# **CURRICULUM VITAE**

Last updated on Dec 21, 2023

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NAME	DR. ZAHID HUSSAIN
CURRENT STATUS	Associate Professor (Tenured)
SERVICE	Research Officer (BPS 17) Dec 12, 2007 to April 27, 2010 (2 years, 4 months, 15 days)  Assistant Professor (TTS – Grade 19) (HEC Endorsement notification no. DF-QA/HEC/AUP/TTS-138/04/2010/426 dated 9.4.2010)  April 28, 2010 to Nov 21, 2018 (8 years, 6 months, 24 days)
EXPERIENCE	Associate Professor (Tenured – Grade 20) Nov 22, 2018 onwards (4 years, 00 month, 00 days) (by Nov 21, 2022) (HEC Endorsement notification no. Dir-QA/UAP/HEC/TTS-138/21/291 dated 17.6.2021)  DTRC meeting held on 22.11.2022 for promotion to Professor (Tenured) Nov 22, 2022 onwards (1 year, 01 month, 00 days) (by Dec 21, 2023)  Total: 16 years, 00 months, 10 days (Dec 12, 2007 – Dec 21, 2023)
POST PHD EXPERIENCE	Secrecy Section Degree Notification No. 470-08 dated Nov 03, 2008 (PhD Country Directory No. (PCD#) by HEC Pakistan, 4708)  Total: 15 years, 01 month, 19 days (by Dec 21, 2023)
POST- DOCTORATE	Ohio State University USA under supervision of Prof. Douglas Doohan, Prof Imed Dami and Prof. Joshua Blakeslee (June 2021 – February 2022)
PERSONAL INFORMATION	Father's Name: FAZAL HUSSAIN Religion: Islam Nationality: Pakistani Languages: English, Urdu, Pashto, Arabic, Persian (R, W, L, S) E-mail: zhussainws@aup.edu.pk Website: http://www.aup.edu.pk/tstaff_dept_details.php?s_id=154&d_id=15&f_id=4
ORCID ID Scopus ID	0000-0001-5262-0648 57213356240
MAILING ADDRESS	Department of Weed Science and Botany, The University of Agriculture Peshawar, Peshawar-25130, Pakistan. Phone (cell): +92 334 9076365 or +92 300 9070265 Fax: +92 91 9216520 Email: <a href="mailto:zhussainws@aup.edu.pk">zhussainws@aup.edu.pk</a>
DOMICILE	Peshawar, Khyber Pakhtunkhwa, Pakistan
SOCIETIES MEMBERSHIP	Life member  Weed Science Society of Pakistan (WSSP)  Pakistan Society of Agronomy (PAS)  Pakistan Botanical Society (PBS)  Pakistan Society of Scientific Research (PSSR)  Italo-Latin American Society of Ethnomedicine (SILAE)  Member  Asian-Pacific Weed Science Society (APWSS)  International Weed Science Society (IWSS)
PROFESSIONAL GOALS	<ul> <li>Discovering sustainable, environmentally safe and economically viable weed management strategies for crops and vegetables.</li> <li>Impart quality education in weed sciences to under and post graduate students as well as equip the general farmers with newly developed technology.</li> </ul>

Member Departmental Tenure Review Committee (DTRC), Department of Weed Science and Botany, The University of Agriculture Peshawar, vide notification No. 145/S-I/UAP dated 14-3-2022. Member Board of Studies in the Department of Weed Science. The University of Agriculture, 2. Peshawar (Notification no. 4082/WS dated 3-1-2013, no. 1680/WS dated 17-2-2017, and no. 65/WS dated 16-11-2020) Advisor to Public Service Commission for interview in Weed Sciences vide letter no. 114/WS-Bot dated 21-09-2022. Staff Proctor, The University of Agriculture, Peshawar, from 19-09-2011 onwards. Member Student Grievances Settlement Committee, Department of Weed Sciences, The University of Agriculture Peshawar (Letter No. 494/WS dated 12.9.2014) Subject expert of weed science for University Admission tests (Letter no. 1042/WS dated 30-10-2015) Member Character Building Committee, The University of Agriculture, Peshawar (from 27-9-2011 onwards) Member Ethics Committee, The University of Agriculture, Peshawar. Coordinator for MPhil/PhD Botany Programs in the department of Weed Science and Botany vide order no. 163/WS dated 09-02-2021. 10. Member Assessment Team in the Department of Weed Science, The University of Agriculture, Peshawar, for HEC Accreditation 11. Coordinator in computerization and technical official correspondence in Weed Science Dept., **OTHER SERVICES** The University of Agriculture, Peshawar 12. Resource Person, ARI Tarnab Peshawar, Agriculture Research System, Department of Food and Agriculture, KPK Pakistan. 13. Nominee of DAS&R UAP for PhD and MSc (H) Seminars. 14. Convener, Institutional Disciplinary Committee (IDC), Department of Weed Science, vide letter no. 222/WS dated 13-5-2019, and vide registrar letter no. 461/R/UAP dated 20-9-2019. 15. Seminar Coordinator in Weed Science Dept., The University of Agriculture Peshawar, vide office order no. 181/WS dated 27-3-2019. 16. Member QEC Committee in Weed Science vide letter no. 337/WS dated 18/10/2019 17. Convener of the departmental committee for auction of unserviceable items; vide notification no. 457/WS-Bot dated Feb 15, 2022. 18. Nominee of the Department of Weed Science and Botany as Focal Person for Office of Research, Innovation, and Commercialization (ORIC) vide letter no. 40/WS dated 15/6/2022. 19. Nominee of the Department of Weed Science and Botany for SOS Call Service of Capital City Police of KP government, vide Letter no. 252/WS dated 2.2.2023. 20. Team Leader of the Departmental Postgraduate Programs Review 2022-23 for Directorate of Quality Assurance (notification no. 43/WS dated 27.4.2023). (a) Scientia Horticulturae (b) Pakistan Journal of Agricultural Research (c) Pak Journal of Weed Science Research (d) Int'l Research Journal of Plant Science (e) Int'l Research Journal of Agriculture Science (f) Journal of Plant Breeding & Crop Science 1. Co-Editor, Pakistan Journal of Weed Science Research (Feb 2011 to Sep 2013) 2. Assistant Managing Editor, Pak Journal of Weed Science Res (Oct 2013 to Oct 2017) 3. Managing Editor, International Journal of Agricultural and Environmental Research (Nov 2017 **EDITORSHIP** onwards) 4. Managing Editor, Sarhad Journal of Agriculture (X-category journal), The University of Agriculture Peshawar, vide notification no. 20/S-I/UAP dated 10-2-2020 (in progress) http://researcherslinks.com/journal-details/Sarhad-Journal-of-Agriculture/14/editorial-board

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	2008 Ph.D. (Agriculture/Weed Ecology) KPK Agricultural University Peshawar CGPA 3.93 / 4.00 (92.13%)
	2004 M.Sc. Hons. (Agriculture/Weed Science) KPK Agricultural University Peshawar CGPA 3.95 / 4.00 (93.85%)
ACADEMIC QUALIFICATIONS	2002 B.Sc. Hons (Agriculture/Weed Science) KPK Agricultural University Peshawar CGPA 3.82 / 4.00 (87.48%)
	1998 F.Sc. Pre-Medical Federal Government Degree College Peshawar Cantonment, KPK, Pakistan Marks 689 / 1100 (62.64%)
	1996 Secondary School Certificate (Matriculation) Chamkani Model School Chamkani Peshawar, KPK, Pakistan Marks 615 / 850 (72.35%)
COURSES TAUGHT	Weed Science B.Sc. (Hons) WS-401: Introduction to Weed Science WS-513: Weed Identification-II: (Kharif weeds) WS-601: Introduction to Applied Ethnobotany WS-612: Introduction to Medicinal Weeds and their Utilization WS-604: Weed Management in Fruits and Vegetables M.Sc. (Hons) WS-702: Research Methods in Weed Science WS-707: Herbicides and Kharif crops PhD WS-712: Advances in Applied Ethnobotany  Botany B.S. Bot-401: Cell Biology, Genetics and Evolution Bot-413: Biostatistics M.Sc. Bot-607: Biodiversity and Conservation MPhil Bot-706: Advances in Applied Ethnobotany
PROFESSIONAL TRAININGS	<ol> <li>7-day "Workshop for In-Service Teachers of Botany" Aug 9-14, 2005 at NWFP Agricultural Univ Peshawar.</li> <li>HEC 2<sup>nd</sup> workshop on "Training of trainers in conservation strategies for plant biodiversity of Pakistan" Aug 20-21, 2007, organized by Centre of Plant Biodiversity (University of Peshawar Botanical Garden).</li> <li>2-day Workshop (July 22-23, 2009) on "Safe Use of Pesticides and Handling of Spray Machines" at ARI Tarnab (Peshawar) funded by Govt. of NWFP.</li> <li>6-day "Orientation Course of the Newly Recruited Research Officers" organized by Directorate General Outreach, KPK Peshawar from March 15-20, 2010 at Agricultural Research Institute Tarnab, Peshawar.</li> <li>2-day training course on "Climate Change and its Impact on Food Security" May 19-20, 2010 at KPK Agricultural University Peshawar Pakistan.</li> <li>4-day training course on "Presentation Skills using Power Point" (September 27-30, 2010) at Pakistan Academy for rural development, Academy town Peshawar.</li> <li>2-day (November 10-11, 2010) cascading workshop on "Development of Sustainable and Collaborative Research Networks" organized by British Council and HEC at Dept of Agricultural Chemistry, AUP.</li> <li>3-day training course on "Effective Teaching Skills" (June 7-9, 2011) at Pakistan Academy for Rural Development, Academy town Peshawar.</li> </ol>

