

CURRICULUM VITAE

NAME	DR. MUHAMMAD ISHFQ KHAN: PhD WeedScience-2009, [Tenured Associate Professor] Postdoc; The University of Edinburgh Scotland UK-2021
RESEARCH AND TEACHING EXPERIENCE	Over 15 years post Phd Teaching and Research experience in the department of weed science & Botany, the university of agriculture Peshawar-Pakistan <ol style="list-style-type: none"> 1. Associate Professor (Tenured) (November 22, 2018 – November 21, 2022) 2. Assistant Professor (TTS) (April 2010 –November 21, 2018) 3. Lecturer January 2007-2010 4. Research Associate (Jan 2005 – Dec 2006), ALP Project, funded by Pakistan Agriculture Research Council, Islamabad-Pakistan
Countries visited for Professional trainings/Symposiums/Fellowships	Australia, UK, China, Saudi Arabia , Turkey , Vietnam , Thailand, Qatar, UAE, Egypt, Indonesia, Mauritius, Sri Lanka, Nepal, Iran, Tunisia .
Date of Birth	24 – 05 – 1978
CNIC No.	
Passport No.	1120-10314001-7
Nationality	PR4100014
Languages	Pakistani
E-mail	English, Urdu, Pashto, <u>Arabic. (R. W. L. S)</u>
Websites	<u>mishfaq@aup.edu.pk</u>
MAILING ADDRESS	Department of Weed Science & Botany, The University of Agriculture Peshawar, Peshawar-25130, Pakistan. Mobile WhatsApp: +92 3339167803
SOCIETIES MEMBERSHIP	Life member Weed Science Society of Pakistan (WSSP) Member Asian-Pacific Weed Science Society (APWSS) International Weed Science Society (IWSS)
Research Interest	Agriculture, Biodiversity, Plant science, Weed management, Field crops, Weeds allelopathy, Exploration of bioactive compounds, Weeds ecology, Bioherbicides.

OTHER SERVICES	<ol style="list-style-type: none"> 1. General secretary weed science society of Pakistan since 2022 2. Sarhad Journal of Agriculture, 3. Pak Journal of Weed Science Research, 4. Resident country coordinator for SAFE network (2016-2020). 5. Young Association of Pakistani Scientists. 6. Member National Academy of young Scientists/ 7. Focal person for University Alumni association since 2013 8. Member of the department disciplinary committee 9. Seminar coordinator in the department of weed science UAP-Pakistan.
EDITORSHIP	<p>Managing editor Pakistan Journal of Weed Science Research (PJWSR) Member of Editorial board of Journal of Research in weed science (Turkey)</p>
ACADEMIC QUALIFICATIONS	<p>2021 Post doctorate (The University of Edinburgh Scotland UK)</p> <p>2009 Ph.D. (Agriculture/Weed Science)The University of Peshawar-Pakistan and Charles Sturt University Australia)</p> <p>2004 M.Sc. Hons. (Agriculture/WeedScience)The University of Peshawar-Pakistan</p> <p>2002 B.Sc. Hons (Agriculture/Entomology)The University of Peshawar-Pakistan</p> <p>1997 F.Sc Pre-Medical GHSS Serai Naurang, BISE Bannu, KPK, Pakistan</p> <p>1996 Secondary School Certificate (Matriculation) GHSS Serai Naurang, BISE Bannu, KPK, Pakistan</p>

PROFESSIONAL TRAINING

Post doctorate from Institute of Molecular Plant Science, the University of Edinburgh Scotland UK (2020-21)

6 Months Research Fellowship at EH grahm center for Agriculture Innovation at Charles Sturt University Wagga Wagga Australia (August 2007- January-2008).

Faculty Development training course at the university of Agriculture Peshawar, sponsored by the Higher education commission of Pakistan (26/02/2007- 27/03/2007).

2-day training course on “Climate Change and its Impact on Food Security” May19-20, 2010 at KPK Agricultural University Peshawar Pakistan.

