

PROF. DR. KHAN BAHADAR MARWAT (SITARA-E-IMTIAZ)

Fellow Pakistan Academy of Sciences

Mob: +92-3078889944; Email: kbmarwat@aup.edu.pk, kbmarwat@sbbu.edu.pk

CITATION

Prof KB Marwat has 2 PhDs (Botany from UOP, Pakistan; Weed Science, UIUC, USA), served the academia as Teachers/Researcher and Academic Administrator for 40 years as Lecturer to Senior Meritorious Professor (BS 22), **Vice Chancellor** Of The University of Agriculture-Peshawar, and then **VC**, SBB University, Sheringal, Dir Upper. He introduced **Weed Science** as a separate discipline in the country, established a Journal, a website (www.wssp.org.pk) and still serving as **President** of Weed Science Society of Pakistan and Chief Editor of Pakistan Journal Of Weed science Research. He is **Fellow** Pakistan Academy of Sciences, and **Secretary** KP Chapter. Recently assigned to work as **Member BoG, MTI Bannu, March 2021-March 2024.**

Dr Marwat remained Nominee of the **President of Pakistan** on Board of Trustees of Pakistan Science Foundation (**PSF**), Member Pakistan Council of Science and Technology (**PCST**), Member Executive Committee of National Commission of Science and Technology (Nominee of the PM), and remained Member of National Core Group on Life Sciences; **member PhD review committee for KP and Baluchistan as Nominee** of HEC and worked as Member **WWF** Scientific Committee

He was decorated with different Awards and Recognitions: like **Sitara-e-Imtiaz** in 2012, **President of Pakistan Medal for S&T** (2008), **Quid-e-Azam Medal** (2011), **Best Teacher Award** (2005), **Outstanding Weed Scientist Award** (1993 from Governor Punjab), **President** Pakistan Botanical Society, **President** Weed Science Society, **Chief Editor** PJWSR, **Editor** Pak Jour of Botany (IF Journal). **PhD Examiner** for Karachi and Punjab University, Gomal University, University of Malaya, Malaysia, University of Mammon Sing Bangladesh and Oregon State University, Corvallis, USA (Co-Supervisor)

International Awards/Recognitions: **Life Achievement Award from Asia-Pacific WSS** (2019); **President, Asia-Pacific Weed Science society** (2007-2010). **PI** of the Linkage Project with University of Queensland. **Organizer** of the Asia-Pacific Weed Science Conference in Lahore. **Member** of Himalayan Universities Consortium (HUC) since May 2010. **Life Member/Country Representative of International Weed Science Society**. He has attended 89 Conferences/Symposia (60 International and 29 National).

He had a chance to work on Statutory bodies of different universities, KUST, US&T Bannu, **Member** Syndicate and Selection Board of **The University of Agriculture**, **Pioneer Member** of Chancellor Committee (syndicate) and Selection committee (Selection Board) of **Malakand University**, **Syndicate** of **Peshawar University** (HEC nominee), **Member** senate **SBBU**. **Member** Senate and Syndicate of **Hazara University** (HEC nominee) . **Member** Board of Governors of **City University** (HEC Nominee). **Member** senate **Abasin University**. **Member** Board of Governors **Qurtaba University** a few to mention.

He has more than 200 citable articles, about 50% in Impact Factor Journals, 3 books and three book chapters, remained **PI** of 7 International/National Research projects. Produced 30 M Phil and 11 PhDs in Weed Science.

PROF. DR. KHAN BAHADAR MARWAT, *FPAS.*, *SI*
PhD (Botany), PhD Weed Science (UIUC, USA)
Sitara-e-Imtiaz (SI) Civil;
Fellow Pakistan Academy of Sciences (FPAS)/
Secretary KP Chapter
Member BoG, MTI Bannu, March 2021-March 2024

Mob: +92-3078889944; Email: marwatkb@gmail.com, kbmarwat@sbbu.edu.pk

Google Citations, h-Index and i10 index as of January 5, 2021

<u>Citation indices</u>	All
<u>Citations</u>	9729
<u>h-index</u>	46
<u>i10-index</u>	221

PERSONAL: Born on August 15, 1953 in Village Kot Kashmir, Tehsil & District Lakki Marwat, married, 4 children (2 boys and 2 girls)

EDUCATION: **1. Ph. D,** Agronomy/Weed Science
University of Illinois at Urbana-Champaign (**USA**) 1988
2. Ph. D (Botany), University of Peshawar,
1980-84, Pakistan.

