

**BRIEF CV OF DR. ABHISHEK WALIA**  
**DEPARTMENT OF MICROBIOLOGY**  
**COBS, CSKHPKV, PALAMPUR –176062 (HP)**



<b>1.</b>	<b>Name</b>	<b>DR. ABHISHEK WALIA</b>		
<b>2.</b>	<b>Father's Name</b>	Sh. Desh Raj Walia		
<b>3.</b>	<b>Designation</b>	Assistant Professor		
	<b>Date of Birth</b>	21 <sup>st</sup> March, 1986		
<b>4.</b>	<b>Present address</b>	Department of Microbiology, College of Basic Sciences, CSKHPKV Palampur. Tehsil-Palampur, District-Kangra. Himachal Pradesh. Pin Code-176062		
	<b>Tel/Fax no. (Office)</b>	01894-230311		
	<b>Tel. No. (Residence)</b>	9815358847; 7018410272		
	<b>E-mail:</b>	<a href="mailto:abhishek@hillagric.ac.in">abhishek@hillagric.ac.in</a> ; <a href="mailto:sunny_0999walia@yahoo.co.in">sunny_0999walia@yahoo.co.in</a>		
<b>5.</b>	<b>Permanent Address</b>	Village-Bandla, Post office-Tea Estate Aima, Tehsil-Palampur, District-Kangra. Himachal Pradesh. Pin Code-176061		
	<b>Tel. No. (Residence)</b>	9815358847		
	<b>Mobile</b>			
	<b>Correspondence Address</b>	Department of Microbiology, College of Basic Sciences, CSKHPKV Palampur. HP. 176062		
<b>6. Educational Qualifications</b>				
	<b>Degree</b>	<b>University</b>	<b>Year</b>	<b>Division</b>
	B.Sc	CSK Himachal Pradesh Agricultural University, Palampur. HP.	2006	1 <sup>st</sup>
	M.Sc	Dr. YS Parmar University of Horticulture and Forestry, Nauni, Solan. HP.	2009	1 <sup>st</sup>
	Ph.D.	Dr. YS Parmar University of Horticulture and Forestry, Nauni, Solan. HP.	2013	1 <sup>st</sup>
<b>7. Title of Thesis</b>				
	<b>M.Sc.</b>	Screening for plant growth promoting rhizobacteria to promote early growth of tomato seedlings		
	<b>Ph.D.</b>	Production, purification and characterization of cellulase free xylanase produced from <i>Cellulosimicrobium cellulans</i> in solid state fermentation of apple pomace and its application in pulp biobleaching		

<b>8. Field of specialization including sub area</b>		Environmental Microbiology, Agricultural Microbiology, Industrial Microbiology
<b>9. Professional experience:</b>		
<b>Designation</b>	<b>Period</b>	<b>University/Institute</b>
Assistant Professor	28 <sup>th</sup> Jan, 2019 to till date	CSKHPKV, Palampur. HP
Assistant Professor and Head	4 year and 6 months	DAV University, Jalandhar. Punjab
Assistant Professor	2 months	Guru Nanak Dev University, Amritsar. Punjab
Senior Scientific Assistant	7 months	Forensic Science Laboratory, Rohini. Delhi
<b>10. Books:</b>		2
<b>11. Manuals:</b>		
<b>12. Publications:</b>		
	<b>a. Research Paper Published</b>	37
	<b>b. Presented:</b>	4
	<b>c. Book Chapters</b>	7
	<b>d. Popular Article</b>	2
<b>13. Awards &amp; honors, including Scientific Leaderships</b>		
<b>International Awards</b>		
<b>National Honor/Awards-</b>		