2-day training workshop on GIS/RS, Jan 9-10 2013, organized by the Department of Environmental Sciences, University of Peshawar.

3 days training on Utilization of modern Agriculture Technologies in changing environmental perspective (21-23/07/2010)

7 Days training workshop for in-service teachers in botany at the university of Agriculture Peshawar Pakistan (09-14/08/2005)

3 days training course on weed management at Pakistan Academy for Rural development 19-21/12/2005.

3 days training workshop training of trainers in plant biodiversity at the department of botany university of Peshawar (23-25/11/2006)

7 days training course of biodiversity and weed sciences at the university of Agriculture Peshawar Pakistan (11-16/12/2006)

10.2 days talent research exchange programme sustainable research network at the university of Agriculture Peshawar Pakistan (10-11/11/2010)

11.3 days International training workshop on water shed management and land rehabilitation at Pakistan Academy of Sciences Islamabad (6-8/12/2010)

12.2 Weeks training course on incorporating technologies in education at the university of Agriculture Peshawar Pakistan sponsored by HEC (2-13/7/2012)

13.2 days training workshop on exploitation of plant oil direct use a biodiesel in the changing climate in Pakistan (19-20/06/2014).

14.3 days’ workshop on Innovative technologies sustainable development in Agriculture at summer campus Bara Galli organized by UAP (19-22/08/2014).

15.3 days training course on ICT’s effectiveness of for good governance at Pakistan academy of rural development (4-6/08/2015).

Organized two days workshop on weed interference, sprayer calibration, herbicides calculation and herbicides safety June 24-26, 2019.

Organized two days international conference of food security in the changing climate October 24-26, 2019.

<p>Paper Presentations</p> <p>INTERNATIONAL CONFERENCES ATTENDED INSIDE THE COUNTRY</p>	<p>First International Weed science conference held at the University of Agriculture Peshawar-Pakistan (23-26/10/2003).</p> <p>2nd International Weed Science Conference 20-22 March 2006 held at University of Arid Agriculture, Rawalpindi.</p> <p>22nd Asian Pacific Weed Science Society (APWSS) Conference held in Lahore Pakistan, 8-12 March 2010.</p> <p>International Symposium on Institutional Linkages for Agriculture Development in Pakistan held at KPK Agricultural University Peshawar, Dec 20-21, 2010.</p> <p>3rd International Weed Science Conference 18-20 April, 2011 at Department of Weed Science, KP Agricultural University Peshawar.</p> <p>First international conference on poverty alleviation through sustainable management of biodiversity at Bara galli summer campus Pakistan (6-8/9/2012).</p> <p>International Conference on “Climate Change: A Challenge for Agriculturists (May 28-30, 2012) at KP Agricultural University Peshawar.</p> <p>The 4th International Weed Science Conference at KPK Agricultural University Peshawar, Pakistan (September 6-8, 2012)</p> <p>First international Kashmir Science conference (20-21/09/2005)</p>
<p>Paper Presentations</p> <p>International conferences attended outside country</p>	<p>17th Iranian Plant protection congress (University of Tehran Karaj-Iran, 01-06/09/2006)</p> <p>8th African Crop Science Society Conference Minia University Egypt (25-30/11/2007)</p> <p>12th International Conference on diffuse pollution management Thailand (22-30/8/2008)</p> <p>16th Asian Agriculture and First ISAT symposium “sufficiency Agriculture at KMITL Bangkok Thailand (25-27/08/2010)</p> <p>Wild flower/cut flower production technologies and herbal medicine training at Fujian China (15/04/2012-30/05/2012).</p> <p>24th Asia Pacific Weed Science Society Conference Bandung-Indonesia(22-25/10/2013).</p> <p>First African Allelopathy Congress sousse Tunisia (06-09/02/2014).</p> <p>International Conference on advances in Agricultural and Biological Sciences</p>

Holiday Inn hotel **Dubai** (14-19/10/2014).

Second International allelopathy Congress Sousse-**Tunisia** (16-19/11/2016).

