2000) Cadmium induced changes in diamine oxidase activity and polyamines levels in *Vigna radiata* Wilczek seedlings. ***J. Plant Physiology*.156**: 704-710. **[Impact Factor: ISI=2.66; NAAS=7.8]**

98. Choudhary ,A., Rizvi, SMH , Alawadhi, M. , Singh I. and **Singh , Rana Pratap** (2000). Immobilization of a thermostable diamine oxidase from *Vigna radiata* (L) wilczek seedlings. ***Plant Cell Biotech. Mol. Biol***. **1**: 41-46 **[Impact Factor: NAAS=4.31].**

99. Rizvi, SMH and **Singh, Rana Pratap** (1999) Edible vaccines from transgenic plants. ***Physiol. Mol. Bio. Plants*.5**:101-102. **[Impact Factor: NAAS=5.2].**

100. **Singh, Rana Pratap** (1999) Science communication in Indian context. ***Curr. Sci*.77**: 208. **[Impact Factor: ISI=0.782; NASS=7.2]**

101. **Singh, Rana Pratap** and Jaiwal, PK (1999) Manipulation of ammonia assimilation in improvement of nitrogen use efficiency. ***Curr. Sci***. **77**:325-326. **[Impact Factor: ISI=0.782; NASS=7.2]**

102. Choudhary, A, Singh, I, and **Singh, Rana Pratap**, (1999) A thermostable diamine oxidase from *Vigna radiata* seedlings, ***Phytochemistry*:52**:1-5. **[Impact Factor: ISI=3.150; NASS=7.9]**

103. Rizvi, SMH, and **Singh, Rana Pratap**, (1998) Commercialization of tissue culture in India, ***Lucknow Univ. J. of Plant Sci*.2**: 33.

104. **Singh, Rana Pratap**, Tahlan, P and Rizvi, SMH (1998), Slow release fertilizers and conservation of agricultural fields. ***Botanica*** **48** : 78-84.

105. Choudhary, A, Singh I, and **Singh Rana Pratap**, (1997-98) Distribution of Cu^{+2} amine oxidase during ontogeny of seedlings of *Vigna radiata* cultivars. ***Biol. Plant*.40**:449-452. **[Impact Factor: ISI=1.582; NASS=7.7]**

106. **Singh, Rana Pratap**, Dabas, S., Choudhary, A. and Maheshwari, R. (1997-98). Effect of lead on nitrate reductase activity and alleviation of lead toxicity by inorganic salts and 6-benzylaminopurine. ***Biol. Plant*.40**:339-404. **[Impact Factor: ISI=1.582; NASS=7.7]**

107. **Singh, Rana Pratap** Tripathi, R.D. Sinha, S.K., Maheshwari, R. and Srivastava, H.S. (1997). Response of higher plants to lead contaminated environment. ***Chemosphere*** 34:2467-2493. [**Impact Factor: ISI=3.155; NAAS=7.79].**

108. Prasad,T.S.D., **Singh, Rana Pratap**, and Sastary , K.V. (1997). Accumulation of chromium and nickel in wheat and water hyacinth in a field irrigated with industrial effluents in Sonepat city, Haryana, India. ***J. Environ. Biol*.18**; 33-36. **[Impact Factor: ISI=0.64; NAAS=6.0]**

109. **Singh, Rana Pratap**(1996).University science education: Need for national agenda. ***Curr. Sci.* 70**: 9-10. **[Impact Factor: ISI=0.782; NASS=7.2]**

110. **Singh, Rana Pratap**, Dabas, S. and Choudhary, A.(1996). Recovery of Pb^{+2} caused inhibition of chlorophyll biosynthesis in leaves of *Vigna radiata* by inorganic salts. ***Indian J. Exp. Biol*.34**; 1129-1132. **[Impact Factor: ISI=0.702; NAAS=7.0]**

111. Murthy, B.N.S, Victor, J. **Singh, Rana Pratap**., Fletcher,R.A. and Saxena ,P.K.(1996). *In vitro* regeneration of chickpea (*Cicer arietinum* L.). Stimulation of direct differentiation of organogenesis and somaticembryogenesis by thidiazuron. ***Plant Growth Regul***. **19**:233-240. **[Impact Factor: ISI=1.63; NAAS=7.6]**