EXPERIENCE WITH THE UNIVERSITY:

July 16, 1977- June 17, 2017. EXPERIENCE: 40 Years

Served for **40 years** as Teacher, Researcher, Education Administrator

Designation of post held	BS	Appointment held
Vice Chancellor, SBBU	VC Package	18-06-2013- 17-06-2017
Vice Chancellor, UAP	BS-22	07-05-2010 - 22-07-2013
Senior Meritorious Professor	BS-22	03-05-2008- 06-05-2010
Meritorious Professor	BS-21	10-01-2004 to 02-05-2008
Professor	BS-20	01-05-95 to 10-09-2004
Associate Professor	BS-19	01-01-87 to 31-05-1995
Assistant Professor	BS-18	23-06-82 to 31-12-1986
Lecturer	BS-17	16-07-77 to 22-06-1982
Plant Taxonomist	BS-17	11-02-76 to 15-07-1977

EXPERIENCE IN EDUCATIONAL ADMINISTRATION: (22 years)

Hostel Warden: **6 years, 4 months:** Responsible for overall management, including financial management.

Coordinator: **2 years:** Assessing computer needs hardware and trainings within University and Research System, during TIPAN Project.

Chairman/Dean: **13 years 4 months (Dean 3 years 2 months)**

Vice Chancellor: Since May 7, 2010 - 17-06-2017

Note: There were several other assignments overlapping with the above mentioned responsibilities, like Convener Purchase Committee (S&D project), Acting VC and Acting Provost.

Type of Educational Administration	Period	
	From -	To
Chairman, Department of Weed Science	31-01-2009 –	07-05-2010
Focal Point/Dean, Faculty of Crop Protection	01-11-2008 to	23-12-08
Dean, Faculty of Crop Protection Sciences	28-09-2005 to	30-10-2008
Chairman Department of Weed Science	June 2, 2000 to	Dec 1 st , 2005
Chairman Department of Plant Breeding/Gen	Oct 1996 to	June 5, 2000
Convener, Committee dealing UFM cases	2003 ---	May 7, 2010
Coordinator Computer	May 1990 to	July 1997
Students' Advisor/Chief Proctor	Oct 1996 to	Oct 1998
Hostel Warden	Jan 1978 to	May 1984

EXPERIENCE RELATED TO VARIOIUS BODIES

1. **Member Selection Board**, KKK University, Karak (July 2020-- for 3 years)
2. **Nominee of HEC on Syndicate**, KKK University, Karak
3. **Member Selection Board**, International Islamic University (IIU),Islamabad, February 24, 2016-February 2018)
4. **Vice President**, Pakistan Botanical Society
5. **President, Pakistan Botanical Society** (2013 -2014)
6. **Member, Selection Board**, Pakistan Institute of Fashion and Design, Johar Town, Lahore. (2013 - 14)
7. **Member, BoT, Pakistan Science Foundation** as nominee of the President of Pakistan for three years (February 2013 - February 2016) from Khyber Pakhtunkhwa.
8. **Convener, PhD Review Committee (HEC)** for KP and Balochistan (2010-2014)
9. Executive Member, Provincial Vice Chancellors' Committee (nominated by HEC).
10. Representative of Higher Education Commission on the **Syndicate of Kohat University of Science and Technology**, Kohat from 1.8.2011 to 31.8.2013,2013-2015, Aug 2017-Aug 2020), Now on **Syndicate of KKUK at Karak (June 2017).**, and **Women University, Mardan, 2017.**
11. Member **Senate**, University of Science & Technology, Bannu (2008-2009, 2010 to 2012).
12. Member **Academic Council, Kohat University** of Science & Technology.
13. Member **Academic Council, NWFP Agricultural University**, (1994 – 2013)
14. Member **Syndicate NWFP Agricultural University** (June 2000 to June 2003)
15. Member **Finance & Planning Committee NWFP Agricultural University** (2002-2003)
16. Member **Finance & Planning Committee, Kohat University** of Science & Technology (KUST)
17. Member **Syndicate** (Chancellors' Committee), **University of Malakand (April 2003- 2006).**
18. Member **Selection Board, University of Malakand (Nov 2001- 2007).**
19. Member **Selection Board, Kohat University** of Science & Technology (KUST).
20. Member **Syndicate, Kohat University** of Science & Technology (KUST) (February 2007—2016)