Third International SAFE network conference Ho Chi Minh City-**Vietnam**(17-20/11/2015)

International conference on Advances in natural and biological sciences (ICAN's-2016) **Antalya-Turkey** (21-23/04/2016)

International Conference on emerging trend in Science and Technology University of **Mauritius** (11-17/05/2017).

International E-Conference on Emerging Trends and Challenges in life Sciences, 18-19 June, 2020-Department of Botany, Dist Aurangabad, INDIA **[Online]**

International conference on Agriculture and Fisheries Colombo **Sri Lanka** (8-9/12/2017).

International conference on Biodiversity and bioprospecting **Kathmandu-Nepal**, organized by the department of plant resources June, 2022.

Two days international conference on recent trend in agriculture and bioscience, computer applications, environment and humanities (RTABCE2020) August 18-19, 2020 in Kashmir-India.**[Online]**

26.6 months online training on “ management of Agriculture economy regulation of Agricultural production environment organized by Chinese government. **[Online]**

27. Attended Elsevier –HEC workshop in Journal indexing in Scopus January, 21, 2021. **[Online]**

**CONFERENCES
/WORKSHOPS
ORGANIZED**

Poster Competition on Wild Flowers (April 25, 2013) at Department of Weed Science, the University of Agriculture Peshawar.

First International Weed science conference (23-26/10/2003).

6th National Weed Science Conference (28-30/03/2005).

Second International Weed Science Conference (20-22/03/2006)

8th National Weed science conference (25-27/06/2007).

9th National Weed Science Conference 28-30/06/2009)

22nd Asia Pacific Weed science conference (8-12/2/2010)

4th International Weed Science Conference (6-8/09/2012)

Awareness, teaching and training on weed management techniques for farmers, faculty, students and researchers and extension workers across the province KP Pakistan held at the University of Agriculture Peshawar-Pakistan (11-12/10/2014).

National workshop on awareness on weed management practices for better yield help at the university of Agriculture Peshawar Pakistan (30-31-12/2015).

Developing a winning research proposal held at the university of Agriculture Peshawar Pakistan (26/12/2018).

Weed Interference, Sprayer Calibration, Herbicide Calculation and Herbicide Safety, Organized by Weed Science Society of Pakistan during June 24-25, 2019

Weed Interference, Sprayer Calibration, Herbicide Calculation and Herbicide Safety, Organized by Weed Science Society of Pakistan during June 24-25, 2019

Integration of ICT in agriculture and applied Research, Organized by Colleagues, The University of Agriculture Peshawar during 21st February 2019.

8th International and 15th National Weed Science Conference, organized by Weed Science Society of Pakistan, during March 02-03, 2020 at Abdul Wali Khan University Mardan-Pakistan

17th National Weed Science Congress, Punjab University Lahore (27-28 Oct 2022) Lahore-Pakistan in 2022.

Food security in wake of climate change, biodiversity, non-timber forest products and weeds, SBBU KP Pakistan August 9-12, 2023.

Food security through sustainable agriculture August 27-31, 2023 at Baragalli summer campus university of Peshawar Pakistan.

Workshop In the wake of climate change, biodiversity, non-timber forest and weeds at SBBU Sheringal KP Pakistan, August 09-11, 2023

9th International 18th National conference on Biodiversity and Medicinal plants Arid Agriculture university Rawalpindi Pakistan December 14-16, 2023