112. Murthy, BNS, **Singh, Rana Pratap** and Saxena,PK, (1996). Induction of high frequency somatic embryogenesis in geranium (Pelargonium ×hortorum Bailey cv. Ringo Rose) cotyledonary cultures . ***Plant Cell Reports*15**:423-426. **[Impact Factor: ISI=2.279; NAAS=7.7]**

113. **Singh Rana Pratap**, Murthy B.N.S. and Saxena PK, (1996). I*n vitro* morphogenetic competence of diploid zonal geranium (*Pelargonium* × *hortorum* Bailey cv. Scarlet Orbit improved) cotyledonary tissue induced with phenyl urea compounds. ***Physiol. Mol. Biol. Plants* 2**: 53-58. **[Impact Factor: ISI = 1.351; NAAS=5.2] .**

114. Bharti N, **Singh, Rana Pratap**. and Sinha SK, (1996). Effect of CaCl2 on heavy metal induced alteration in growth and nitrate assimilation of *Sesamum indicum* seedlings. ***Phytochemistry*. 41**:105-109. **[Impact Factor: ISI=3.150; NAAS=7.9]**

115. **Singh, Rana Pratap**, (1995). Slow release fertilizers for energy economy, more efficient plants nutrition and better environment. ***Physiol. Mol. Biol. Plants* 1**:101. **[Impact Factor: ISI = 1.351; NAAS=5.2].**

116. Dabas S, and **Singh, Rana Pratap** (1995). Differential effect of lead on nitrate reductase activity and organic nitrogen content of mungbean (var. P-105) seedlings. ***Indian J. Plant Physiol***. **38**:155-157. **[Impact Factor: NAAS=5.5].**

117. **Singh, Rana Pratap** (1995). Differential responses of growth and nitrate assimilation in sesame and mungbean seedlings to heavy metal stress. ***Proc. Acad. Environ. Boil*.4**: (2), 215-220.

118. Dabas S, **Singh, Rana Pratap** and Sawhney V. (1995). Nitrogen fixation and ammonia assimilation in *Vigna radiata* seedlings under lead environment. ***Physiol. Mol. Biol. Plants* 1**:135-140. **[Impact Factor: ISI = 1.351; NAAS=5.2]**

119. **Singh, Rana Pratap**, Maheshwari R and Sinha S.K. (1994). Recovery of lead caused decrease in biomass accumulation of mungbean (*Vigna radiata* L.) seedlings by K_2HPO_4 and $CaCl_2$. ***Indian J. Exp. Biol*.32**:507-510. **[Impact Factor: ISI=0.702; NAAS=7.0]**

120. Dabas S, and **Singh, Rana Pratap** (1994). Increase in NADH-glutamate dehydrogenase in roots and leaves of *Vigna radiata* (L) Wilczek cv Pusa Baisakhi during lead enrichment **Natl. Acad. *Sci. Lett***. **17**:49-52. **[Impact Factor: ISI=0.345]**

121. Bharti N, **Singh, Rana Pratap** (1994). Antagonistic effect of NaCl to different heavy metal toxicity regarding *in vivo* nitrate reductase activity and organic nitrogen contents of roots and leaves of *Sesamum indicum* L cv PB-1. ***Phytochemistry***. **35**:1157-1161. **[Impact Factor: ISI=3.150; NAAS=7.9]**

122. **Singh, Rana Pratap**, Bharati, N. and Kumar G. (1994). Differential toxicity of heavy metals to growth and nitrate assimilation of *Sesamum indicum* L cv PB-1 seedlings.***Phytochemistry*** **35**:1153- 1156. **[Impact Factor: ISI=3.150; NAAS=7.9]**

123. Bharti N. **Singh, Rana Pratap** (1993). Growth and nitrate reduction by *Sesamum indicum* L.cv PB-1respond differently to lead. ***Phytochemistry*.33**: 531-534. **[Impact Factor: ISI=3.150; NAAS=7.9]**

124. Kumar G. **Singh, Rana Pratap** And Sushila (1993). Nitrate assimilation and biomass production in Sesamum *indicum* L. seedlings in a lead enriched environment. ***Water Air and Soil Pollution***. **66**:163-171. **[Impact Factor: ISI=1.765; NAAS=7.6]**

125. Rao G.P. Sinha S.K. and **Singh, Rana Pratap** (1992) . Biochemical changes in grassy shoot disease affected plants of sugarcane. In ***Proc. 54th Annual Convention of Sugarcane Technologists***, pp.78-82.