21. Convener **Appellate Committee, Kohat University** of Science & Technology (KUST) (2004—2007)
22. **Convener, UFM Committee**, NWFP Agricultural University (2003-2010)
23. Member **Board of Faculty**, IT & Computer Science, City University-Peshawar, till 2012.
24. Member **Board of Studies, Hazara University (till 2012)**
25. Member Board of Studies for **Center of Biodiversity, Peshawar University (pioneer)**
26. Member, **Board of Governor (HEC nominee), City University, Peshawar (ended 2014)**
27. Member, **Senate, Abasyn University, Peshawar (2010- 2015)**
28. Member, **Board of Governors, Qurtuba University, Peshawar (2010 - 2017).**
29. HEC representative, **Syndicate, Hazara University (2010--Apr 2013).**
30. Member, **Senate, Hazara University, Mansehra (2010—April 2013).**
31. Member, **Pakistan Council for Science and Technology**
32. Member, **Senate, Shaheed Benazir Bhutto University, Sheringal, Dir Upper (26.2.2011 to 25.2.2013).**
33. Member (HEC Nominee), **Board of Governors, City University of Science & IT, Peshawar (3.3.2011 to 2.3.3013).**

PROFESSIONAL RECOGNITION

A. AWARDS:

I. National Recognition:

1. Recipient of Life **Achievement award**, Pakistan Botanical Society, March 24, 2018.
2. Member Executive Committee **National Commission** for Science and Technology (ECNCST). November 2014 (for 2 years).
3. **Fellow Pakistan Academy of Sciences**, December 2014 (life time).
4. Civil Award “**Sitara-i-Imtiaz**” by the Government of Pakistan during 2012.
5. Recipient of **President of Pakistan’s Gold Medal for S&T, 2008**
6. **Best University Teacher Award for 2005**, conferred on January 26, 2008 by Chairman Higher Education Commission, Islamabad.
7. Recipient of **Outstanding Weed Science Award** from Governor Punjab, 1993.
8. **Quaid-e-Azam Gold Medal, 2011.**
9. **Research Productivity Award 2011-12, 12-13, 13-14, 14-15, 15-16** by Pakistan Council of Science & Technology, Islamabad, Pakistan.

B. Variety developed (As applicant/ Chairman of department):

1. Ghaznavi-98

II. International Recognition

- i. Recipient of Life Achievement Award, September 4, 2019 from Asia-Pacific Weed Science Society. Kuching, Malaysia.
- iii. Certificate of Appreciation from Organizers of 3rd International Conference, October 2-3, 2019, at the University of Duhok, Kurdistan Region, Iraq.

C. Membership of International Bodies

1. **President**, Asia Pacific Weed Science Society (2007-2010). See (www.wssp.org.pk)
2. **Vice President**, Asia Pacific Weed Science Society (2005-2007)
3. **Executive Member Near-East, Weed Science Society (2007-09)**
4. **Life Member** International Weed Science Society (www.iwss.info)
5. **Member**, Weed Science Society of Japan (2003-2010)

6. **Member**, Weed Science Society of Philippine (2003-05)
7. **Member**, Asian-Pacific Weed Science Society (2003-2010)
8. **Member**, Near East Weed Science Society (2004-2011)
9. **Member** (Honorary), New York Academy of Sciences
10. **Member** (Honorary), Research Board of Advisors, The American Bibliographic Institute
11. **Member**, Weed Science Society of America (1984-91)
12. **Member**, Core Group in Biological Science, HEC Islamabad
13. **Member**, The University of Peace Foundation **UNESCO CR**
14. **Principal Signatory** of Memorandum of **Sino-Pakistan Collaboration** with Chinese Academy of Sciences for Biodiversity
15. **Member**, Scientific Committee of **WWF – Pakistan (Ended May 2015)**