- 9. 2-day workshop on "Cased Based Teaching" (Aug 3-4, 2011) at Higher Education Commission Regional Centre (Hayatabad) Peshawar.
- 2-day online HEC workshop on "Publishing with Emerald" (Dec 14-15, 2011) at Video Conference Room, KPK Agricultural University Peshawar.
- 11. 2-day workshop (Feb 8-9, 2012) on "Project Formulation" conducted by Pakistan Science Foundation at KP Agricultural University Peshawar.
- 12. The European Weed Research Society's workshop on the statistical software R: "Use of Linear and Non-linear regression in Physical, Chemical and Biological Weed Control" (June 17, 2012) at New Century Grand Hotel, Hangzhou, China.
- 13. 2-week workshop (July 2-13, 2012) on "Incorporating Technology in Education (ITE)" sponsored by NAHE HEC Pakistan at KP Agricultural University Peshawar.
- 14. 3-day workshop (July 4-6 2012) on "Cascading of AIT based Training Program (Ensuring Training Effectiveness)" sponsored by HEC Pakistan.
- 15. 3-day International Workshop on "Adaptation to Natural Hazards under the Changing Global Climate Scenario" September 25-27, 2012, at COMSTECH Islamabad, Pakistan.
- 16. 2-day training workshop on GIS/RS, Jan 9-10 2013, organized by the Department of Environmental Sciences, University of Peshawar.
- 17. One-day seminar on Anti-plagiarism Policy and Procedure, at VCR of the University of Agriculture Peshawar on Mar 29, 2013 organized by QEC UAP.
- 18. One day training on "Data analysis techniques for crop, animal and social sciences" on Feb 6, 2014 organized by AUTA at VCR of UAP.
- 19. One day national seminar on "Exploitation of plants' oil for direct use as biodiesel in the changing climate of Pakistan" on June 19, 2014 organized by AUTA, UAP.
- 20. One day training on "Disaster management" on May 25, 2015 organized by Center for Environmental Solutions. Pakistan.
- 21. A three-day training course on "ICTs: Effective tools for good governance" held at PARD Peshawar during Aug 04-06, 2015.
- 22. A four-day training course on "Integrated Rural Development" held at PARD Peshawar during Mar 07-10, 2016.
- 23. One day workshop on "Integration of ICT in Agriculture and Applied Research" held on February 21, 2019 at the University of Agriculture Peshawar.
- 24. National Workshop on "Developing Research Skills and Data Management" (Apr 4-5, 2019) at Abdul Wali Khan University Mardan.
- 25. Two days' training/workshop on "MPCP (Monitoring Plant Clinic Performance) of Plantwise and Action on Invasives" organized by CABI held on Aug 29-30, 2019 at the Ambassador Inn Hotel Islamabad.
- 26. Two days training on "Teaching Methodologies in HEIs" held on Nov 30 Dec 01, 2022 at VCR Main Library, organized by Directorate of ORIC, The University of Agriculture Peshawar.
- 27. One day session on "awareness on Geographical Indications (GIs) and Consultations for Joining Lisbon Agreement for International Registration for GIs" held on 15.12.2022 jointly organized by IPO-Pakistan and Directorate of Quality Enhancement, University of Peshawar
- 28. Two days training on "Awareness and control of wild oat (*Asphodelus tenuifolius*) in chickpea at District Karak" held on Jan 26-27, 2023 at Department of Weed Science and Botany, UAP.
- 29. Training titled "Bayer: Safe Use Ambassador" organized by Bayer International at the main auditorium of the University of Agriculture Peshawar on 5.10.2023.
- 30. Training Workshop for Program Evaluators / Subject Experts organized by NAEAC, HEC on 2.11.2023 at the Video Conference Room, The University of Agriculture Peshawar.
- 1. 2-day Workshop (July 22-23, 2009) on "Safe Use of Pesticides and Handling of Spray Machines" at ARI Tarnab (Peshawar) funded by Govt. of NWFP.
- 2. 3-day training (July 25-27, 2011) on "Production techniques of maize and sunflower" for farmers of DI Khan and Tank, financed by Govt. of KP
- 3. 2-day training (Sep 11-12, 2014) on "Weed Management techniques for farmers, faculty members, researchers, and extension workers across KPK".
- 4. 2-day training (April 2-3, 2015) on "Judicious weed management in cereals, orchards and vegetables in the environment of Khyber Pakhtunkhwa", held at ARI Tarnab Peshawar, organized by Directorate of Outreach, Agricultural Research, KP Pakistan.
- 5. 2-day training (December 30-31, 2015) on "Awareness on weed management practices for better yields", held at Dept. of Weed Science, The University of Agriculture Peshawar,

# RESOURCE PERSON IN PROFESSIONAL TRAININGS

	Delistan
	Pakistan. 6. 5-day training (February 21-25, 2017) on "Integrated crop management", held at PARD, Peshawar.
	2 <sup>nd</sup> International Weed Science Conference 20-22 March 2006 held at University of Arid Agriculture, Rawalpindi.
	2. 21 <sup>st</sup> Asian Pacific Weed Science Society (APWSS) Conference held in Colombo Sri Lanka, 2-6 October 2007.
	3. 22 <sup>nd</sup> Asian Pacific Weed Science Society (APWSS) Conference held in Lahore Pakistan, 8-12 March 2010.
	4. International Symposium on Institutional Linkages for Agriculture Development in Pakistan held at KPK Agricultural University Peshawar, Dec 20-21, 2010.
	5. 3 <sup>rd</sup> International Weed Science Conference 18-20 April, 2011 at Department of Weed Science, KP Agricultural University Peshawar.
	6. International Conference on "Climate Change: A Challenge for Agriculturists (May 28-30, 2012) at KP Agricultural University Peshawar.
INTERNATIONAL CONFERENCES	7. The 6 <sup>th</sup> International Weed Science Congress at New Century Grand Hotel, Hangzhou, China (June 17-22, 2012).
ATTENDED	8. The 4 <sup>th</sup> International Weed Science Conference at KPK Agricultural University Peshawar, Pakistan (September 6-8, 2012)
	9. The 2 <sup>nd</sup> Africa International Allelopathy Congress held at Sousse, Tunisia (November 16-19, 2016)
	10. Three days International Conference on "Climate Change Threats to Agriculture and Food Security" held at University of Agriculture Peshawar (November 22-24, 2017)
	11. Three days international conference on "Bio-fortification of Staple Food Crops" (September 24-26, 2018) sponsored by University of Agriculture Peshawar and HEC.
	12. Two days international conference on "Strategies for Ensuring Food Security in the Changing Climate" (October 23-24, 2019) held at the University of Agriculture Peshawar Pakistan.
	13. Three days international conference on "Food Security through Sustainable Agriculture
	Strategies in the Current Climate Change Scenario" (March 08-10, 2023) held at the University of Agriculture Peshawar Pakistan.
	1. 8 <sup>th</sup> National Weed Science Conference 25-27 June, 2007 at Department of Botany, GCU Lahore.
	2. 9 <sup>th</sup> National Weed Science Conference 28-30 June, 2009 at Department of Weed Science, NWFP Agricultural University Peshawar.
	3. National Seminar on Recent Trends in Agronomic Strategies for Further Green Revolution (May 2-3, 2012) held at the Department of Agronomy, KP Agricultural University Peshawar
	4. 2 <sup>nd</sup> Environmental Sciences Conference titled "Environment and Climate Change – Local
	Perspectives 2014" (June 4-6, 2014) held at Baragali Summer Campus.  5. National conference on "Innovative Technologies and Sustainable Development in Agriculture"
NATIONAL CONFERENCES	<ul><li>(August 19-22, 2014) held by AUTA at Summer Campus, Bara Gali, University of Peshawar.</li><li>3-days National conference on "Thinking Climate Change Adaptation in Water and Farming"</li></ul>
ATTENDED	THINK – ADAPT, 2016 (November 28-30, 2016) held by Climate Change Center of The University of Agriculture, Peshawar.
	7. Two days national conference on "Climate Smart Agriculture and Crop Modeling" (April 18-19, 2018) organized by Dept. of Agronomy, The University of Agriculture Peshawar.
	8. Two days national conference on "Beneficial Microbes and Sustainable Crop Production" (Feb
	19-20, 2020) organized by Dept. of Agronomy, The University of Agriculture Peshawar.  9. 16 <sup>th</sup> National Weed Science Conference (July 08-10, 2021) at the Department of Weed
	Science and Botany, The University of Agriculture Peshawar.  10.17 <sup>th</sup> National Weed Science Conference 27-28 June 2022, organized by the Weed Science
	Society of Pakistan at the University of the Punjab, Lahore.
40 OBO 411777	<ol> <li>Poster Competition on Wild Flowers (April 25, 2013) at Department of Weed Science, The University of Agriculture Peshawar</li> </ol>
AS ORGANIZER	2. National Workshop on "Data Presentation and Interpretation for Effective Publication" (Mar 20, 2018) at Abdul Wali Khan University Mardan
	3. National Workshop on "Developing Research Skills and Data Management" (Apr 4-5, 2019) at

