


<b>NAME</b>	<b>Dr. Ajay Kumar</b>		
<b>DESIGNATION</b>	Assistant Professor-11 Scale		
<b>EMAIL ID</b>	ajaykumar_bhu@yahoo.com		
<b>CONTACT NUMBER</b>	+91-8960639724		
<b>H-Index/ I-index</b>	31		
<b>Citations</b>	3374		
<b>RESEARCH INTERESTS</b>	Plant-microbe interaction; Postharvest management of Fruits; Cyanobacterial Biology		
<b>EDUCATIONAL QUALIFICATIONS:</b>			
<b>Name of College / University</b>	<b>Degree</b>	<b>Year</b>	
Banaras Hindu University, Department of Botany	Ph.D.	2016	
C.C.S. University, Meerut	M.Sc.	2009	
<b>Title of Ph.D. thesis: PGPR induced modulation in growth and metabolite synthesis of rhizome of <i>Curcuma longa</i> l.</b>			
<b>EXPERIENCE (in chronological order):</b>			
<b>Designation</b>	<b>Type of post held (teaching/ research)</b>	<b>Name of the Institute</b>	<b>Year (From – To)</b>
Assistant Professor-11 Scale	Teaching / Research	Amity Institute of Biotechnology, Amity University, Noida-201313, India	10 -07-2023 to continue
Assistant Professor	Teaching / Research	M.V.College Buxar,Bihar	08-05-2023-09-07-2023
Visiting Scientist	Research	Agriculture Research Organization, Volcanic entre, Israel	03-2018 to 04- 2022
<b>No. of Ph.D. students supervised</b>			
<b>No. of Post-Doc</b>			
<b>No. of M.Tech. Students supervised:</b>			
<b>No. of B.Tech. Students supervised:</b>			
<b>PUBLICATIONS (20)</b>	<ol style="list-style-type: none"> <li>1. Wang, Z., Solanki, M.K., Kumar, A., Solanki, A.C., Pang, F., Ba, Z.X., Niu, J.Q. and Ren, Z.X., 2023. Promoting Plant Resilience against Stress by Engineering Root Microenvironment with Streptomyces Inoculants. <i>Microbiological Research</i>, p.127509.(<b>Impact factor-6.7</b>)</li> <li>2. Orozco-Mosqueda, M.D.C., Kumar, A., Babalola, O.O. and Santoyo, G., 2023. Rhizobiome Transplantation: A Novel Strategy beyond Single-Strain/Consortium Inoculation for Crop Improvement. <i>Plants</i>, 12(18), p.3226. (<b>Impact factor-4.5</b>)</li> <li>3. Singh, R.P., Yadav, P., Kumar, I., Solanki, M.K., Roychowdhury, R., Kumar, A. and Gupta, R.K., 2023.</li> </ol>		

Advancement of Abiotic Stresses for Microalgal Lipid Production and Its Bioprospecting into Sustainable Biofuels. *Sustainability*, 15(18), p.13678. **(Impact factor-3.9)**

4. Singh, R.P., Yadav, P., Kumar, A., Hashem, A., Avila-Quezada, G.D., Abd\_Allah, E.F. and Gupta, R.K., 2023. Salinity-Induced Physiochemical Alterations to Enhance Lipid Content in Oleaginous Microalgae *Scenedesmus* sp. BHU1 via Two-Stage Cultivation for Biodiesel Feedstock. *Microorganisms*, 11(8), p.2064. **(Impact factor-4.5)**
5. Rohilla, D., Srivastava, A.K., Singh, R.P., Yadav, P., Singh, S.K., Kumar, D., Bhardwaj, N., Kesawat, M.S., Pandey, K.D. and Kumar, A., 2023. Algae Polysaccharides (Carrageenan and Alginate)—A Treasure-Trove of Antiviral Compounds: An In Silico Approach to Identify Potential Candidates for Inhibition of S1-RBD Spike Protein of SARS-CoV2. *Stresses*, 3(3), pp.555-569.
6. Srivastava, A.K., Singh, D., Yadav, P., Singh, M., Singh, S.K. and Kumar, A., 2023. Paradigm of Well-Orchestrated Pharmacokinetic Properties of Curcuminoids Relative to Conventional Drugs for the Inactivation of SARS-CoV-2 Receptors: An In Silico Approach. *Stresses*, 3(3), pp.615-628.
7. Kashyap, N., Singh, S.K., Yadav, N., Singh, V.K., Kumari, M., Kumar, D., Shukla, L., Kaushalendra, Bhardwaj, N. and Kumar, A., 2023. Biocontrol Screening of Endophytes: Applications and Limitations. *Plants*, 12(13), p.2480. **(Impact factor-4.5)**
8. Devi, S., Sharma, S., Tiwari, A., Bhatt, A.K., Singh, N.K., Singh, M. and **Kumar, A.**, 2023. Screening for Multifarious Plant Growth Promoting and Biocontrol Attributes in *Bacillus* Strains Isolated from Indo Gangetic Soil for Enhancing Growth of Rice Crops. *Microorganisms*, 11(4), p.1085. **(Impact factor-4.5)**
9. Roychowdhury, R., Das, S.P., Gupta, A., Parihar, P., Chandrasekhar, K., Sarker, U., Kumar, A., Ramrao, D.P. and Sudhakar, C., 2023. Multi-Omics Pipeline and Omics-Integration Approach to Decipher Plant's Abiotic Stress Tolerance Responses. *Genes*, 14(6), p.1281 **(Impact factor-4.2)**.
10. Kamat, S., Kumari, M., Sajna, K.V., Singh, S.K., **Kumar, A.** and Jayabaskaran, C., 2023. Improved Chrysin Production by a Combination of Fermentation Factors and Elicitation from *Chaetomium globosum*. *Microorganisms*, 11(4), p.999. **(Impact factor-4.5)**
11. Anand, U., Pal, T., Yadav, N., Singh, V.K., Tripathi, V., Choudhary, K.K., Shukla, A.K., Sunita, K., Kumar, A., Bontempi, E. and Ma, Y., 2023. Current Scenario and Future Prospects of Endophytic Microbes: Promising Candidates for Abiotic and Biotic Stress Management for Agricultural and Environmental Sustainability. *Microbial Ecology*, pp.1-32. **(Impact factor-4.6)**
12. **Kumar, A.**, Santoyo, G., White, J.F. and Mishra, V.K., 2023. Special Issue "Microbial Endophytes: Functional Biology and Applications". *Microorganisms*, 11(4), p.918. **(Impact factor-4.5)**
13. Kesawat, M.S.; Satheesh, N.; Kherawat, B.S.; **Kumar, A.**; Kim, H.-U.; Chung, S.-M.; Kumar, M. Regulation of Reactive Oxygen Species during Salt Stress in Plants and Their Crosstalk with Other Signaling Molecules—Current Perspectives and Future Directions. *Plants* **2023**, 12, 864.