<ul style="list-style-type: none"> <li>• <b>NATIONAL ELIGIBILITY TEST (NET)</b> in the discipline of Microbiology/Agricultural Microbiology.</li> <li>• <b>INSPIRE FELLOWSHIP (JRF and SRF)</b> by DST, Ministry of Science and Technology, Govt. of India.</li> <li>• <b>BEST PUBLICATION AWARD- 2012</b> by SADHNA Society, Solan. HP.</li> <li>• <b>SWAMI VIVEKANAND SCHOLARSHIP</b> under <b>National Scholarship Scheme</b>, Govt. of Himachal Pradesh.</li> </ul>		
<b>Other Honors/Awards-</b>		
<ul style="list-style-type: none"> <li>• <b>GOLD MEDAL in Ph.D (Microbiology)</b> “Awarded by Himotkarsh Sahitya Sanskriti Avam Jan-Kalyan Parishad, Una for securing top position in Ph.D in College of Forestry, Dr. YSPUHF, Nauni, Solan. (HP)</li> <li>• <b>M.Sc 1st Rank (Topper)</b> in 2009 in the Department of Basic Sciences, Dr. YSPUHF, Nauni, Solan. (HP)</li> <li>• <b>MERIT SCHOLARSHIP</b> in M.Sc. under <b>University Merit Scholarship Scheme.</b></li> </ul>		
<b>Scientific Leadership</b>		
<b>Editorial Board Members-</b>		
<ul style="list-style-type: none"> <li>• International Journal of Microbiology and Biotechnology</li> <li>• Acta Scientific Microbiology</li> </ul>		
<b>Review Editor-</b> Pantnagar Journal of Research		
<b>Reviewer of National and International Journals-</b>		
<ul style="list-style-type: none"> <li>• Recent Advances in Microbial Technology and Immunology</li> <li>• Journal of Applied Microbiology</li> <li>• Journal of Basic Microbiology</li> </ul>		

<ul style="list-style-type: none"> <li>• 3Biotech</li> <li>• Brazilian Archives of Biology and Technology</li> <li>• International Journal of Biological Macromolecules</li> <li>• BMC Microbiology</li> <li>• Scientific Reports</li> <li>• Agriculture and Food Security</li> <li>• Chiang Mai University Journal of Natural Sciences</li> <li>• Journal of Environmental Science and Health, Part B</li> <li>• Research Journal of Biotechnology</li> <li>• Environmental Science and Pollution Research</li> <li>• Heliyon</li> </ul>				
<b>Research Projects</b>				
<b>Sr No</b>	<b>Name of the project</b>	<b>Teacher/Scientist</b>	<b>Funding agency</b>	<b>Amount (Rs. In Lakh)</b>
<b>As Principal Investigator</b>				
<b>Completed Projects</b>				
<b>On-going Projects</b>				
<b>As Co-Principal Investigator</b>				
<b>On-going Projects</b>				
1.	CAAST-NAHEP (Component Co-PI)	Scientist	World Bank	
<b>14.</b>	<b>Membership of professional societies/journals</b>	Microbiology Society, England (Membership No. C033420); SADHNA Society, Solan (HP)		
<b>15.</b>	<b>Conferences/ symposia attended (no. only):</b>			
	a. National	8		
	b. International	8		
<b>16.</b>	<b>MSc and PhD Students guided-</b> Twenty three (23) M.Sc Students guided for their dissertation work at DAV University, Jalandhar.			