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	<ul> <li>Abdul Wali Khan University Mardan</li> <li>4. 17<sup>th</sup> National Weed Science Conference (June 27-28, 2022) organized by the Weed Science Society of Pakistan at the University of the Punjab, Lahore.</li> <li>5. Three days international conference on "Food Security through Sustainable Agriculture Strategies in the Current Climate Change Scenario" (March 08-10, 2023) held at the University of Agriculture Peshawar Pakistan</li> </ul>						
HEC Approved Supervisor	HEC approved PhD supervisor vide letter no. HEC/HRD/ASA/2020/44974 dated 29-5-2023						
RESEARCH INTERESTS	Integrated Weed Management Crop-Weed Interactions Population Dynamics and Weed Demography Ethno-botany Medicinal herbs (weeds) Herbicides and crops Herbicide drift analysis						
DISTINCTIONS/ AWARDS/ HONORS	<ol> <li>Bronze Medal in Faculty of Crop Protection Sciences in B.Sc. (Hons).</li> <li>1<sup>st</sup> Position in the Department in B.Sc. (Hons)</li> <li>Achieved 7<sup>th</sup> position in the top 10 winners quota for agriculture all over Pakistan in the contest on Sep 13, 2004 for the 200 PhD Merit Scholarship Scheme in Science and Technology launched by HEC.</li> <li>Awarded shield in recognition of being the "REVIEWER of International Journal of Agricultural and Environmental Research" by VC AWKUM Prof. Dr. Khurshid Khan</li> </ol>						
FELLOWSHIPS	<ol> <li>HEC Merit Scholarship for PhD in Science &amp; Technology (Sep 2004)</li> <li>International Research Support Initiative Program (IRSIP) Fellowship by HEC to Ohio State University (USA) (March – August 2008)</li> <li>Post Doc Fellowship Program (Phase III) Batch-I by HEC Pakistan (selected vide letter no. 3-1/PDFP/HEC/2020/413 dated 19-3-2020) for Ohio State University (Jun 2021 – Feb 2022)</li> </ol>						
TRAVEL GRANTS	<ul> <li>HEC Travel Grant of Rs. 94760/- for International symposium on dry land ecology and human security (ISDEHS) in Dubai UAE (December 4-7, 2006).</li> <li>HEC Travel Grant of Rs. 102,400/- for 21<sup>st</sup> Asia Pacific Weed Science Conference in Colombo Sri Lanka (Oct 2-6, 2007).</li> <li>HEC Travel Grant of Rs. 212,400/- for 6<sup>th</sup> International Weed Science Congress in Hangzhou China (June 17-22, 2012).</li> </ul>						
AUTHOR OF MONOGRAPHS / BOOKS/ BOOK CHAPTERS	<ol> <li>Monograph (2008):         Title: Interference of Xanthium strumarium L. with Maize at Various Densities         Authors: Zahid Hussain and Khan Bahadar Marwat         Publisher. VDM Verlag Dr. Müller GmbH &amp; Co. KG, Germany; (Project No. 44368 and ISBN 978-3-639-35163-7)         Online link: <a href="http://www.amazon.com/Interference-Xanthium-strumarium-Various-Densities/dp/3639351630">http://www.amazon.com/Interference-Xanthium-strumarium-Various-Densities/dp/3639351630</a> </li> <li>Book chapter (2022):         Chapter title: Effects of mulching practices on the management of weeds         Authors: Zahid Hussain and Luqman         Book title: Mulching in Agroecosystems (Plants, Soil and Environment)         Editors: K. Akhtar, M. Arif, M. Riaz and H. Wang         Print ISBN: 978-981-19-6409-1;         Citation: Hussain, Z., Luqman (2022). Effects of Mulching Practices on the Management of Weeds. In: Akhtar, K., Arif, M., Riaz, M., Wang, H. (eds) Mulching in Agroecosystems.         Springer, Singapore. Pp. 135-150. (doi.org/10.1007/978-981-19-6410-7_9)         Online limk: <a href="https://link.springer.com/chapter/10.1007/978-981-19-6410-7_9">https://link.springer.com/chapter/10.1007/978-981-19-6410-7_9</a></li> </ol>						
OTHER SKILLS & HOBBIES etc.	Weeds Identification  Multi-Lingual (English, Arabic, Urdu, Persian, Pashto)  Sports (Cricket, Soccer, Badminton and Table Tennis)  Reading News Papers and Books  Traveling  Social integration						

CO-CURRICULAR CERTIFICATES HELD	Ohio State University (USA) Experience ALP Project Experience PSF Project experience Tafseer Certificate (Imdadul Uloom) B.Sc. (Hons) Distinction Certificate (Depinglish Language Course (Advance II) C	
COMPUTER KNOWLEDGE	Office automation Windows (All types) Statistical softwares	MS Office Internet Operating computer softwares in applied research
RESEARCH PROJECTS	of Khyber Pakhtunkhwa, Pakistan) at Funding Agency: SANDEE, ICIMOD Status: Submitted on 24.5.2023  National Completed Projects (2 as PI and 1 as C As Principal Investigator  1. Title: Environment friendly weed man Project No. 20-2332/NRPU/R&D/HEC Total approved amount: Rs. 2.217 mi Funding Agency: Higher Education C Project start: March 01, 2014 Project end: Feb 28, 2017 Status: Completed (Completion Certif 2. Title: Weed seed bank studies in whe management and soil fertility Project No. 20-5142/NRPU/R&D/HEC Total approved amount: Rs. 3.9417 n Funding Agency: Higher Education C Project start: June 01, 2016 Project end: May 31, 2019 Status: Completed (Completion Certif As Co-Principal Investigator  3. Title: Management of wild onion and Khyber Pakhtunkhwa, Pakistan Project No. 20-4477 /NRPU/R&D/HEC Total approved amount: Rs. 1.50 milli Principal Investigator: Dr. Imtiaz Khar Funding Agency: Higher Education C Project start: May 01, 2015 Status: Completed (Completion Certif	Co-PI)  lagement in vegetables C/13 Illions ommission Pakistan  ficate received from HEC)  eat and maize growing areas of KP for sustainable weed C/14 nillions ommission Pakistan  ficate received from HEC)  other associated weeds for long term control policy in C/14 ions n, Associate Professor, Weed Science, UAP ommission Pakistan  Project end: April 30, 2018 ficate received from HEC)
STUDENTS SUPERVISED	crops in district Buner (complete 2. Abdul Majid Khan (2011) Studies Agricultural University Peshawar 3. Luqman (2012) Integrated weed conditions of Peshawar (comple 4. Yasir Abbas (2015) Indigenous Pakistan regarding weed flora in	urvey on weed problems in wheat, maize and potato ed). s on weed seed bank of new developmental farm of r Pakistan (completed) I management in bitter gourd in the agro-ecological ted) knowledge of the farming community in district Swabi

- knowledge of the local farming community (completed)
- 6. Izaz Ali Shah (2016) Indigenous knowledge of the farming community in district Nowshera Pakistan regarding flora in wheat and maize crops (completed)
- 7. Muhammad Aftab (2018) Weed seed bank studies in wheat and chickpea fields (completed)
- 8. Rashid-ur-Rehman (2018) Weed seed bank studies in oat and rapeseed fields (completed)
- 9. Jawad Gul, class no. 256 (2019) Investigating the indigenous knowledge of the farming community of district Malakand regarding crops and weeds (Completed)
- 10. Aqib Javed, class no. 433 (2020) Indigenous knowledge of local farming community of district Swabi regarding medicinal plants and their associated weeds (Completed).
- 11. Umair Firdos, class no. 528 (2021) Indigenous knowledge of the farming community in district Mardan regarding weed flora in wheat and maize crops (Completed)
- 12. Muhammad Bilal, class no. 176 (2022) Evaluation of weed free and weed infested conditions for performance of maize in maize-legume intercropping (Completed)
- 13. Sabi Ullah, class no. 259 (2023) Exploring the indigenous knowledge of the farming community of District Bannu, Khyber Pakhtunkhwa Pakistan (In Progress)

## Co-advisor with students of other departments

# Department of Agronomy

- 1. Hazrat Amin (2014) Response of maize to organic and inorganic sources of nutrients (completed)
- 2. M. Siraj ul Haq (2014) Effect of residual biochar, FYM and N on mungbean (completed)
- 3. Muneeb Ahmed (2014) Effect of residual biochar, FYM and N on maize yield and soil physiochemical properties (completed)

## Department of Horticulture

4. Lajbar Khan (2014) Importance value indices of various weeds and their management in turf grass (completed)

# Department of Soil and Environmental Sciences

5. Javed Khan (2015) Effect of irrigation and various levels of nitrogen and phosphorus fertilizers on maize crop (completed)

#### University of Peshawar, Department of Environmental Science

- 6. M. Nasir Afridi (2014) Pesticides and their registration process in KP (completed)
- 7. Ajbar (2014) Pesticides & their registration process in Khyber Pakhtunkhwa (completed)

## Master of Science - Honors (M.Sc. - Hons) in Weed Science

### Chairman supervisory committee

- 1. Shah Fahad (2012) Comparative study of cultural and chemical weed control methods in wheat crop (Completed)
- 2. Abrar Ahmad (2014) Effect of plant population and mulching on weeds and onion crop (Completed)
- 3. Zafar Ali (2014) Cultural weed management in potato (Completed)
- Abdul Majid Khan (2014) Soil seed bank analysis of different districts of Parthenium infested areas of Pakistan (completed)
- 5. Luqman (2014) Effect of different sowing geometry and weed control strategies on yield and yield components of onion (completed)
- 6. Ranra (2021) Allelopathic effect of aqueous extracts of weeds on medicinal plants and their associated weeds (Completed)
- 7. Shuja Ullah (2022) Weed detection, identification and management using artificial intelligence in wheat crop (Completed)
- 8. Zahoor-ul-Islam (2023) (Allotted fresh)

#### Member Major field

- 9. Rahamdad Khan (2011) Weed control efficiency of bio-herbicides and their impact on growth of wheat crop (Completed)
- 10. Muhammad Haroon (2014) Weed density and strawberry yield as affected by herbicides