D. Fellowship/Membership of various Bodies:

1. Chairman, Agriculture Steering Committee of Italian sponsored Project/IAO (Agriculture Development Project, Swat, Pakistan), Up to July 2013.
2. **Life Member** and President, Weed Science Society of Pakistan (www.wssp.org.pk).
3. **Life Member**, International Weed Science Society (IWSS) (www.iwss.ifo)
4. **Life Member**, Pakistan Botanical Society (www.pbs.org)
5. **Member & President** (Founding), Pakistan Ethnobotanical Society (PES)
6. **Member**, Pakistan Council for Science and Technology.

F. SENIOR REVIEWER (INTERNATIONAL):

1. Weed Science, USA
2. Weed Technology, USA
3. Invasive Species, USA
4. Weed Management and Biology (John Wiley & Sons)

SPECIAL ACHIEVEMENTS:

1. **Introduced Weed Science as independent discipline at B.Sc. (Hons.), M.Sc. (Hons.) and PhD level in NWFP Agricultural University Peshawar, the *first in Pakistan*.**
2. **Registered Weed Science Society of Pakistan** under Societies Act.
3. **Registered Pakistan Ethnobotanical Association** under Association Act.
4. **Founding President** of Pakistan Ethnobotanical Society.
5. Obtained **declaration for Pakistan Journal** of Weed Science Research.
6. Organized **3rd National Conference** in 2001, then **1st International Weed Science Conference** in 2003, **1st Training Course** in Weed Science for teachers of all Agricultural Universities, October 1-6, 2001, **workshop for PLI** (Project for Livelihood Improvement) 12-14 November, 2004 and **6th National Conference** in 2005 as **Chief organizer**.
7. **Represented Pakistan** in Asia-Pacific Forum in Manila, Philippine in 2003.
8. **Represented Pakistan** in International Weed Science Congress in Durban, South Africa in 2004.
9. **President Weed Science Society of Pakistan and President Pakistan Ethnobotanical Society.**
10. **Chief Editor** of the Pak J Weed Science Research.
11. **Editor**, Pakistan Journal of Botany, Botanical Society of Pakistan.
12. **Editor**, Pakistan Journal of Seed Technology.
13. **Technical Editor**, International Journal of Biology and Biotechnology
14. Recipient of **First-ever Outstanding Weed Scientist Award** of Pakistan Weed Science society, Presented at 4th All Pakistan Weed Science Conference, at Agricultural University, Faisalabad, on March 26, 1994.
15. Presented **Pakistan Status Paper** on Parasitic Weeds at Amman, Jordan (1993) under the auspices of **FAO of UN**
16. **Registered Wheat variety Ghaznavi-98** and got its approval through Seed Council
17. **Pioneer in producing BNS, Pre-Basic, Basic and Certified seed** of wheat & maize in the history of The University of Agricultural, Peshawar.
18. **Ph.D. Examiner**, University of **Punjab**, Q.A. University **Islamabad** and Shah Abdul Latif University, **Khairpur**.
19. **PhD Examiner**, University of Malaya, KL, Malaysia.
20. **Ph.D Examiner**, University of Putra Malaysia.
21. Ph.D Examiner/Member Committee, Oregon State University, USA
22. Ph.D Examiner for University of Memon Singh, Bangladesh.
23. PhD Examiner, University of Karachi

CONFERENCES/WORKSHOPS/MEETINGS ATTENDED:

A. International: (60)

1. Gave Online Plenary Lecture on "Ethics in Agriculture" to International Cooperative Conference of Modern Agriculture Technologies (ICCMAT-2021) March 24, 2021. University of Anbar and University of Salah Al-Din, Erbil, Kurdistan Region, Iraq.
2. Attended the Conference and received, Life Achievement Award, September 4, 2019, from Asia-Pacific Weed Science Society (APWSS). Kuching, Malaysia
3. Invited Speaker and received Certificate of Appreciation from Organizers of 3rd International Conference, October 2-3, 2019, at the University of Duhok, Kurdistan Region, Iraq.
4. Plenary and Invited speaker at First ICAS conference, in Salahuddin University, Erbil. November 6-7, 2019.
5. Invited Speaker and specialist to establish Weed Science Research in University of Duhok and University of Saladin (Salahuddin), Erbil, Iraq Kurdistan. November 6-12, 2018.
6. 7th International and 16th National Conference of of Pakistan Botanical Society, March 24-26, 2018, Islamia College, Peshawar..
7. 14th National Conference of Weed Science Society, 24-25, 2018, Islamia College, Peshawar.
8. 3rd International Symposium on Wild Edible Plants, Baragali (July 21, 2017).
9. 6th International and 13th National Conference of Weed Science Society, August, 2016 at SBBU, Sheringal, Dir Upper, Pakistan
10. Attended the 2nd International Agricultural Scientific conference on April 26-27, 2016 as an invited speaker, in College of Agriculture, University of Duhok, Kurdistan Region, Iraq.
11. Attended 5th International and 14th National Conference of Pakistan Botanical Society, February 13-18, 2016, University of Karachi.
12. February 19-20, 2016, Bio-safety conference at Pakistan Academy of Sciences, Islamabad.
13. Attended the Himalayan Universities Consortium (HUC) Summit as a member from October 29-30, 2015 at Hotel Soaltee, and ICIMOD, Katmandu, Nepal
14. 5th International and 12th National Conference of Weed Science Society, June 12-14, 2015 at SBBU, Sheringal, Dir Upper, Pakistan..
15. 4th International and 13th Conference of Pakistan Botanical Society, Aug 26-30, 2013. SBBU Sheringal Upper Dir, Pakistan.
16. Workshop on Responsible Conduct of Science, Aug 28, 2014. SBBU Sheringal Upper Dir, Pakistan
17. Workshop on Biodiversity of Plants, Aug 28-29, 2014 in Collaboration with University of Karachi at SBBU Sheringal Upper Dir, Pakistan
18. Participated in the International Conference on "Ideal Human and Ideal

- Society” organized by Rumi Forum at the Punjab University, Lahore on November 21, 2012.
19. Participated in the “3rd International Conference of Botany ICB-2012” organized by Pakistan Botanical Society at Quaid-e-Azam University, Islamabad during Sep. 1-3, 2012.
 20. Attended workshop on “High altitude eco-system and climate change” at COMSTECH, Islamabad during Sep. 3-5, 2012 as Resource Person.
 21. Attended 4th International Weed Science Conference on “Vegetation management in 21st century” during Sep. 6-8, 2012 - Agricultural University, Peshawar.
 22. Participated in the OIC Vice Chancellors’ Forum on “Islamic Educational, Scientific and Cultural Organization (ISESCO)” jointly organized by Ministry of S&T, HEC, Pakistan; Federation of the Universities of the Islamic World held at COMSATS IIT, Islamabad during June 11-12, 2012.
 23. Participated in the International Conference on “Climate Change: Opportunities and Challenges” by PCST, Islamabad – May 09-11, 2012.
 24. Attended Regional Workshop on “Strengthening research capacity of the Hindu Kush Himalayan (HKH) Universities and research institutions for promoting inclusive and innovative development in the HKH region” organized by ICIMOD at Kathmandu, Nepal – January 23-23, 2012.
 25. Attended International Workshop on “Medicinal Plants: Conservation and Sustainable Use” during December 08-10, 2011 at Quaid-i-Azam University, Islamabad, Pakistan.
 26. Attended APWSS Conference during Sep. 23 – Oct. 03, 2011 at Sebel Cairns, Australia.
 27. Met counterparts in different Turkish Universities based in Istanbul, Ankara, Izmir and Anatolia during August 18-25, 2011 for placing IBGE students under SIBGE.
 28. Delivered key note lecture on “Weeds as Medicinal Plants” organized by the Municipality of Denizli, Turkey on May 18, 2011.
 29. Presented paper on “*Silybum*” in the international conference on “Climate Change, Agrifood Fisheries and Ecosystems at Agadir, Morocco, during May 19-21, 2011.
 30. Attended Professional Development Training in UK during March 21-26, 2011, organized by HEC and British Council.
 31. Attended 2nd International Conference of Plant Scientists (ICPS-2011) at GC University, Lahore. Feb. 24, 2011.
 32. Attended International conference on “Biodiversity is our life” at Shah Abdul Latif University, Khairpur. December 31, 2010.
 33. Meetings with the management of Chiba and Tsukuba Universities, Japan under Linkage Programme and signed MoUs for joint collaboration. July 22 – Aug. 02, 2010.
 34. Attended International workshop “Conduct of responsible science, safety, security and ethics” held at COMSTECH, Islamabad. June 09-10, 2010.
 35. Chief Organizer, 22nd Asia-Pacific Weed Science Conference, Lahore, March 8-12, 2010.
 36. Linkage Project Meeting on “Parthenium” with University of Queensland,