<p>COURSES TAUGHT Assistant Professor</p>	<p>B.Sc. (Hons)</p> <p>WS-401: Introduction to Weed Science</p> <p>WS-513: Weed Identification-II: (Kharif weeds)</p> <p>WS-604: Weed Management in Fruits and Vegetables WS-505: Allelopathy in weed management</p> <p>WS-515: Introductory Agrostology</p> <p>M.Sc. (Hons)</p> <p>WS-702: Research Methods in Weed Science</p> <p>MSc Botany</p> <p>Bot-606: Environmental Biology</p> <p>PhD</p> <p>WS-708: Biodiversity in Ecosystem</p> <p>WS-711: Perennial and parasitic weeds and their management</p>
<p>HEC Approved Supervisor</p>	<p>Yes</p>
<p>DISTINCTIONS/ AWARDS/ HONORS</p>	<p>1st Position in the Department of Weed Science in MSc (Hons)</p> <p>Awarded best paper oral presentation award at International Conference University of Mauritius ST Loius 2017.</p> <p>Awarded best researcher and best academician award by Bionan frontier organization of India at International Conference University of Mauritius ST Loius 2017.</p>
<p>FELLOWSHIPS</p>	<p>1. International Research Support Initiative Program (IRSIP) Fellowship by HEC to Charles Sturt university Australia (August 2007-january-2008)</p>
<p>Grants Received</p>	<p>Received 15 travel grants from HEC, PSF, ECOSAF, HUC, KIRKHOUSE TRUST, IDB, International Allelopathy Society and USDA...</p>

STUDENTS SUPERVISED	<p>PHD</p> <ol style="list-style-type: none"> 1. Adbullah (In progress 2024) 2. Dr. Abdul Majid Khan 2021) 3. Dr. Tamanna Bakht (completed in 2016) 4. Dr. Umm e Kulsoon (completed 2017) <p>MSc (Hons) Agriculture/M Phil BotanyMajor Supervision</p> <p>Mr. Muhammad Kashif (completed 2015)</p> <p>Mr. Inayat Ur Rehman M.Phil Botnay (Completed 2016)</p> <p>Mr. Muhammad Ibrahim (in progress)</p> <p>Member major field in MSc (Hons) Theses</p> <p>MS Tamana Bakht (completed)</p> <p>Mr Sirajuddin (completed)</p> <p>Mr Muhammad Imran (completed)</p> <p>Mr Muhammad Ibrahim (completed)</p> <p>Mr Hidayat Ullah (completed)</p> <p>Mr. Ijaz Ahmad (completed)</p> <p>Mr Muhammad Kabir (completed)</p> <p>Ms Nadia Khan (completed)</p> <p>Mr Muhammad Tahir M.phil botany (Completed)</p> <p>Mr Muhammad Luqman (completed)</p> <p>Mr Ijaz Ahmad (completed)</p> <p>UNDER GRADUATES B.SC. (HONS)</p> <p>Major supervision</p> <p>Mr. Khalid Khan (2011 completed)</p> <p>Mr Shah Fahad (2012 completed)</p> <p>Mr Muhammad Waqas (2011 completed)</p> <p>Mr Ishaq Khan (2014 completed)</p> <p>MS Sundas Malik (2016 completed)</p>
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	Abdullah (2017 completed)
EXAMINER OF PHD STUDENTS	<p>Written comprehensive</p> <p>MS Umme Kulsoom (2015)</p> <p>Mr.Zahoor Ahmad (2017)</p> <p>Mr. Abdul Majid Khan (2017)</p> <p>Oral Comprehensive</p> <p>Mr. Abdul Majid Khan (2017)</p> <p>Mr. Zahoor Ahmad (2017)</p>
AUTHOR OF MONOGRAPHS / BOOK CHAPTERS	<ol style="list-style-type: none"> 1. Book published as a main author on Biology and Management of <i>Asphodelus tenuifolius</i> (2009) as a main author. Publishers (VDM verlog Germany) 2. Book chapter published on Response of wild oat biotypes to different oat killer and its impact on wheat; as a co-author in 2012. Publishers (Springer Link). 3. Implications of Mulching on Weed Management in Crops and Vegetable. Springer nature. Published as corresponding author in 2022. 4. Improvement of plant production in the ear of climate change. Taylor and Francis (CRC) Published as co-author in 2022.
Community Services	<ol style="list-style-type: none"> 1. Elected as a President of All Pakistan Tenure Track Faculty Association for the session 2019-20. 2. Elected as a Joint Secretary of All Pakistan Tenure Track Faculty Association for the session 2018-19. 3. Elected as a Joint Secretary/General Secretary for Agriculture University teacher Association (AUTA) for the session 2018. 4. Elected as a Finance Secretary for Agriculture University teacher Association (AUTA) for the session 2015. 5. Volunteer teaching at Agricultural university school and college for the session 2019. 6. Currently working as a country coordinator for SAFE Network, elected in Vietnam in a conference in 2015-2020.