- and mulching techniques (Completed) under supervision Dr. M. Saeed
- 11. Mudassir (2021) Evaluation of different weed management techniques on weed control and yield of wheat (Triticum aestivum L. crop) under supervision of Dr. Shahida Bibi (completed)
- 12. Muhammad Badar Ijaz (2023) Performance of maize-legume intercropping under weed free and weed infested conditions, under supervision of Dr. Muhammad Azim Khan (completed)

#### Member Minor field

## Department of Agronomy

- Sulaiman Khan (2016) Effect of different levels of humic acid and phosphorus on yield and yield components of wheat varieties, under supervision of Dr. Asim Muhammad (Completed)
- 2. Afza Tabassum (2016) (Effect of sorghum extract concentration in combination with herbicide application times on weed density and yield of wheat), under supervision of Prof. Dr. Shad Khan Khalil (Completed)
- 3. Kamran Akhtar Awan (2016) Yield comparison of wheat varieties by planting intervals under rain-fed conditions, under supervision of Prof. Dr. Muhammad Akmal (Completed)
- 4. Muneeb Ahmad (2016) Effect of successive planting and weed control at different ages of maize, under supervision of Prof. Dr. Habib Akbar (Thesis approved).
- 5. Wasim Ali (2017) Response of maize hybrid to reduce and left over levels of nitrogen, phosphorus and zinc in cereal legume cropping system, under supervision of Prof. Dr. Shad Khan Khalil (Completed)
- 6. Zahir Hussain (2017) Effect of crop residue and sulfur on the performance of Sesame under Prof. Dr. Amanullah Jan (Completed)
- 7. Said Badshah (2017) Effect of irrigation, potassium and nitrogen levels on maize, under supervision of Prof. Dr. Shad Khan Khalil (Completed 2017)
- 8. Muhammad Suleman (2017) Salicylic acid seed priming and sowing dates effect on yield and yield components of barley, under supervision of Dr. Asim Muhammad (Completed)
- 9. Muhammad Hamid (2017) Effect of beneficial microbes, humic acid and farmyard manure on yield and yield components of wheat, under supervision of Prof. Dr. Shad Khan Khalil (Completed)
- 10. Muhammad Sohail (2017) Influence of pre-sowing techniques on growth and yield of spring maize, under supervision of Prof. Dr. Amir Zaman Khan (synopsis approved)
- 11. Adeel Liaqat (2018) Effect of fresh and composted poultry manure, urea and beneficial microbes on yield and yield components of wheat, under supervision of Prof. Dr. Shad Khan Khalil (Thesis Completed)
- 12. Ata ur Rahman (2018) Improving wheat yield and soil fertility through organic and inorganic soil amendments, under supervision of Prof. Dr. M. Arif. (Completed)
- 13. Muhammad Atif (2019) Effect of poultry manure and different levels of humic acid on growth and yield of wheat, under supervision of Prof. Bashir Ahmad (Completed)
- 14. Bilal Shah (2021) De-husking and nitrogen management effects on maize yield, under supervision of Habib Akbar (Completed)
- 15. Younis Jan (2021) Effect of rice straw mulching and N-fertilizer on soil fertility and wheat productivity, under supervision of Dr. Ahmad Khan (Completed)
- 16. Muhammad Ibrahim (2022) Response of wheat to sowing dates and seed priming, under supervision of Dr. Shahen Shah (Thesis approved)
- 17. Shamsur Rehman (2023) Spring maize response to stimulated nitrogen availability from farmyard manure with vermicompost, under supervision of Dr. Ahmad Khan (Synopsis approved)
- M. Ahmad Saleem (2023) The role of bioaab in mineral nitrogen availability from manure for improving wheat production under different irrigation levels, under supervision of Prof. Dr. Ahmad Khan (Synopsis approved)

#### Department of Entomology

19. Asim Iqbal (2016) Effect of weed extracts, synthetic insecticides and ash against red pumpkin beetle (*Aulacophora foveicollis*) on snake melon (*Cucumis melo*), under supervision of Dr. Amjad Usman

Department of Agricultural Extension Education and Communication

20. Ishtiaq Ahmad (2017) Performance of Model Farm Centers in getting extension to farmers of Lakki Marwat district, under supervision of Prof. Dr. Iftikhar Ahmad (Completed)

## Department of Horticulture

21. Lajbar (2017) Effect of IBA, planting time and cuttings on rooting of Rangoon Creeper (*Quisqualis indica*) under supervision of Prof. Dr. Noorul Amin

Department of Agric chemistry and Biochemistry

22. Anis-ur-Rehman (2023) Evaluation of allelopathic effect of selected plants extracts on some crops and weeds as bio-herbicides, under supervision of Zafar Ali Shah (completed)

IBGE (MPhil)

23. Usama Tahir (2021) -- title yet to be decided -- under supervision of Dr. Sajid Bangash

## Master of Philosophy (MPhil) in Botany

Major supervisor in Weed Science department

1. Asma Mehmood (2014) Evaluation of the allelopathic potential of some common grassy and broad leaf weeds against economic Kharif crops (synopsis approved)

Co-Supervisor in other departments or universities

Dept. of Botany, Qurtuba University of Science & IT

- 2. Sawera (2018) Evaluation of phytotoxic effect of *Cynodon dactylon*, *Silybum marianum* and *Sorghum halepense* on Okra (MPhil completed)
- 3. Sana Shafee (2018) The allelopathic potential of *Ammi visnaga*, *Chenopodium murale* and *Rumex crispus* on bitter gourd (MPhil completed)
- 4. Roqia Shahzad (2018) Allelopathic effect of *Ficus carica* on *Triticum aestivum* (MPhil completed)
- 5. Sajeela Sami (2018) Inhibitory effect of *Parthenium hysterophorus* L, *Convolvulus arvensis* L. and *Medicago denticulata* Wild. on *Pisum sativum* in District Charsadda (MPhil completed)
- 6. Saira Siyar (2018) Germination and growth response of wheat (*T. aestivum*) to aqueous extracts of problematic weeds (MPhil completed)
- 7. Lubna Jamil (2019) Allelopathic potential of *Canabis sativa*, *Ammi visnaga*, *Sonchus oleraceus* on Brassica species (MPhil completed)
- 8. Asma Nawaz (2020) Allelopathic potential of *Soliva sessilis* on wheat (*Triticum aestivum* L.) Varieties (MPhil completed).

#### Doctor of Philosophy (PhD)

Chairman supervisory committee

 Luqman (2021) Integrated effect of tillage depths and weeding regimes on yield components, nutritional status and weeds of maize crop (Completed)

Member major field

- 2. Abdul Majid Khan (2022) Integration of different weed management approaches in wheat under rainfed conditions, under supervision of Dr. Imtiaz Khan (Completed)
- 3. Shah Fahad (2022) Investigation and confirmation of herbicide resistance in *Phalaris minor* Retz. in wheat crop of Khyber Pakhtunkhwa Pakistan, under supervision of Dr. Saima Hashim (Completed)

Member minor field

Department of Agronomy

- 4. Izaz Hussain (2020) Effect of beneficial microbes, humic acid, and farmyard manure on yield and yield components of maize, under supervision of Dr. Ahmad Khan (Completed)
- 5. Sajid Khan (2023) Weed productivity and soil fertility in response to stimulated manure decomposition under supervision of Dr. Ahmad Khan (completed)

Department of Agricultural Mechanization

6. Subhan Uddin (2022) Impact of mechanical and chemical weed control on yield and yield components of maize in Peshawar, Pakistan, under supervision of Dr. Mansoor Khattak (Completed).

Institute of Biotechnology and Genetic Engineering

7. Abdul Wadood (2023) Response of tomato plants (*Solanum lycopersicum*) to different heavy metals stress grown in hydroponic media, under supervision of Dr. Dawood Ahmad

	8. Brekhna the selec supervisi	<ul> <li>(In progress)</li> <li>8. Brekhna Khan (2023) A morpho-physiological and biochemical trait-based approach for the selection of drought resilient maize lines under water limiting condition under supervision of Dr. Sajid Ali Bangash (In progress)</li> </ul>								
NATIONAL AND		118 in peer reviewed, HEC-Pakistan recognized national and international journals including <b>38 impact factor</b> publications in 15 different international impact factor journals and 80 non-impact								
INTERNATIONAL PUBLICATIONS	factor publication		in 15 different international i	mpact factor journals and 80 non-impact						
CITATIONS / H- INDEX / I-10 Index	H-Index: I10-Index:	1343 019 041	Citations since 2018: H-Index since 2018: I10-Index since 2018: citations?hl=en&user=5heEf	817 015 026 R8QAAAAJ						
TOTAL IMPACT FACTOR	<b>34.81</b> from 39 a (20.73 from 23 a		r to HJRS + 14.08 from 16 a	rticles after HJRS implementation)						
IMPACT	EACTOR BURLIO	ATIONS 2	22 articles (W. category, Jou	rnals - Before July 01 2020)						