- Australia, July 20-26, 2009.
37. Meeting with Faculty of Tsukuba University on collaboration and Weed Science Society of Japan. Invited by Weed Science Society of Japan. July 28-September 5, 2009.
 38. Presented paper in International Conference on Biodiversity, 19-23 October. Aqaba, Jordan,
 39. Presented paper in Second Arab Conference of Applied Biological Control of Pests, Cairo, Egypt, April 7-10, 2008.
 40. Chaired Session in International Conference of Plant scientists (10th Meeting of Plant Scientists), April 21-24, 2008. Pakistan Botanical Society, University of Agriculture Faisalabad, Pakistan
 41. Presented paper and Chaired General Session, 4th Asia-Pacific Conference on Chemical Ecology, September 10-14, 2007, Tsukuba, Japan.
 42. Attended 1st Asia Pacific Conference in Colombo, Sri Lanka, October 2-6, 2007.
 43. Presented paper in 17th Iranian Plant Protection Congress, 2-5, September 2006, Tehran, Iran.
 44. Presented paper in 9th Arab Congress of Plant Protection, November 19-24, 2006 Damascus, Syria
 45. Presented papers in 20th Asian Pacific Weed Science Society Conference, 7-11, Nov. 2005, HMC, Vietnam.
 46. Presented paper in XVII International Botanical Congress, 17-23 July, 2005 in Vienna, Austria.
 47. Presented paper in 19th Asian Pacific Weed Science Society (APWSS) Conference, 17-21 March 2003. Westin Plaza Hotel, Manila, Philippines.
 48. Presented paper in 4th International Weed Science Congress at Durban, South Africa 20-24 June, 2004.
 49. Presented paper in Asian-Pacific Forum and the 2nd National Symposium on Ethnobotany 16-19 August 2004, Xishuangbanna, China
 50. Weed Science Society of America 27th meeting, February 3-5, 1987 at Adam's Mark Hotel, St. Louis, Missouri.
 51. Weed Science Society of America 28th meeting, February 1-4, 1988 at Riviera Hotel, Las Vegas, Nevada.
 52. North Central (USA) Weed Control 41st Conference, December 2-4, 1986, at Hyatt Regency, Milwaukee, Wisconsin.
 53. 79th annual meeting of American Society of Agronomy, Crop Science Society, and Soil Science Society of America, on November 29-December 4, 1987 at Atlanta, Georgia.
 54. Workshop on Systems Approaches in Teaching Agriculture on November 28-29, at Atlanta, Georgia.
 55. 14th Illinois Crop Protection Workshop: March 9-11, 1988 at Illini Union, University of Illinois.
 56. International Legume Conference: July 6-11, 1986, at Sheraton Hotel, Spokane, Washington. USA.
 57. Weed Management Strategies Workshop: July 12-August 1, 1987, at International Plant Protection Center (IPPC), Corvallis, Oregon.

58. Teaching Skills Workshop: at UOI, 1987.
59. Teaching Skills Workshop: Aug. 1986, at Southern Illinois University at Carbondale.
60. Microcomputer Workshop: August 1987: at UOI arranged by the Office of International Agriculture, University of Illinois.
61. MSTAT (Computer software for Agronomic Experiments) workshop, Michigan State University, June 13-15, 1988.