	7. General Secretary Agricultural University teachers association 2023.
COMPUTER KNOWLED	Sigma Plot, Statistix, Office automation Programming , Windows (All types), Internet Statistical software's, Operating computer software's in applied research
RESEARCH PROJECTS (Completed)	<p>Approved Research Projects</p> <p>As Principal Investigator</p> <p>1. Title: <i>Weeds Allelopathy</i></p> <p>Project No. 20-2158/NRPU/R&D/HEC/12-4758</p> <p>Total approved amount: Rs. 3.81millions PKR = (40,000 USD)</p>
	<p>Funding Agency: Higher Education Commission Pakistan Project start: August 2013</p> <p>Current status: Completed As Co-Principal Investigator</p> <p>Title: <i>Weed seed bank studies in wheat and maize growing areas of KP for sustainable weed management and soil fertility</i></p> <p>Project No. 20-5142/NRPU/R&D/HEC/14 Total approved amount: Rs. 3.9417 millions</p> <p>Funding Agency: Higher Education Commission Pakistan Current status: Research work completed</p> <p>Title: <i>Management studies of noxious weed (Asphodelus tenuifolius-Wildonion) in chickpea growing areas of District Karak, Khyber Pakhtunkhwa, Pakistan</i></p> <p>Grant No. PSF/NSLP/KP-UAP(932)</p> <p>Total approved amount: Rs. 3.053 million Funding Agency: Pakistan Science Foundation</p> <p>Status: In progress</p>
Publications	
Over 71 Articles Published	
<p>Muhammad Ishfaq Khan, Rifat Ara Begum, Lenka Franková, Stephen C Fry. 2024. Allelochemical root-growth inhibitors in low-molecular-weight cress-seed exudate. <i>Annals of Botany</i>, 133(3): 447-458.</p> <p>Imtiaz Khan, Muhammad Ishfaq Khan, Saima Hashim, Muhammad Fawad, Aftab Jamal Mahmoud F. Seleiman, Haroon Khan, Bakhtiar Gul, Zahid Hussain, Muhammad Farhan Saeed and Aurelio Scavo. 2023. Managing Weed-Crop Interactions Enhances Chickpea (<i>Cicer arietinum</i> L.) Chemical Components." <i>Plants</i> 12(17): 3073.</p> <p>Muhammad Ather Nadeem, Bilal Ahmad Khan, Asim Riaz Chadar, Rizwan Maqbool, Ali Raza, Muhammad Mansoor Javid, Athar Mahmood, Muhammad Ishfaq Khan, Masood Ahmad, and Muhammad Irfan. 2022. Weed control and sustainable rice production through rice intensification system and conventional practices of weed competition periods and age of transplanted seedlings." <i>Semina: Ciências Agrárias</i> 43(5): 2271-2292.</p> <p>Bilal Ahmad Khan, Aneela Nijabat, Muhammad Ishfaq Khan, Imtiaz Khan, Saima Hashim, Muhammad Athar Nadeem, Muhammad Ikram. 2022. Implications of mulching on weed management in crops and vegetable. <i>Mulching in Agroecosystems: Plants, Soil & Environment</i>. Singapore: Springer Nature Singapore p. 199-213.</p> <p>Begum N, Wang L, Ahmad H, Akhtar K, Roy R, Muhammad Ishfaq Khan, Zhao T. 2022. Co-inoculation of <i>arbuscular mycorrhizal</i> fungi and the plant growth-promoting rhizobacteria improve growth and photosynthesis in tobacco under drought stress by up-regulating antioxidant and mineral nutrition metabolism. <i>Microb Ecol.</i> 83:971-988, 2022.</p>	