	IMPACT FACTOR PUB	BLICATIONS 2	23 artic	les (W category Journ	als - Befor	e July	01, 2020)	
S #	Title	Journal	Year	Authors/Status	Vol. & page no.	IF (Cit.)	Index/ ISSN no.	HEC Categ
1	Common cocklebur competition in forage maize	Weed Technology	2011	Hussain, Z., K.B. Marwat, J. Cardina	25(1): 151-158	1.21	0890-037X (p) 1550-2740 (e)	W
2	Impact of tillage, plant population and mulches on weed management and grain yield of maize	Pakistan Journal of Botany	2011	Gul, B., K.B. Marwat, M. Saeed, <b>Z. Hussain</b>	43(3): 1603-1606	0.91 (50)	0556-3321 (p) 2070-3368 (e)	W
3	Effect of common cocklebur density on biological yield of maize at varying populations	Pakistan Journal of Botany	2012	Hussain, Z., K.B. Marwat, B. Gul, M. Saeed and S. Bibi	44(5): 1627-1632	0.87	0556-3321 (p) 2070-3368 (e)	W
4	Effect of weed density on leaf area index and biological yield of maize	Pak Journal of Botany	2012	Saeed, M., K.B. Marwat, B. Gul and <b>Z. Hussain</b>	44(6):1939 -1942	0.87	0556-3321 (P) 2070-3368 (e)	W
5	Impact of nitrogen and phosphorus on seed yield and yield components of okra cultivars	Journal of Animal & Plant Sciences	2012	M. Sajid, M.A. Khan, A. Rab, S.N.M. Shah, M. Arif, I. Jan, <b>Z. Hussain,</b> M. Mukhtiar	22(3): 704-707	0.64	1018-7081	W
6	Evaluation of various herbicides and their combinations for weed control in wheat crop	Pakistan Journal of Botany	2013	Hussain, Z., K.B. Marwat, F. Munsif, A. Samad	45(1): 55-59	1.21	0556-3321 (P) 2070-3368 (e)	W
7	How nitrogen and phosphorus influence the phenology of okra	Pakistan Journal of Botany	2013	Khan, M.A., M. Sajid, <b>Z. Hussain</b> , K.B. Marwat, F. Munsif	45(2): 479-482	1.21	0556-3321 (P) 2070-3368 (e)	W
8	Studies on efficacy of different herbicides against weeds in potato crop	Pakistan Journal of Botany	2013	<b>Hussain, Z.</b> , F. Munsif, K.B. Marwat, K. Ali, R.A. Afridi, S. Bibi	45(2): 487-491	1.21	0556-3321 (P) 2070-3368 (e)	W
9	Influence of intercropping in maize crop on weed growth and maize grain yield	Pakistan Journal of Botany	2013	Hussain, Z., KB Marwat, F. Munsif, A. Samad, S. Hashim, T. Bakht	45(5): 1729- 1734	1.21	0556-3321 (P) 2070-3368 (e)	W
10	Weed control effects on the wheat-pea intercropping	Pakistan Journal of Botany	2013	Khan, MA, KB Marwat, U Kulsom, <b>Z. Hussain</b> , S Hashim, et al.	45(5): 1743- 1748	1.21	0556-3321 (P) 2070-3368 (e)	W
11	How the competition of <i>Xanthium</i> strumarium L. affects the phenological characters of maize crop	Pakistan Journal of Botany	2013	Hussain, Z., K.B. Marwat, M.A. Khan, S. Hashim, T. Bakht	45(6): 1883- 1887	1.21	0556-3321 (P) 2070-3368 (e)	W
12	Xanthium strumarium L. impact on corn yield and yield components	Turkish J of Agriculture & Forestry	2014	Hussain, Z., K.B. Marwat, J. Cardina, I.A. Khan	38(1): 39-46	0.93	1300-011X (P) 1303-6173 (e)	W
13	Integration of row spacing, mulching and herbicides on weed management in tomato	Pakistan Journal of Botany	2014	Bakht, T., I.A. Khan, K.B. Marwat and <b>Z.</b> <b>Hussain</b>	46(2): 543-547	0.82	0556-3321 (p) 2070-3368 (e)	W
14	Effect of organic and inorganic nutrients sources on phenology and growth of wheat	Pakistan Journal of Botany	2015	Ali, K., M. Arif, F. Munsif, M.T. Jan, <b>Z.</b> <b>Hussain,</b> S. Munir and S. Shah	47(6): 2215- 2222	0.82	0556-3321 (p) 2070-3368 (e)	W

15	Comparison of the newly introduced rearing methods of cotton stainer Dysdercus koenigii (Hemiptera: Pyrrhocoridae) with classical method	Pakistan Journal of Zoology	2016	Shah, SIA, M. Rafiq, T.H. Malik,I.R. Khan, S.A.S. Shah and <b>Z. Hussain</b> .	48(3): 781-787	0.40	0030-9923	W
16	Ethnobotanical study of wild flora in the remote areas of nothern Pakistan	Wulfenia	2016	Khan, M.T., I. Khan, M.I. Khan, <b>Z. Hussain,</b> S. Ayub, N. Khan, M. Shuaib and I.A. Khan.	23(10): 149-165	1.31	1561-882X	W
17	Non-chemical weed management in potato at higher elevations	Applied Ecology & Environ. Research	2016	Hussain, Z, MA Khan, M Ilyas, Luqman and IA Khan	14(5): 67-76	0.56	1589-1623 (p) 1785-0037 (e)	W
18	Screening of USDA cotton accessions against sucking insect pests complex & cotton leaf curl virus disease with major emphasis on abiotic factors	Pakistan Journal of Zoology	2017	Shah, S.I.A., T.H. Malik, I.R. Khan and <b>Z.</b> <b>Hussain</b>	49(4): 1159- 1173	0.40	0030-9923	W
19	Impact of various weed management approaches on the yield of chickpea <i>Cicer arietinum</i> L. crop	Pakistan Journal of Botany	2018	Khan, IA, <b>Z Hussain</b> , Z Ullah, R Khan and G Hassan	50(2): 635-638	0.82	0556-3321 (p) 2070-3368 (e)	W
20	Plant spacing and mulching together affect the phenology and yield of tomato crop	J of Animal & Plant Sciences	2018	Khan, I.A., <b>Z. Hussain</b> , T. Bakht and Luqman	28(2): 546-551	0.45	1018-7081	W
21	Effect of herbicides and intercropping on weeds and yields of maize and the associated intercrops	Pakistan Journal of Botany	2019	Bibi, S., I.A. Khan, Z. Hussain, S. Zaheer and S.M.A. Shah	51(3): 1113- 1120	0.82	0556-3321 (p) 2070-3368 (e)	W
22	Influence of sowing orientation and intercropping of chilies on onion yield and its associated weeds in Peshawar, Pakistan	Pakistan Journal of Botany	2020	Luqman, <b>Z. Hussain</b> , M. Ilyas, I.A. Khan and T. Bakht	52(1): 95-100	0.82	0556-3321 (p) 2070-3368 (e)	W
23	Performance of mungbean under herbicide application and intercropping with maize	Pakistan Journal of Botany	2020	Bibi, S., I. A. Khan, <b>Z. Hussain</b> , S. Zaheer, et al.	52(3): 873-877	0.82	0556-3321 (p) 2070-3368 (e)	W
				Total Impact Factor of	f 23 articles	20.73		
	IMPACT FACTOR PUB	LICATIONS 10	) article	es (W,X,Y category Joi	urnals - Aft	er July	y 01, 2020)	
S#	Title	Journal	Year	Authors	Vol. & page no.	IF (JPI)	Index/ ISSN no.	HJRS Categ
24	Influence of different tillage practices and herbicide application on physical properties of soil and yield of maize	Soil and Environment	2020	Uddin, S., M. Amin, M. Ramzan, <b>Z. Hussain</b> , and S. Shah	39(2): 231-242	0.24 (21)	2074-9546 (p) 2075-1141 (e)	Х
25	Integrated effect of tillage and herbicides on wheat crop	Gesunde Pflanzen	2021	<b>Hussain, Z.</b> , Luqman, S. Hashim & K. Jabran	73(2): 239-247	1.10 (32)	0367-4223 (p) 1439-0345 (e)	Х
26	Integrated effect of soil tillage implements and weeding intervals on leaf area index and chlorophyll content of maize crop leaves	Journal of Himalayan Earth Sciences	2021	Luqman and <b>Z. Hussain</b>	54(1): 90-100	0.24 (12)	1994-3237 (p) 2305-6959 (e)	Y
27	Maize response to soil properties improved with beneficial microbes, humic acid and FYM application	Zemdirbyste- Agriculture	2021	Hussain, I, A. Khan, H. Akbar, <b>Z. Hussain</b>	108(4): 321-330	1.15 (41)	1392-3196 (p) 2335-8947 (e)	Х
28	Effect of tillage implements and weed management techniques on nutritive values of wheat grains	Gesunde Pflanzen	2022	A.M. Khan, I. Khan, <b>Z.</b> <b>Hussain</b> and M.I. Khan	74(1): 133-139	1.10 (01)	0367-4223 (p) 1439-0345 (e)	Х
29	Evaluation of secondary metabolites in <i>Saccharum</i> officinarum and <i>Mimosa invisa</i> Mart. as natural herbicides	Jordan J of Biological Sciences	2022	D. Roeswitawati, <b>Z</b> <b>Hussain</b> , A Jan, MI Massadeh, RH Setyobudi, M Muhidin & D Hudin	15(1): 1-6	0.83	2307-7166 (p)	
30	Allelopathic potential of Soliva sessilis Ruiz & Pav. on wheat	Gesunde Pflanzen	2022	A. Nawaz, <b>Z. Hussain</b> , N. Akhtar, F. Hussain and N. Ullah	74(2): 477-486	1.10 (32)	0367-4223 (p) 1439-0345 (e)	Х
				RH Setyobudi, MFM Atoum,	15(3):			