<b>17.</b>	<b>Trainings and foreign visits</b>	(i) Participated in the DBT, Govt. of India Sponsored Workshop-cum Training Programme on “Bioinformatics: A tool for analyzing Genome and their Phylogenetic Relationship” organized by Bioinformatics Centre, Himachal Pradesh University, Summer Hill, Shimla, Himachal Pradesh from <b>13<sup>th</sup>-17<sup>th</sup> September, 2010.</b> (ii) Participated in the DBT, Govt. of India Sponsored Training-cum Seminar on “Molecular Biology Techniques” organized by Faculty of Biotechnology, Shoolini University of Biotechnology and Management Sciences, Solan, Himachal Pradesh from <b>10<sup>th</sup>-19<sup>th</sup> November, 2011.</b>		

		<p>(iii) Participated in the National Institute of Agricultural Extension Management, An Organization of Ministry of Agriculture, Govt. of India, Rajendranagar, Hyderabad Sponsored Training under “Agri-clinics and Agri-business Centres Scheme of Government of India” from <b>4<sup>th</sup> August-2<sup>nd</sup> October, 2010</b> at Solan (HP).</p> <p>(iv) Participated in the workshop on “The art and science of scholarly communication: Writing better research papers” held on <b>March 14, 2015</b> at DAV University, Jalandhar.</p> <p>(v) Attended two day National seminar on “Future of Basic Sciences: Where we are heading to?” organised by GNDU-HRDC under Faculty Development Centre held from <b>15-16<sup>th</sup> October, 2018</b> at GNDU, Amritsar.</p> <p>(vi) Attended two day workshop on “Application of Bioinformatics in Teaching and Research” organized by Bioinformatics Centre, Himachal Pradesh University, Shimla (HP) held on <b>25-26<sup>th</sup> October, 2018</b>.</p> <p>(vii) Attended five days training programme on “Production Protocol for Biofertilizers” organized by National Institute of Plant Health Management, Hyderabad (Telangana) from <b>19<sup>th</sup>-23<sup>rd</sup> August, 2019</b>.</p>
	<b>Foreign Visit</b>	Nil
<b>18.</b>	<b>Teaching</b>	
	<b>Courses Taught</b>	<b>Under Graduate-</b> Agricultural Microbiology, Food Safety and Microbial Standards, General Microbiology, Introductory Microbiology, Bacteriology, Soil Microbiology, Food Microbiology, , Mycology and Phycology
		<b>Post Graduate (M.Sc &amp; Ph.D)-</b> Dairy Microbiology, Principles of Microbiology, Lab Techniques in Microbiology, Microbial Diversity, Microbial Genetics, Industrial and Environmental Microbiology, Research Methodology and Aptitude
<b>19</b>	<b>Important Publication</b>	
	<b>International Journal</b>	<ol style="list-style-type: none"> <li><b>1. Walia Abhishek</b>, Mehta Preeti, Chauhan Anjali and Shirkot C.K. 2013. Optimization of cellulase-free xylanase production by alkalophilic <i>Cellulosimicrobium</i> sp. CKMX1 in solid-state fermentation of apple pomace using central composite design and response surface methodology. <i>Annals of Microbiology</i>. <b>63</b>:187-198. ISSN: 1590-4261. <b>SCI Journal, Impact factor: 1.407/ NAAS Rating: 7.12</b></li> <li><b>2. Walia Abhishek</b>, Mehta Preeti, Chauhan Anjali, Kulshrestha Saurabh and Shirkot C.K. 2014. Purification and characterization of cellulase-free low molecular weight endo <math>\beta</math>-1, 4 xylanase from an alkalophilic <i>Cellulosimicrobium cellulans</i> CKMX1 isolated from mushroom compost. <i>World Journal of Microbiology and Biotechnology</i>. <b>30</b>: 2597-2608. ISSN: 0959-3993. <b>SCI Journal, Impact Factor: 2.10/ NAAS Rating: 7.66</b></li> <li><b>3. Walia Abhishek</b>, Mehta Preeti, Guleria Shiwani and Shirkot CK. 2015. Improvement for enhanced xylanase production by <i>Cellulosimicrobium</i></li> </ol>