ALHaithloul, Haifa Abdulaziz Sakit, **Muhammad Ishfaq Khan**, Arafa Musa, Mohammed M. Ghoneim, Ayshah Aysh ALrashidi, Imtiaz Khan, Ehab Azab, Adil A. Gobouri, Mahmoud R. Sofy, Mohamed El-Sherbiny, and Mona H. Soliman. 2022. Phytotoxic effects of *Acacia saligna* dry leachates on germination, seedling growth, photosynthetic performance, and gene expression of economically important crops." Peer J 10: 13623.

Razdan, Imtiaz Khan and **Muhammad Ishfaq Khan**. 2022. Impact of various organic and cultural practices on yield and weed management in okra (*Abelmoschus esculanta* L.). Pak. J. Weed Sci. Res., 28(1): 53-61.

Hamida Bibi, Mudassar Iqbal, Hassan Wahab, Mehmet Öztürk, Fei Ke, Zafar Iqbal, **Muhammad Ishfaq Khan** & Suliman Mohammed Alghanem. 2022. Green synthesis of multifunctional carbon coated copper oxide nanosheets and their photocatalytic and antibacterial activities. Scientific Reports 11(1):10781. <https://doi.org/10.1038/s41598-021-90207-5>.

Abdul Majid Khan Dawar, Imtiaz Khan, **Muhammad Ishfaq Khan**, Zahid Hussain. 2021. Effect of tillage implements and weed management techniques on nutritive values of wheat grains Gesunde Pflanzen, 74: pp. 133-139.

Imtiaz Khan, Khalid Iqbal, Sadar Uddin Siddiqui and **Muhammad Ishfaq Khan**. 2021. Influence of Varieties, Irrigation and Weed Control Measures On Nutritional Status of Chickpea Grains. Gesunde Pflanzen 73, 367-373. <https://doi.org/10.1007/s10343-021-00563-5>.

Khan I, Kabir M, Khan **Muhammad Ishfaq Khan**, H, Hashim S, Khan M. A. 2021. Effect of sowing pattern and herbicides application on weed management in wheat crop. Pak J Weed Sci Resh 27(1):67-78.

Iqbal, K., S. U. Siddiqui, I. Khan, A. Ghafoor and **Muhammad Ishfaq Khan**. 2021. Chickpea varietal response to integrated weed management under different irrigation regimes. Acta Ecologica Sinica, 41(2), 164-169.

Muhammad, Asim, Ishaq Ahmad Mian, Dost Muhammad, Haroon Khan, Imtiaz Khan, **Muhammad Ishfaq Khan**, and Abdullah Jalal. 2020. Management of weeds through planting dates alteration and using selected maize cultivars under changing climate." Mitteilungen Klosterneuburg, 70(2): 108.

Begum N, Qin C, Ahanger MA, Raza S, **Muhammad Ishfaq Khan**, Ashraf M, Ahmed N and Zhang L. 2019. Role of Arbuscular Mycorrhizal Fungi in Plant Growth Regulation: Implications in Abiotic Stress Tolerance. Front. Plant Sci. 10:1068. doi: 10.3389/fpls.2019.01068.

Imtiaz Khan and **Muhammad Ishfaq Khan**. 2019. Integration of allelopathy and herbicide to control *Asphodelus tenuifolius* in chickpea crop. Acta Ecol. Sin., 39(3): 257-260. <https://doi.org/10.1016/j.chnaes.2018.09.012>
Long Yang, Hongjuan Huang, Muhammad Saeed, Zhaofeng Huang, Cuilan Jiang, Chaoxian Zhang,

Muhammad Ishfaq Khan, Imtiaz Khan and Shouhui Wei. 2019. Anatomical study of seed and fruit morphology of an invasive weed buffalobur (*Solanum rostratum* Dunal). Pak. J. Bot., 51(1): 241-246. DOI: 10.30848/PJB2019-1(12).