126. Singh, Rana Pratap and Srivastava H.S. (1992). Comparative characteristics of NADH-glutamate synthase from root and leaf tissues of maize seedlings. ***Proc. Natl. Acad. Sci.*62**(B) I 109-113. **[PNAS Impact Factor = 9.38]**

127. Singh D.N. **Singh, Rana Pratap** and Srivastava H.S. (1991). Effect of Cadmium on seed germination and seedlings growth of some crop plants ***Proc. Natl. Acad. Sci*.61**(B) II 245-247. **[PNAS Impact Factor = 9.38]**

128. Jaiwal P.K. and **Singh, Rana Pratap** (1989). Effect of growth regulaters on peroxidase activity and some metabolites of cicer arietinum L. during development stages. ***Proceedings of National Seminars of Plant Physiology*,** pp.*41*-45.

129. Singh D.N. Srivastava H.S. and **Singh, Rana Pratap** (1988). Nitrate assimilation in pea leaves in presence of cadmium. ***Water Air and Soil Pollution*** **.42**:1-6. **[Impact Factor: ISI=1.765; NAAS=7.6]**

130. Srivastava H.S. and **Singh, Rana Pratap**, (1987).Role and regulation of L-glutamate dehydrogenase in higher plants. ***Phytochemistry*.26**:597-610 **[Impact Factor: ISI=3.150; NAAS=7.9]**

131. **Singh, Rana Pratap** and Srivastava H.S. (1987a). Effect of salicylic acid on NADH-glutamate synthase activity in roots and leaf tissues of maize seedlings. ***Indian J. of Plant Physiol***. **30**:60-85. **[Impact Factor: NAAS=5.5].**

132. **Singh, Rana Pratap**, and Srivastava H.S (1987b). *In vivo* effects of some metabolic inhibitors on glutamate dehydrogenase and glutamate synthase activities in excised maize tissues. ***Curr.Sci*.56**: 93-94. **[Impact Factor: ISI=0.782; NASS=7.2]**

133. **Singh, Rana Pratap**, and Srivastava H.S (1987c). Increase in glutamate synthase activity in excised roots and leaf of maize seedlings in response to acidic amino acids and amides. ***Biochem. Physiol. Plfanzen*.182**: 497-500. **[Impact Factor: ISI=2.042; NASS=7.7]**

134. **Singh, Rana Pratap**, and Srivastava H.S (1986). Increase in glutamate synthase activity in maize seedlings in response to nitrate and ammonium nitrogen. ***Physiol. Plant***. **66**:413-416. **[Impact Factor: ISI=3.076; NASS=7.9]**

135. **Singh, Rana Pratap**, Mehta P., and Srivastava H.S.,(1984).Characterization of ammonium absorption by excised root and leaf tissues of maize. ***Physiol. Plant***. **60**:119-124. **[Impact Factor: ISI=3.076; NASS=7.9]**

136. **Singh, Rana Pratap**, and Srivastava H.S (1983). Regulation of glutamate dehydrogenase activity by amino acids in maize seedlings.***Physiol Plant***. **57**:549-564. **[Impact Factor: ISI=3.076; NASS=7.9]**

137. **Singh, Rana Pratap**, and Srivastava H.S (1982). Glutamate dehydrogenase activity and assimilation of inorganic nitrogen in maize seedling. ***Biochem. Physiol***. *Plfanzen(Renamed as Plant Physiology and Biochemistry)* **177**: 633-642. **[Impact Factor: ISI=2.042; NASS=7.7]**