	in Indonesia as Iron Booster	Sciences		Maftuchah, <b>Z Hussain</b> et al.				
32	Eco-friendly weed mangement in tomato at higher elevation	Journal of Xi'an Shiyou University, Natural Science Edition	2022	<b>Z Hussain</b> , M Ilyas, M Ismail, Luqman, QS Ali, M Amir, J Nisar, S Ali, F Khan, M Huzaifa, N Haq	18(10): 387-403	0.34 (24)	1673-064X (p)	Х
33	The potential of cashew apple waste as a slimming agent	Jordan J of Biological Sciences	2022	A Asmawati, M Marianah, MFM Atoum, DA Sari, I Iqrar, <b>Z Hussain</b> , RH Setyobudi, and N Nurhayati	15(5): 887-892	0.83	2307-7166 (p)	
34	Assessment of Aegle marmelos fruit extracts as organic insecticide for Spodoptera exigua on Allium asculentum	E3S Web of Conferences	2023	D. Roewetawati, T Ramzy, PG Adizzurani, RH Setyobudi, <b>Z Hussain</b> , I Iqrar and NN Huu	Vol. 374, Article 09	0.38	2267-1242	Index Scopus / WoS
35	Production and nutrient value of elephant grass in agroforestry systems in Indonesia	E3S Web of Conferences	2023	ED Purbajanti, DW Widjajanto, PG Adinurani, <b>Z Hussain</b> and I Ekawati	Vol. 374, Article 11	0.38	2267-1242	Index Scopus / WoS
36	Pest control using bark pesticide applicator (BPA) in citrus plants	E3S Web of Conferences	2023	RC Wicaksono, O Endatto, S Wuryantini, and <b>Z Hussain</b>	Vol. 374, Article 30	0.38	2267-1242	Index Scopus / WoS
37	Phenology, crop stand, and dry matter production of wheat in response to beneficial microbes and organic matter sources	SABRAO Journal of Breeding and Genetics	2023	S Khan, A Khan, T Nadeem, H Akbar and <b>Z Hussain</b>	55(2) 463-475	0.30 (25)	2224-8978 (e) 1029-7073 (p)	Х
38	Managing weed–crop interactions enhances chickpea ( <i>C. arietinum</i> L.) chemical components	Plants	2023	I Khan, MI Khan, S Hashim, M Fawad, (4 auth), <b>Z</b> <b>Hussain</b> , (2 auth)	12(17) 03073	4.5 (38)	2223-7747	Х
39	Bio-insecticide activity of neem oil and tobacco extract mixture against citrus aphids and green scale on citrus	E3S Web of Conferences	2023	S Wuryantini, O Endarto, RC Wicaksono, M Istianto, <b>Z Hussain</b> , and U Triasih	Vol. 432, Article 36	0.38	2267-1242	Index Scopus / WoS
40	Antimicrobial activity and cytoxicity of Sumbawa traditional oils ( <i>Minyak</i> <i>sumbawa</i> ) in Sumbawa regency, west Nusa Tenggara, Indonesia	E3S Web of Conferences	2023	RRA Chaidir, B Manguntungi, AZ Mustopa, I Islam, <b>Z Hussain</b> and I Iqrar	Vol. 432, Article 30	0.38	2267-1242	Index Scopus / WoS
			Т	otal Impact Factor after Ju	ly 01, 2020	14.08		
		F	1	ıbmissions (11)				
S#	Title	Journal	Sub Year	Authors	Ref No.	IF (JPI)	ISSN no.	HJRS Cat.
1	Characterization and quantification of active compounds in P. hysterophorus for development of a bio-herbicide to reduce reliance on synthetic herbicides	Pak J Botany	2023	B Baig, S Yousaf, Javaid and <b>Z Hussain</b>	PJB-2023- 251	0.82 (44)	0556-3321 (p) 2070-3368 (e)	Х
2	Nutrients cycling and nitrogen losses depends on lability of the organic matter sources and microbial respiration	Biogeochemi stry	2023	A Khan, S Khan, H Akbar and <b>Z Hussain</b>	BIOG-D- 22-00176	4.00 (88)	1573-515X (p) 0168-2563 (e)	w
3	Faster manure mineralization due to effective microbe addition to soil caused greater carbon and nitrogen cycling	Journal of Plant Nutrition and Soil Science	2023	Sajid Khan Zahid Hussain	Submitted	2.56 (73)	1522-2624 (p) 1436-8730 (e)	W
4	Soil weed seed bank analyses in the agroecological environments of Peshawar, Pakistan	Journal of Himalayan Earth Sci	2023	Luqman, <b>Z Hussain</b> , AM Khan, T Bakht, et al.	332- JHES	0.24 (10)	2305-6959 (p) 1994-3237 (e)	Y
5	Ramification of Climate Change on Population Dynamics of Weeds in Crops of Pakistan: A Review	Intl. J of Agric and Biology	2023	MI Khan, I Khan, H Khan, S Hashim, <b>Z Hussain</b> , B Gul, BA Khan, MG Shahid and T Yaseen	Submitted	0.89 (39)	1560-8530 (p) 1814-9596 (e)	
6	Application of earthworm with compost to upgrade the fertilizer nutrient management value for tomato crop productivity in modern sustainable agriculture		2023	M Hasnain, Donghui Wu, <b>Z Hussain</b> and P Wang	Yet to submit			
7	Response of bell pepper,	Weed	2023	<b>Z Hussain</b> , C Hu, ASL Soto, C Herms and D	Yet to submit	1.87 (63)	0890-037X (p) 1550-2740 (e)	
	cucumber, kale and lettuce to preplant glufosinate application  Effect of tillage type and weed control	Technology		Doohan Luqman, <b>Z. Hussain,</b>		(00)	1550-2740 (e)	

9	Effect of legumes intercropping and chemical weed control in maize on soil nitrogen, OM, LER, aggressivity and competitive ratio		2023	S. Bibi, IA Khan, <b>Z.</b> <b>Hussain</b> and N Khan	Yet to submit	1.85 (61)		
	NON IMPACT FACTOR P	UBLICATION	S 74 ar	ticles (X,Y,Z HEC cate	gories - Be	efore Ju	uly 01, 2020)	
S#	Title	Journal	Year	My status	Vol. & page no.	JPI (Cit.)	Index/ ISSN no.	HEC Categ
1	Impact of weed management on rapeseed	Pak J Weed Science Res	2003	Marwat KB, <b>Z Hussain,</b> IA Khan and B Gul	9(3-4): 209-214	 (11)	1815-1094 (p) 2225-7942 (e)	Υ
2	Efficacy of different herbicides for controlling weeds in onion	Pak J Weed Science Res	2005	Marwat, KB, B Gul, IA Khan and <b>Z Hussain</b>	9(3-4): 225-228		-do-	Υ
3	Chemical weed management in wheat in rainfed areas-I	Pak J Weed Science Res	2005	Marwat, KB, M Saeed, <b>Z</b> <b>Hussain</b> , and B Gul	11(1-2): 31-36		-do-	Υ
4	Efficacy of different herbicides for weed control in onion higher altitudes	Pak J Weed Science Res	2005	Marwat, KB, B Gul, M Saeed and <b>Z Hussain</b>	11(1-2): 61-68		-do-	Υ
5	Chemical weed management in wheat at higher altitudes-I	Pak J Weed Science Res	2005	Marwat KB, <b>Z Hussain,</b> M Saeed, B Gul S Noor	11(3-4): 103-108		-do-	Υ
6	Herbicides evaluation for weed control in chickpea	Pak J Weed Science Res	2005	Marwat KB, IA Khan, MI Khan, <b>Z Hussain</b> and H. Khan	11(3-4): 147-150	(8)	-do-	Υ
7	Efficacy of different herbicides for weed control in canola higher altitude	Pak J Weed Science Res	2005	Marwat KB, M Saeed, B Gul, <b>Z Hussain</b> et al	11(3-4): 165-170		-do-	Υ
8	Chemical weed management in wheat Intercropped with sugarcane	Pak J Weed Science Res	2006	KB Marwat, <b>Z Hussain,</b> B Gul and M Saeed	12(3): 145-150		-do-	Y
9	Performance of different herbicides in wheat ( <i>Triticum</i> <i>aestivum</i> L.) under rainfed conditions of Kohat Pakistan	Pak J Weed Science Res	2006	Marwat KB, M Saeed, B Gul and <b>Z Hussain</b>	12(3): 163-168		-do-	Υ
10	Survey on weed problems in wheat crop in District Mardan	Pak J Weed Science Res	2006	Marwat KB, <b>Z Hussain</b> , B Gul, M Saeed and S. Din	12(4): 353-358		-do-	Υ
11	Survey on weed problems in wheat crop in Chitral, NWFP-Pakistan	Pak J Weed Science Res	2007	<b>Z Hussain</b> , KB Marwat, M Saeed, B Gul et al.	13(1-2): 121-127		-do-	Υ
12	Study of different chemicals for weed management in wheat in Chitral	Pak J Weed Science Res	2007	Marwat KB, <b>Z Hussain</b> , M Saeed, B Gul et al.	13(3-4): 157-165		-do-	Υ
13	Study of a biopesticide in comparison with some synthetic pesticides against thrips in garlic crop	Sarhad J of Agriculture	2007	Ahmad S, IA Khan, <b>Z Hussain</b> , SIA Shah and M. Ahmad	23(3): 719-722		1016-4383 (p) 2224-5383 (e)	Х
14	Comparing the effectiveness of a biopesticide with three synthetic pesticides for aphid control in wheat	Sarhad J of Agriculture	2007	Shah, SIA, IA Khan, <b>Z Hussain</b> . M Ahmad and S Ahmad	23(3): 723-728		-do-	Х
15	Comparative study of a biopesti-cide with some synthetic pestici-des used against mustard aphids	Sarhad J of Agriculture	2007	Ahmad S, IA Khan, <b>Z</b> <b>Hussain</b> , SIA Shah and M Ahmad	23(3): 729-732		-do-	Х
16	Chemical weed management in wheat at higher altitudes	Comm. Agric. Appl. Biol. Sci.	2007	Khan, I., K.B. Marwat and Z. Hussain	72(2): 259-264		1379-1176	Υ
17	Studying the performance of silkworm, Bombyx mori L. races fed with different mulberry varieties	Sarhad J of Agriculture	2007	Shah SIA, IA Khan, <b>Z</b> <b>Hussain</b> , M Shah and A Usman	23(4): 1079- 1083		1016-4383 (p) 2224-5383 (e)	Х
18	The effect of three different mulberry varieties on performance of three different Bombyx mori L. races	Sarhad J of Agriculture	2007	Shah, SIA, IA Khan, <b>Z</b> <b>Hussain</b> , S Ahmad and M Ahmad	23(4): 1085- 1089		-do-	Х
19	Comparison of three silkworm races fed with three mulberry	Sarhad J of Agriculture	2007	Shah SIA, IA Khan, I Ahmad, M Shah and <b>Z</b>	23(4): 1103-		-do-	Х