		<p><i>cellulans</i> CKMX1 using Central Composite Design of Response Surface Methodology and its application in biobleaching. <i>3Biotech</i>. <b>5</b>: 1053–1066. ISSN: 2190-572X. <b>SCI Journal, Impact Factor: 1.497/ NAAS Rating: 7.36</b></p> <p><b>4. Walia Abhishek</b>, Mehta Preeti, Guleria Shiwani and Shirkot CK. 2015. Modification in the properties of paper by using cellulase-free xylanase produced from alkalophilic <i>Cellulosimicrobium cellulans</i> CKMX1 in biobleaching of wheat straw pulp. <i>Canadian Journal of Microbiology</i>. <b>61</b>: 1-11. ISSN: 0008-4166. <b>SCI Journal, Impact Factor: 1.243/NAAS Rating: 7.46</b></p> <p><b>5. Walia Abhishek</b>, Mehta Preeti, Guleria Shiwani, Chauhan Anjali and Shirkot CK. 2015. Molecular cloning and sequencing of alkalophilic <i>Cellulosimicrobium cellulans</i> CKMX1 xylanase gene and characterization of gene product. <i>Brazilian Archives of Biology and Technology</i>. <b>58</b>(6): 913-922. ISSN: 1516-8913. <b>SCI Journal, Impact Factor: 0.676/ NAAS Rating: 6.64</b></p> <p><b>6. Walia Abhishek</b>, Mehta Preeti, Guleria Shiwani, Chauhan Anjali and Sharma JP. 2017. Microbial xylanases and their application in pulp biobleaching: a review. <i>3Biotech</i>. <b>7</b>: 11. ISSN: 2190-572X. <b>SCI Journal, Impact Factor: 1.497/ NAAS Rating: 7.36</b></p> <p><b>7. Mehta Preeti, Walia Abhishek</b>, Chauhan Anjali, Kulshrestha Saurabh and Shirkot C.K. 2013. Phosphate solubilization and plant growth promoting potential by stress tolerant <i>Bacillus</i> sp. isolated from rhizosphere of apple orchards in trans Himalayan region of Himachal Pradesh. <i>Annals of Applied Biology</i>. <b>163</b>: 430-443. ISSN: 0003-4746. <b>SCI Journal, Impact Factor: 2.046/ NAAS Rating: 8.05</b></p> <p><b>8. Mehta Preeti, Walia Abhishek</b>, Chauhan Anjali, Shirkot CK. 2013. Plant growth promoting traits of phosphate-solubilizing rhizobacteria isolated from apple trees in trans Himalayan region of Himachal Pradesh. <i>Archives of Microbiology</i>. <b>195</b>: 357-369. ISSN: 0302-8933. <b>SCI Journal, Impact Factor: 1.607/ NAAS Rating: 7.60</b></p> <p><b>9. Mehta Preeti, Walia Abhishek</b>, Kakkar Nitin and Shirkot CK. 2014. Tricalcium phosphate solubilisation by new endophyte <i>Bacillus methylotrophicus</i> CKAM isolated from apple root endosphere and its plant growth-promoting activities. <i>Acta Physiologiae Plantarum</i>. <b>36</b>: 2033-2045. ISSN: 0137-5881. <b>SCI Journal, Impact Factor: 1.438/ NAAS Rating: 7.36</b></p> <p><b>10. Mehta Preeti, Walia Abhishek</b>, Kulshrestha Saurabh, Chauhan Anjali and Shirkot CK. 2013. Efficiency of plant growth-promoting P-</p>
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		<p>solubilizing <i>Bacillus circulans</i> CB7 for enhancement of tomato growth under net house condition. <i>Journal of Basic Microbiology</i>. <b>53</b>: 1–12. ISSN: 1521-4028. <b>SCI Journal, Impact Factor: 1.580/ NAAS Rating: 7.44</b></p> <p><b>11.</b> Kumar Anil, Guleria Shiwani, Mehta Preeti, <b>Walia Abhishek</b>, Chauhan Anjali, and Shirkot CK. 2015. Plant growth promoting traits of Phosphate solubilizing rhizobacteria isolated from seabuckthorn growing in cold desert region of trans-Himalayas and evaluating their potential on growth of tomato seedlings. <i>Acta Physiologia Plantarum</i> <b>37</b>(3): 1-12. ISSN: 0137-5881. <b>SCI Journal, Impact Factor: 1.438/ NAAS Rating: 7.36</b></p> <p><b>12.