	<p><a href="https://doi.org/10.3390/plants12040864">https://doi.org/10.3390/plants12040864</a> . <b>(Impact factor-4.5)</b></p> <p>14. Orozco-Mosqueda, M.d.C.; <b>Kumar, A.</b>; Fadiji, A.E.; Babalola, O.O.; Puopolo, G.; Santoyo, G. Agroecological Management of the Grey Mould Fungus <i>Botrytis cinerea</i> by Plant Growth-Promoting Bacteria. <i>Plants</i> <b>2023</b>, <i>12</i>, 637. <a href="https://doi.org/10.3390/plants12030637">https://doi.org/10.3390/plants12030637</a>. <b>(Impact factor-4.5)</b></p> <p>15. Kundu, A.; Kamil, D.; Paul, S.; Venkadasamy, G.; Salim, R.; Singh, S.K.; Kumar, D.; <b>Kumar, A.</b> Exploring Potent Fungal Isolates from Sanitary Landfill Soil for In Vitro Degradation of Dibutyl Phthalate. <i>J. Fungi</i> <b>2023</b>, <i>9</i>, 125. <a href="https://doi.org/10.3390/jof9010125">https://doi.org/10.3390/jof9010125</a> <b>(Impact factor-4.7)</b></p> <p>16. Kumari, M., Kamat, S., Singh, S.K., <b>Kumar, A*</b>, and Jayabaskaran, C., 2023. Inhibition of Autophagy Increases Cell Death in HeLa Cells through Usnic Acid Isolated from Lichens. <i>Plants</i>, <i>12</i>(3), p.519. <b>(Impact factor-4.5)</b></p> <p>17. Guzmán-Guzmán, P., <b>Kumar, A.</b>, de los Santos-Villalobos, S., Parra-Cota, F.I., Orozco-Mosqueda, M.D.C., Fadiji, A.E., Hyder, S., Babalola, O.O. and Santoyo, G., 2023. Trichoderma Species: Our Best Fungal Allies in the Biocontrol of Plant Diseases—A Review. <i>Plants</i>, <i>12</i>(3), p.432. <b>(Impact factor-4.5)</b></p> <p>18. Singh, P.K., Singh, V.P., Passarini, M.R.Z. and Kumar, A., 2023. Cyanobacterial biology in twenty-first century. <i>Frontiers in Microbiology</i>, <i>14</i>. <b>(Impact factor-5.02)</b></p> <p>19. Singh VK, Singh AK, Singh PP, <b>Kumar A*</b>. Interaction of plant growth promoting bacteria with tomato under abiotic stress: A review. <i>Agriculture, Ecosystems &amp; Environment</i>. 2018 Nov 15;267:129-40. <b>(Impact Factor-6.6)</b></p> <p>20. Singh AK, Singh PP, Tripathi V, Verma H, Singh SK, Srivastava AK, <b>Kumar A*</b>. Distribution of cyanobacteria and their interactions with pesticides in paddy field: A comprehensive review. <i>Journal of environmental management</i>. 2018 Oct 15;224:361-75. <b>(Impact Factor-8.9)</b></p>
<b>BOOK/BOOK CHAPTER (7)</b>	Book- 45/ Chapters-105
<b>PATENTS (5)</b> <i>Granted:2</i> <i>Published:2</i> <i>Filed: 1</i>	
<b>RESEARCH PROJECTS</b>	
<b>AWARDS &amp; HONOURS/ DISTINCTIONS</b>	<ul style="list-style-type: none"> <li>➤ GATE-2009</li> <li>➤ CSIR-JRF-2009;</li> <li>➤ ARO FELLOWSHIP -2018</li> <li>➤ Outstanding Faculty award -2013 (Carrier 360)</li> </ul>
<b>MEMBERSHIP</b> with Professional/ Academic bodies	<ul style="list-style-type: none"> <li>➤ International Society for Molecular Plant-Microbe Interactions</li> <li>➤ Asian PGPR Society</li> <li>➤ Association of microbiologists of India</li> </ul>