	varieties			Hussain	1108			
20	Comparison of a biopesticide with some synthetic pesticides against aphids in rapeseed crop	Sarhad J of Agriculture	2007	Ahmad S, IA Khan, <b>Z</b> <b>Hussain</b> , SIA Shah and M Ahmad	23(4): 1117- 1120		-do-	Х
21	Study of various herbicides for weed control in wheat under irrigated conditions	Pak J of Weed Science Res	2008	Marwat, K.B., M. Saeed, <b>Z. Hussain</b> , B. Gul and H. Rashid	14 (1-2): 1-8		1815-1094 (p) 2225-7942 (e)	Υ
22	Evaluation of different herbicides for weed control in onions	Sarhad J of Agriculture	2008	Hussain, Z., K.B. Marwat and S.I.A Shah	24(3): 453-456		1016-4383 (p) 2224-5383 (e)	Х
23	Evaluation of herbicides for weed control in wheat at varying densities	Sarhad J of Agriculture	2008	Hussain, Z., K.B. Marwat and S.I.A Shah	24(3): 457-460		-do-	Х
24	Efficacy of various herbicides for management of weed flora in citrus orchards	Pak J of Weed Science Res	2010	Hussain, Z., F. Munsif and A. Samad	16(1): 73-79		1815-1094 (p) 2225-7942 (e)	Υ
25	Effect of individual and tank mixed herbicides on yield of wheat crop	Pak J of Weed Science Res	2010	Khalil, M.F., G. Hassan, <b>Z.</b> <b>Hussain</b> , N.H. Shah and M.M. Khan	16(1): 89-96		-do-	Υ
26	Bio-efficacy of different plant extracts against melon fruit fly in bitter gourd	Pak J of Weed Science Res	2011	Ali H, S Ahmad, G Hassan, A Amin, <b>Z</b> <b>Hussain</b> and M Naeem	17(2): 143-149		-do-	Υ
27	Effect of various tillage methods and nitrogen management on weeds and maize performance	Pak J of Weed Science Res	2011	Ali K, F Munsif, <b>Z</b> <b>Hussain</b> , IU Din, M Waqas and Wagma	17(3): 253-262		-do-	Υ
28	Important chickpea weeds of New Developmental Farm, Khyber Pakhtunkhwa Agricultural University, Peshawar, Pakistan	Pak J of Weed Science Res	2011	Khan, A., I.A. Khan, R. Khan, I. Khan, <b>Z.</b> <b>Hussain</b> , R. Humayun, and S. Ali.	17(3): 271-276		-do-	Υ
29	Allelopathic potential of <i>Silybum</i> marianum L. against the seed germination of edible legumes	Pak J of Weed Science Res	2011	R Khan, MA Khan, W Ullah, M Waqas, AM Khan, <b>Z Hussain</b> et al.	17(3): 293-302	 (12)	-do-	Υ
30	Effect of different weeds management practices on weeds and yield of maize (Zea mays L.)	Pak J of Weed Science Res	2011	Ali, K., F. Munsif, <b>Z.</b> <b>Hussain</b> , I. Khan, et al.	17(4): 313-321		-do-	Υ
31	Evaluation of herbicides for weed management in maize and their impact on grain yield of maize	Pak J of Weed Science Res	2011	<b>Z. Hussain</b> , F Munsif, K Ali and SIA Shah	17(4): 333-342		-do-	Υ
32	Distribution and checklist of weeds in maize crop of F.R. Bannu, KPK, Pakistan	Pak J of Weed Science Res	2011	Muhammad, Z., S.M. Wazir, A. Farooq, S. Ullah and <b>Z. Hussain</b>	17(4): 373-379	 (8)	-do-	Υ
33	Identification of common weeds and its distribution pattern in wheat fields of FR Bannu, KP, Pakistan	Pak J of Weed Science Res	2011	Ullah, I., S.M. Wazir, A. Farooq, S.U. Khan and <b>Z. Hussain</b>	17(4): 407-416	 (13)	-do-	Υ
34	Effect of different Phosphorus levels on the yield and yield components of maize	Sarhad J of Agriculture	2011	Masood, T., R. Gul, F. Munsif, F. Jalal, <b>Z.</b> <b>Hussain</b> et al.	27(2): 167-170		1016-4383 (p) 2224-5383 (e)	Х
35	Management of organic and inorganic nitrogen for different maize varieties	Sarhad J of Agriculture	2011	Ali, K., F. Munsif, M. Zubair, H. Akbar, <b>Z.</b> <b>Hussain</b> et al.	27(4): 525-529	 (16)	-do-	Х
36	Effects of tillage depth on seedling growth, fodder yield and economic value of maize	Intl. J of Biology and Biotechnol	2011	Munsif, F., M. Arif, N. Khan, <b>Z. Hussain</b> , M. Waqas and K. Ali	8(2): 233-237		1810-2719	Υ
37	Seed priming in Zn solutions enhances emergence and yield of chickpea	Intl. J of Biology and Biotechnol	2011	Arif, M., M. Waqas, F. Munsif, A. Ali, <b>Z.</b> <b>Hussain</b> , et al.	8(2): 295-298		-do-	Υ
38	Assessment of allelopathic effects of Parthenium seed germination and seedling growth of wheat cultivation	Pak J of Weed Science Res	2012	Khan N, H. Ullah, K. Naveed, <b>Z. Hussain</b> and S.A. Khan	18(1): 39-50	(29)	1815-1094 (p) 2225-7942 (e)	Υ
39	Effect of different weed control methods on weeds and yield of Chillies ( <i>C. annuum</i> L.)	Pak J of Weed Science Res	2012	Khan, A., M. Sajid, <b>Z. Hussain</b> and A. Mateen	18(1): 71-78	 (14)	-do-	Υ

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40	Impact of maize-legume intercropping on weeds and Maize crop	Pak J of Weed Science Res	2012	Khan, M.A., K. Ali, <b>Z. Hussain</b> and R.A. Afridi	18(1): 127-136	 (26)	-do-	Y
41	Studies on weed seed bank of New Developmental Farm of KP Agricultural University Peshawar	Pak J of Weed Science Res	2012	Khan, A.M., <b>Z. Hussain</b> , I. Khan et al.	18(2): 183-189		-do-	Υ
42	Assessment of weed problems in wheat crop in Peshawar Pakistan	Pak J of Weed Science Res	2012	<b>Z Hussain,</b> F Munsif, SIA Shah, M.S. Kakar and A Ahmad	18(3): 357-366	 (16)	-do-	Υ
43	Response of maize and three perennial weeds to different combinations of macro-nutrients.	Pak J of Weed Science Res	2012	Umm-e-Kalsoom, SD Kakar, MA Khan, <b>Z</b> <b>Hussain</b> and A. Khan	18(4): 433-443		-do-	Y
44	Bioherbicidal activity of some winter weeds against some crops	Pak J of Weed Science Res	2012	R Khan, MA Khan, M Waqas, M Haroon, <b>Z</b> <b>Hussain</b> , et al.	18(4): 561-569	 (15)	-do-	Y
45	Impacts of soil solarization combined with other weed control strategies on weed management in onion nursery	Pak J of Weed Science Res	2013	Gul, B., I.A. Khan, <b>Z. Hussain</b> and M. Saeed	19(1): 101-108		-do-	Y
46	Integrated weed management in bitter gourd in the agroecological conditions of Peshawar	Pak J of Weed Science Res	2013	Luqman, <b>Z Hussain</b> and S Fahad	19(3): 341 – 347		-do-	Y
47	Biological screening of the crude extract isolated from a soil born fungi ( <i>Cladosporium carrionii</i> )	Pak J of Weed Science Res	2013	AA Khan, B Ahmad, G Lutfullah, N Bacha and <b>Z</b> <b>Hussain</b>	19(4): 427 – 435		-do-	Y
48	Morphology and anatomy of some weeds from flora of Bannu district Pakistan	Pak J of Weed Science Res	2013	A Mehsud, S Mehmood, A Muhammad, R Wazir and <b>Z Hussain</b>	19(4): 437 – 445	(06)	-do-	Y
49	Allelopathic effects of rice straw extract on different crops and weeds	ARPN J of Agric & Biol Sci	2013	RA Afridi, MA Khan, <b>Z</b> <b>Hussain</b> , S Saleem, S Khan, K Afridi & M Ali	8(5): 411-418		1990-6145	Z
50	Mineral profile of different medicinal plants and their quantitative analyses collected from NW Pak.	Pak J of Weed Science Res	2014	S Zaheer, IU Khan, H Ullah, S Shah, <b>Z Hussain</b> , S Bibi et al.	20(2): 145-154		1815-1094 (p) 2225-7942 (e)	Y
51	Allelopathic effects of some weeds on chickpea crop	Pak J of Weed Science Res	2014	I Khan, Z Ali, MI Khan, <b>Z</b> <b>Hussain</b> , S Bibi, et al	20(2): 207-211	(06)	-do-	Y
52	Response of Tomato to Different Levels of Calcium & Magnesium Concentration	World Appl Sciences Journal	2014	M Ilyas, G Ayub, <b>Z Hussain</b> , M Ahmad, B Bibi, et al.	31(9): 1560- 1564		1818-4952	Z
53	Effect of forest fire on the chemical composition of the soil of Margalla hills of Pakistan	Pak J of Weed Science Res	2014	J Khan, B Muhammad, MA Khan, <b>Z Hussain</b> , SU Khattak, et al.	20(2): 213-223		1815-1094 (p) 2225-7942 (e)	Υ
54	Comparative study of weed species in different field crops of Bannu, KP, Pakistan	Pak J of Weed Science Res	2014	RU Khan, S Mehmood, SU Khan, A Muhamad and <b>Z Hussain</b>	20(4): 489-504		-do-	Υ
55	Efficacy of different groups of insecticides against cotton stainer, D. koenigii in field conditions	Pakistan Entomologist	2014	M Rafiq, SIA Shah, MT Jan, IR Khan, SAS Shah and <b>Z Hussain</b>	36(2): 105-110		2521-5922	Z
56	Pheno-morphological traits of mungbean as influenced by P and tillage under irrigated and un- irrigated conditions	Pure & Applied Biology	2014	Amanullah, M Ullah, I Khan, <b>Z Hussain</b> and KM Kakar	3(2): 55-59		2304-2478	Y
57	Bioactive neem leaf powder enhances the shelf life of stored mungbean grains and extends protection from pulse beetle	Pak J of Weed Science Res	2015	K Ahmad, M Adnan, MA Khan, <b>Z Hussain</b> , K Junaid, N Saleem, M Ali, A Basir and A Ali	21(1): 71-78	 (17)	1815-1094 (p) 2225-7942 (e)	Y
58	Response of onion crop to various eco-friendly weed management techniques at Pesh Pak	Pak J of Weed Science Res	2015	<b>Z Hussain,</b> Luqman, M Ilyas, S Hussain, M Ali, MS Khan et al.	21(2): 195-206		-do-	Y
59	Influence of synthetic and bioher- bicides on management of horse purslane ( <i>T. portulacastrum</i> L.)	Pak J of Weed Science Res	2015	M Saeed, M Iqbal, M Haroon, <b>Z Hussain</b> , M Buriro, M Memon et al.	21(3): 317-325		-do-	Y