</b> Guleria Shiwani, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2015. Purification and characterization of detergent stable alkaline protease from <i>Bacillus amyloliquefaciens</i> SP1 isolated from apple rhizosphere. <i>Journal of Basic Microbiology</i>. <b>55</b>: 1-15. ISSN: 1521-4028. <b>SCI Journal, Impact Factor: 1.580/ NAAS Rating: 7.44</b></p> <p><b>13.</b> Chauhan Anjali, Guleria Shiwani, Balgir Praveen P, <b>Walia Abhishek</b>, Mahajan Rishi, Mehta Preeti and Shirkot CK. 2016. Tricalcium phosphate solubilization and nitrogen fixation by newly isolated <i>Aneurinibacillus aneurinilyticus</i> CKMV1 from rhizosphere of <i>Valeriana jatamansi</i> and its growth promotional effect. <i>Brazilian Journal of Microbiology</i>. <b>48</b>(2): 294–304. ISSN: 1517-8382. <b>SCI Journal, Impact Factor: 1.810/ NAAS Rating: 7.09</b></p> <p><b>14.</b> Guleria Shiwani, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2016. Molecular characterization of alkaline protease of <i>Bacillus amyloliquefaciens</i> SP1 involved in biocontrol of <i>Fusarium oxysporum</i>. <i>International Journal of Food Microbiology</i>. <b>232</b>:134-143. ISSN: 0168-1605. <b>SCI Journal, Impact Factor: 3.451/ NAAS Rating: 9.34</b></p> <p><b>15.</b> Guleria Shiwani, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2016. Immobilization of <i>Bacillus amyloliquefaciens</i> SP1 and its alkaline protease in various matrices for effective hydrolysis of casein. <i>3Biotech</i>.<b>6</b>:208. ISSN: 2190-572X. <b>SCI Journal, Impact Factor: 1.497/ NAAS Rating: 7.36</b></p>
	<p><b>National Journals</b></p>	<p><b>1. Walia Abhishek</b>, of plant growth promoting rhizobacteria isolated from tomato Mehta Preeti, Chauhan Anjali and Shirkot C.K. 2013. Antagonistic activity rhizosphere against soil borne fungal plant pathogens. <i>International Journal of Agriculture, Environment and Biotechnology</i>. <b>6</b>(4): 587-595. ISSN: 0974-1712. <b>NAAS Rating: 4.69</b></p>

		<ol style="list-style-type: none"> <li>2. Mehta Preeti, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2011. Accelerated Solubilization of Inorganic Phosphate and Production of Antifungal Activity in Soil by Plant Growth Promoting Rhizobacteria Isolated from Apple Rhizosphere. <i>Journal of Mycology and Plant Pathology</i> <b>41</b>(3): 342-349. ISSN: 0971-9393. <b>NAAS Rating: 5.79</b></li> <li>3. Guleria Shiwani, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2013. Optimization of cultural conditions for cellulase-free xylanase production by mutant strain of alkalophilic <i>Cellulosimicrobium</i> sp. CKMX1 in submerged fermentation. <i>Applied Biological Research</i>. <b>15</b> (2): 137-144. ISSN: 0972-0979. <b>NAAS Rating: 5.07</b></li> <li>4. Guleria Shiwani, Sharma Kritika, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2014. Population and functional diversity of phosphate solubilizing bacteria from Apricot (<i>Prunus Armeniaca</i>) of mid and high regions of Himachal Pradesh. <i>The Bioscan</i>. <b>9</b>(2): 1435-1443. ISSN: 0973-7049. <b>NAAS Rating: 5.26</b></li> <li>5. Rana Neerja, <b>Walia Abhishek</b> and Rana Vishal. 2011. Isolation of an antifungal protein from kiwifruits. <i>International Journal of Food and Fermentation Technology</i>. <b>1</b>: 129-131. ISSN: 2249-1570. <b>NAAS Rating: 4.03</b></li> <li>6. Rana Neerja, Kumar Manish, <b>Walia Abhishek</b> and Sharma Surabhi. 