Imtiaz Khan, **Muhammad Ishfaq Khan**, H. Ullah, M. Haroon and Bakhtiar Gul. 2018. Assessment of integrated weed management approaches on *Asphodelus tenuifolius* in chickpea. Planta Daninha. Doi: 10.1590/S0100-83582018360100101.

Iqbal, M., R. Ullah, H. Bibi, Z. Iqbal, M. Numan, S.R. Awan, Z. Din, I. Khan and **Muhammad Ishfaq Khan**. 2018. Mycelial extract of *Acremonium* sp.: A potent target specific bio herbicide against *Echinochloa crus-galli* and *Asphodelus tenuifolius*. Fresenius Environ. Bull. 27: 1778-1785.

Bakhtiar Gul., Muhammad Saeed, Haron Khan, **Muhammad Ishfaq Khan** and Imtiaz Khan. 2017. Impact of water hyacinth and water lettuce aqueous extracts on growth and germination of wheat and its associated troublesome weeds." Applied Ecology & Environmental Research 15(3): 939-950 (2017).

Ijaz Ahmad, Imtiaz Khan, Shah Zareen, **Muhammad Ishfaq Khan**, Rahamdad Khan and Muhammad Haroon. 2017. Yield and yield attributes of tomato (*Lycopersicon esculentum* Mill) cultivars influenced by weed management techniques. Pak. J. Weed Sci. Res., 23(4) : 431-438.

Imtiaz Khan, Muhammad Ashfaq Khan, **Muhammad Ishfaq Khan**, Muhammad Saeed, Zahid Hanif, Shah Masaud Khan and Murad Ali. 2016. Weed management in maize (*Zea mays* L.) through different control strategies. Pak. J. Weed Sci. Res., 22(1): 25-35.

Muhammad Ishfaq Khan, I. Khan, N. Khan, B. Gul, R. Khan, A. Hashmatullah, L. Ahmed, I. A. Khan, M. Iqbal, and H. Bibi. 2016. Varietal response of Maize (*Zea mays* L.) against weeds aqueous extracts." Applied Ecology and Environmental Research 14, (4): 569-576.

Zahid Hussain, Muhammad Ilyas, Ijaz Ahmad Khan, Imtiaz Khan, **Muhammad Ishfaq Khan**, Bushra Khan. 2016. Effect of sowing direction, plant spacing and weed control treatments on tomato yield and its weeds. Pakistan Journal of Weed Science Research, 22(1).

Muhammad Ishfaq Khan, Imtiaz Khan, Rahamdad Khan, Ijaz Ahmad and Hashmat Ullah. 2016. Response of wheat (*Triticum aestivum* L.) biotypes towards weeds allelopathy. J. Agric. Res., 54(1):35-41.

I. Ahmad and Hasmatullah **Muhammad Ishfaq Khan**, Imtiaz Khan, R. Khan. 2016. Response of wheat (*Triticum eastivum* L.) biotypes towards weeds allelopathy. Journal of Agriculture Research, 54(1): 35, 2016.

Muhammad Ishfaq Khan, H. Alim, M. Afaq, I. Khan, I. Munir, G. Mustafa, I. Ullah, M.N. Ahmad, M. Yasinzai. 2016. Effect of different concentrations of fluoride on growth and nutritional value of two elite genotypes of *Triticum aestivum*. Fluoride, 50(2): 143.

Muhammad Tahir Khan, Imtiaz Khan, **Muhammad Ishfaq Khan**, Zahid Hussain, Shahida Ayub, Naeem Khan, Muhammad Shuaib, And Ijaz Ahmad Khan. 2016. Ethnobotanical study of wild flora in the remote areas of Northern Pakistan." Wulfenia Journal (23) 10.

Imtiaz Khan, and M. I. Khan. 2015. Environment friendly (allelopathic extract) weed control techniques in wheat crop. 1307-1316.