Effect of sowing direction, plant spacing and weed control treatments on tomato yield and its weeds	Pak J of Weed Science Res	2016	<b>Z Hussain</b> , M Ilyas, Luqman, IA Khan, F Shehzad, I Khan et al.	22(1): 49-62		-do-	Y
Indexing the Cyanobacterial communities of different ecological habitats of Malakand, Pakistan	Pak J of Weed Science Res	2016	F Hussain, SZ Shah and Z Hussain	22(1): 37-47		-do-	Υ
Importance value indices of weeds infesting maize crop at the farm of UAP, Peshawar	Pak J of Weed Science Res	2016	IA Khan, SU Kakar, <b>Z</b> <b>Hussain</b> and R Khan	22(1): 63-68	(04)	-do-	Y
Nitrogen depletion by weeds from organic and inorganic nitrogen sources in wheat crop	Pak J of Weed Science Res	2016	M Adnan, MA Khan, N Saleem, <b>Z Hussain</b> , M Arif, M Alam, A Basir and H Ullah	22(1): 103-110	(07)	-do-	Y
Influence of sowing orientation and intercropping of chili on tomato yield and its weeds	Pak J of Weed Science Res	2016	<b>Z Hussain,</b> M Ilyas, Luqman and IA Khan	22(3): 395-406		-do-	Y
Ethnobotanical study of weeds at Mohmand Agency, Pakistan	Pak J of Weed Science Res	2016	S Ali, M Musa, <b>Z</b> <b>Hussain</b> , S Shah, S Uddin and W Khan	22(3): 483-492		-do-	Υ
Ethnobotanical assessment of the medicinal flora of Khyber Agency	Pak J of Weed Science Res	2016	K Ali, M Shuaib, <b>Z</b> <b>Hussain</b> , W Sajjad, F Ali and M Fazil	22(4): 607-616	 (11)	-do-	Y
Importance value indices of various weeds and their management in turf grass	Pure & Applied Biology	2016	L Khan, NU Amin, <b>Z</b> <b>Hussain</b> , Luqman, K Shah, MA Khan et al.	5(4): 804-814		2304-2478	Y
Interactive effect of Ca and Mg on the growth and yield of tomato (Lycopersicon esculentum L.)	Pure & Applied Biology	2016	M Ilyas, M Ahmad, <b>Z</b> Hussain, A Saeed, F Begum, Luqman, K Shah, MI Khan and S Shah	5(4): 876-882	(3)	2304-2478	Y
Efficacy of different groups of insecticides against dusky cotton bug, O. laetus Kirby in Pakistan	Journal of Agric and Research	2016	SIA Shah, MT Jan, M Rafiq, TH Malik, IR Khan and <b>Z Hussain</b>	2(3): 1-17		0095-9758	Z
Effect of different nitrogen levels on the growth of Chrysanthemum cultivars	Intl. J of Biosciences	2016	N Malik, G Ayub, M Ilyas, AM Khattak, M Ahmad, <b>Z</b> <b>Hussain</b> et al.	8(5): 202-211		2220-6655 (p) 2222-5234 (e)	Z
Plant spacing and mulching effect on onion yield and weeds	Pak J of Weed Science Res	2017	<b>Z Hussain</b> , M Ilyas, Luqman, IA Khan, I Ullah and K Ullah	23(1): 65-77		1815-1094 (p) 2225-7942 (e)	Y
Allelopathic effects of some common weeds prevailing in wheat fields on growth characteristics of wheat ( <i>Triticum aestivum</i> L.)	PSM Biological Research	2017	S Siyar, Z Chaudhry, F Hussain, <b>Z Hussain</b> , A Majeed	2(3): 124-127		2517-9586 (e)	Υ
Allelopathic effects of two asteraceae w eeds ( <i>Artemisia annua</i> and <i>Taraxicum officinalis</i> ) on germination of maize and wheat	PSM Biological Research	2018	S Siyar, Z Muhammad, F Hussain, <b>Z Hussain</b> , S Islam, A Majeed	3(2): 44-47		2517-9586 (e)	Υ
Allelopathic effects of sheesham extracts on germination and seedling growth of common wheat	Cercetari Agronomice in Moldova	2018	S. Siyar, S. Sami, F. Hussain and <b>Z.</b> <b>Hussain</b>	4: 17-26.		0379-5837 (p) 2784-0360 (e)	Z
	JBLICATIONS	5 artic	cles (X,Y HEC HJRS ca	tegories -	After J	uly 01, 2020)	l
Title	Journal	Year	Authors	Vol. & page no.	IF (JPI)	Index/ ISSN no.	HJRS Categ
Response of bitter gourd (Momordica charantia) to cultural and chemical weed control methods	Pak J of Weed Science Res	2020	Luqman, <b>Z. Hussain</b> , M. Ilyas, et al.	26(3): 343-347		1815-1094 (p) 2225-7942 (e)	Y
Impact of tillage tools and weeding regimes on nutritive values of maize grains	Sarhad Journal of Agriculture	2021	Luqman and <b>Z. Hussain</b>	37(1): 71-76	JPI (09)	1016-4383 () 2224-5383 (e)	Y
Soil weed seed bank status in the agroecological conditions of Chitral, Pakistan	Pak J of Weed Sci Res	2021	Luqman, Z. <b>Hussain</b> , T. Bakht, et al.	27(3): 253-262		1815-1094 (p) 2225-7942 (e)	Y
Allelopathic effect of aqueous extracts of weeds on medicinal Plants	Pak J of Weed Sci Res	2022	R Jalal, <b>Z Hussain</b> , S Jan, I Ahmad, M Ilyas, R Khan, SM Rasheed, T Ali	28(4): 388-399		1815-1094 (p) 2225-7942 (e)	Y
	spacing and weed control treatments on tomato yield and its weeds Indexing the Cyanobacterial communities of different ecological habitats of Malakand, Pakistan Importance value indices of weeds infesting maize crop at the farm of UAP, Peshawar Nitrogen depletion by weeds from organic and inorganic nitrogen sources in wheat crop Influence of sowing orientation and intercropping of chili on tomato yield and its weeds Ethnobotanical study of weeds at Mohmand Agency, Pakistan Ethnobotanical assessment of the medicinal flora of Khyber Agency Importance value indices of various weeds and their management in turf grass Interactive effect of Ca and Mg on the growth and yield of tomato (Lycopersicon esculentum L.)  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79	Response of onion crop to varying cropping patterns and non-chemical weed control methods	Pak J of Weed Sci Res	2023	Luqman , <b>Z Hussain</b> , T Bakht, F Wahab , M Din, H Khan, I Shinwari, et al.	29(1): 58-63	 1815-1094 (p) 2225-7942 (e)	Υ
80	Comparison of artificial intelligence and synthetic herbicides for weed control in wheat crop	Pak J of Weed Sci Res	2023	S Khan, <b>Z Hussain</b> and H Khan	29(2): 81-87	 1815-1094 (p) 2225-7942 (e)	Y

## **REFERENCES**

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