2014. Tomato fruit quality under protected environment and open field conditions. <i>International Journal of Bio-resource and Stress Management</i> <b>5</b>(3):422-426. DOI:10.5958/0976-4038.2014.00592.2. ISSN: 0976-4038. <b>NAAS Rating: 4.46</b></li> <li>7. Chauhan Anjali, Guleria Shiwani, <b>Walia Abhishek</b>, Mahajan Rishi, Verma Seema and Shirkot CK. 2014. Isolation and characterization of <i>Bacillus</i> sp. with their effect on growth of tomato seedlings. <i>Indian Journal of Agricultural Biochemistry</i>. <b>27</b>(2): 193-201. ISSN: 0970-6399. <b>NAAS Rating: 4.69</b></li> <li>8. Chauhan Anjali, Mehta Preeti, Mahajan Rishi, <b>Walia Abhishek</b> and Shirkot CK. 2011. Deodar wood dust: An alternative substrate for amylase production by an alkalophilic <i>Bacillus</i> sp. by using solid state fermentation. <i>Asian Science</i> <b>6</b>(1&amp;2): 41-47. ISSN: 0973-4740. <b>NAAS Rating: 3.14</b></li> <li>9. Sharma Rashmi, <b>Walia Abhishek</b>, Chauhan Anjali and Shirkot CK. 2015. Multi-trait plant growth promoting rhizobacteria from tomato rhizosphere and evaluation of their potential as bioinoculants. <i>Applied Biological Research</i>. <b>17</b>(2): 1-12. ISSN: 0972-0979. <b>NAAS Rating: 5.07</b></li> </ol>
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	<p><b>Book Chapters</b></p>	<p><b>1.</b> Joshi VK, <b>Walia Abhishek</b> and Rana Neerja. 2012. Production of Bioethanol from Food Industry Waste: Microbiology, Biochemistry and Technology. In: Biomass Conversion: The Interface of Biotechnology, Chemistry and Materials Science. Baskar Chinnappan, Baskar Shikha and Dhillon Ranjit S. (eds.). Springer Verlag Germany, Berlin, Heidelberg. pp. 251-311. <b>ISBN: 978-3-642-28417-5</b></p> <p><b>2.</b> <b>Walia Abhishek</b>, Guleria Shiwani, Chauhan Anjali, Mehta Preeti. 2017. Endophytic bacteria: Role in phosphate solubilization. In: Endophytes: Crop Productivity and Protection, Sustainable Development and Biodiversity. Maheshwari DK and Annapurna K (eds.), Springer International Publishing AG. pp. 1-33. <b>ISBN: 978-3-319-66543-6</b></p> <p><b>3.</b> <b>Walia Abhishek</b>, Samriti Sharma, Saruchi. 2019. A Renewable Source of Hydrocarbons and High Value Co-Products from Algal Biomass. In: Advances in Biofeedstocks and Biofuels; Volume 3: Liquid Biofuel Production. Lalit Kumar Singh, Gaurav Chaudhary (eds.), Wiley – Scrivener Publishing House. <b>ISBN: 978-1-119-45987-3</b></p> <p><b>4.</b> <b>Walia Abhishek</b>, Sharma Anil, Sharma Samriti, Mehta Preeti. 2018. Microalgae based biofuels - production, improvement, processing and extraction. In: Biofuels. Anil Kumar (ed.). Nova Science Publishers. <b>ISBN: 978-1-53614-671-4</b></p> <p><b>5.</b> Mehta Preeti, Sharma Rashmi, Putatunda Chayanika, <b>Walia Abhishek</b>. 2018. Endophytic fungi: Role in Phosphate Solubilization. In: Advances in Endophytic Fungal Research. Bhim Pratap Singh (ed.). Springer International Publishing. <b>ISBN: 978-3-030-03589-1</b></p> <p><b>6.</b> Pooja Sharma, Priya Arora, Dhriti Kapoor, Kanika Khanna, Pardeep Atri, Ravinder Singh Bali, Rupinder Kaur, <b>Abhishek Walia</b>, Renu Bhardwaj. 2020. The Role of Sugars in Improving Plant Abiotic Stress Tolerance. In: Improving Abiotic Stress Tolerance in Plants. M. Iqbal R. Khan, Amarjeet Singh, Péter Poór (eds.). CRC Press, Boca Raton. <b>ISBN: 978-0-42902-750-5</b></p>