Chaâbani, Ghaya, Jessica Tabart, Claire Kevers, Jacques Dommes, **Muhammad Ishfaq Khan**, Sonia Zaoui,

Lotfi Chebchoub, Mokhtar Lachaâl, and Najoua Karray-Bouraoui. 2015. Effects of 2, 4-dichlorophenoxyacetic acid combined to 6-Benzylaminopurine on callus induction, total phenolic and ascorbic acid production, and antioxidant activities in leaf tissue cultures of *Crataegus azarolus* L. var. aronia." Acta physiologiae plantarum (37): 1-9.

Muhammad Ishfaq Khan, I. Khan, R., Ahmad, I., & Hashmatullah. 2015. Allelopathic effect of aqueous extract of four weed species on germination of some crops, The Philippine Journal of agricultural scientist. 98 (3): 328-332.

Imtiaz Khan, Zafar Ali, **Muhammad Ishfaq Khan**, Zahid Hussain, Shahida Bibi, Muhammad Waqas, Rahamdad Khan, Sohail Khan and Murad Ali. 2014. Allelopathic effects of some weeds on chickpea crop. Pak. J. Weed Sci. Res., 20(2): 207-211.

Nawab, K., A. Rab, I. Khan, **Muhammad Ishfaq Khan**, M. Idrees, A. Saljoqi, and M. A. Khan. 2013. Effect of irrigation regimes on chickpea varieties sown on different dates on irrigated fields of Karak, Khyber Pakhtunkhwa, Pakistan. 175-180.

Ijaz Ahmad Khan, **Muhammad Ishfaq Khan**, Imtiaz Khan, M. Imran, M. Idrees, and S. Bibi. 2013. Effect of different herbicides and plant extracts on yield and yield components of wheat (*Triticum aestivum* L.)." Pakistan Journal of Botany (45)3: 981-985.

Hidayatullah Hidayat, Gul Hassan, Imtiaz Khan, **Muhammad Ishfaq Khan** and Ijaz Ahmad Khan. 2013. Effect of different mulches and herbicides on potato and associated weeds. Pak. J. Weed Sci. Res., 19(2): 191-200.

Muhammad Ishfaq Khan and Muhammad Kabir. 2013. Allelopathic effects of different weeds on the seeds

germination of wheat and chickpea. Proc. 24th Pacific weed science society conference, Indonesia.

Muhammad Ibrahim, Mohammad Gul Hassan, **Muhammad Ishfaq Khan**, Imtiaz Khan, Ijaz Ahmad Khan and Shahida Bibi. 2012. The impact of chemical and non-chemical weed control methods on weeds dynamics and on the yield of onion (*Allium cepa* L.). Pakistan Journal of Weed Science Research, 8(2): 255.

Muhammad Waqas, **Muhammad Ishfaq Khan**, Imtiaz Khan, Rahamdad Khan and A. M. Khan. 2012. Efficiency of weeds extracts through their priming effects on the seed germination of wheat and chickpea. 21-30.

Muhammad Ishfaq Khan, Gul Hassan and Imtiaz Khan, Muhammad Saeed, A. A. Khakwani, M. Idrees and K. Nawab. 2011. Factors influencing seed germination of wild onion and chickpea cultivars. Pak. J. Bot., 43(6): 2787-2792.

Muhammad Ishfaq Khan and F. Shah. 2011. Effect of potassium nitrate and thiourea on seed germination of crops and weeds." African Crop Science Conference Proceedings, (10). pp. 461 - 463.

Khan I., Hassan G., **Muhammad Ishfaq Khan**, Gul M. 2011. Tolerance of Different Wild Oats Biotypes to Different Oat Killers and Their Impact on Wheat. Survival and Sustainability Part 1, p. 129-136.

Imtiaz Khan, Gul Hassan, **Muhammad Ishfaq Khan**, Naqib Ullah Khan and Khan Bahader Marwat. 2010. Agronomic and polymorphism study of wild oat (*Avena fatua* L.) Biotypes at DNA level. Pak. J. Bot., 42(3): 1841-1848.

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