B. National: (29)

1. Plenary Lecture on Agriculture in wake of Climate Change, AWKU Mardan Conference on Role of Biochar, December 17-18, 2019
2. Workshop on Weed Interference, Sprayer calibrations, Herbicide calculations and Herbicide safety, June 24-25, 2019. Funded by PSF.
3. 14th National Conference of Weed Science Society, March 24-25, 2018. Islamia College, Peshawar
4. Plenary speaker in 2nd International Conference on Plant Sciences. December 5-7, 2018.
5. 13th National Conference of Weed Science Society, August 19-21, 2016 at SBBU, Sheringal, Dir Upper, Pakistan
6. Biodiversity at Wari Campus, 2013. HEC Funded.
7. Responsible conduct of Science, PAS funded 2014, Chitral Campus of SBBU.
8. Biodiversity day International, Chitral Campus, 2014. GIZ funded.
9. Participated in the Workshop on "University Advancement and Fundraising for Vice Chancellors" LUMS, Lahore, June 29, 2013.
10. Participated in the 1st National Conference on "Poverty Alleviation Through Sustainable Management of Biodiversity", organized by the University of Swat at Bara Gali Summer Camp during Sep. 29-30, 2012.
11. Attended 11th National Meeting of Plant Scientists (NMPS) at GC University, Lahore. Feb. 22, 2011.
12. Attended seminar on "Floristic Biodiversity and Conservation" at Federal Urdu University of Arts, Science and Technology, Karachi. December 22, 2010.
13. Chaired National Seminar on "Technological interventions for food and environment security", organized by Agricultural University Teachers' Association (AUTA) at Bara Gali, Abbottabad. June 28 – July 02, 2010.
14. First All Pakistan Conference of Plant Scientists, University of Karachi, 1982.
15. National Workshop on Photovoltaic Systems, October 2-6, 1988, National Institute of Silicon Technology, Islamabad.
16. Economic analysis of experimental data sponsored by CIMMYT/PARC, at Agricultural University, Faisalabad, March 12-18, 1989.
17. NWFP Seed Industry Workshop, March 19-21, 1989, NWFP Agricultural University, Peshawar.
18. Participated in a 4 days workshop on sustainability of NWFP Agricultural University system, from August 30 to September 2, 1993, Sponsored by

TIPAN/NWFP Agricultural University.

19. Participated as Pakistan/Country Representative in FAO-sponsored Workshop on Parasitic Weeds (*Cuscuta* and *Orobancha* spp.) at Amman, Jordan. September 26-30, 1993.
20. Participated in Third All Pakistan Weed Science Conference, held at Agricultural University, Peshawar, Oct 16-17, 1991.
21. Participated in Fourth All Pakistan Weed Science Conference, held at Agricultural University, Faisalabad, March 26-27, 1996.
22. Participated in National Meeting on status of Alien Invasive Species, at NARC on September 18, 1999. Sponsored by IUCN/CABI, Islamabad.
23. Participated in National wheat meeting at NARC Islamabad, Nov 3-4, 1999.
24. Participated in National Wheat Workshop at Faisalabad, Nov 10, 1999.
25. Participated in workshop at Nathiagali on, "Curriculum development in Applied Ethnobotany, May 2-4, 2002.
26. Presented paper in 8th National Meeting of Plant Scientist. February 24-28, 2003, University of Karachi, Karachi.
27. Participated in International Symposium on, "Medicinal Plants: Linkages Beyond National Boundaries" at NARC Islamabad. Sep 7-9, 2004. SOJ-Japan/WWF Sponsored.
28. Key note Speaker, Biotechnology for development. June 10, 2008, University of Science & Technology, Bannu.
29. Participated/Chaired a session International Conference of Plant Scientists (10th National Meeting of Plant Scientists), 21-24 April, 2008.

CONFERENCES/WORKSHOPS ORGANIZED:

1. Member organizing committee, Plant Life in Asia, Feb 24-27, 2020. University of Karachi.
2. 8th International and 15th National Weed Science Conference in AWKU Mardan, March 2-3, 2020
3. 14th National Conference of Weed Science Society, March 24-25, 2018. Islamia College, Peshawar
4. 13th National Conference of Weed Science Society, August 19-21, 2016 at SBBU, Sheringal, Dir Upper, Pakistan
5. Chief Organizer of the 5th International and 12th National Weed Science Conference, June 12-14, 2015. SBBU, Sheringal, Dir Upper.
6. Chief Organizer of Biodiversity at Wari Campus, 2013. HEC Funded.
7. Co-Organizer for Responsible conduct of Science, PAS funded 2014, Chitral
8. Organizer for Biodiversity day International, Chitral Campus, 2014. GIZ funded.
9. Chief Organizer of 4th International and 13th Conference of Pakistan Botanical Society, Aug 26-30, 2013. SBBU Sheringal Upper Dir, Pakistan.
10. Co-Organizer Workshop on Responsible Conduct of Science, Aug 28, 2014. SBBU Sheringal Upper Dir, Pakistan
11. Co-Organizer of Workshop on Biodiversity of Plants, Aug 28-29, 2014 in

- Collaboration with University of Karachi at SBBU Sheringal Upper Dir, Pakistan
12. Organized 3rd International Weed Science Conference during April 18-20, 2011 at AUP.
 13. Organizer/Instructor Computer Research Methodology Workshop: A computer-training course for the teachers of Agricultural University, July 7 to 19, 1990.
 14. Organizer/Instructor Computer Workshop on Data Analysis and Computer Applications in Agriculture: Sponsored by European Economic Committee (EEC) for Agric. Officers of Buner (Dagar) Development Project, June 8 to June 20, 1991.
 15. Organizer/Instructor for Two Computer Training Courses, Advanced and Introduction to Data Processing, Spreadsheet, and Word processing to Supporting staff of NWFP Agricultural University, August 10 to 21, 1991. Sponsored by USAID/TIPAN.
 16. Organizer/Instructor: Two days workshop on Herbicides calculation and calibration of sprayers, November 20-21, 1991 at ARI, D.I. Khan- Sponsored by USAID/TIPAN and NWFP Agricultural University.
 17. Organizer/Instructor for five days workshop, "Applications of microcomputers in Agricultural Research and Education, January 5-10, 1992 at Gomal University, D. I. Khan, Sponsored by USAID/TIPAN.
 18. Instructor/Organizer for six days workshop, "Use of WordPerfect for word processing" at NWFP Agricultural University, Peshawar, June 20-25, 1992. Sponsored by USAID/TIPAN.
 19. Instructor/ Organizer for six days workshop, "Use of MSTAT for statistical analysis of agricultural experiments" August 22-27, 1992. Sponsored by USAID/TIPAN.
 20. Instructor/Organizer for a five days workshop, "Use of WordPerfect for Desk-Top Publishing, September 13-17, 1992. Sponsored by USAID/TIPAN.
 21. Organizer/Instructor for five days workshop, "Applications of microcomputers in Agriculture". May 2-6, 1993 at Agriculture Research Station, Mingora for researchers of ARS, Malakand Fruit & Vegetable Project and PATA Project. Sponsored by USAID/TIPAN.
 22. Organizer/Instructor for five days workshop, "Applications of microcomputers in Agriculture". July 7-15, 1993 at Potato Research Station, Abbotabad for researchers of Potato Research Station, Abbotabad, Potato Research Station, Abbotabad, Sponsored by

USAID/TIPAN.

23. Organizer/Instructor for five days workshop, "Applications of microcomputers in Agriculture. August 6-13, 1993 at Agriculture Research Station, Chitral for researchers of Agriculture Research Station, Abbotabad, Agriculture Research Station, Dhodial, Jabba Sheep Farm. Sponsored by USAID/TIPAN.
24. Organizer for UGC-sponsored workshop on PC maintenance at NWFP Agricultural University, Peshawar. October 23-28, 1993.
25. Organizer for "Third All Pakistan Weed Science Conference, NWFP Agricultural University, Peshawar, October 16-17, 1991.
26. Organizer/Instructor for six days workshop, "Applications of microcomputers in Agricultural Research and Education, January 1-6, 1994 at Agriculture Research Institute Ratta Kulachi, D. I. Khan.
27. Organizer 1st International Conference on Weed Science, NWFP Agricultural University, Peshawar. September 22-25, 2003.
28. Organized 1st Training Course in Weed Science for teachers of all Agricultural Universities, October 1-6, 2001
29. Organized workshop for PLI (Project for Livelihood Improvement) 12-14 November, 2004
30. Organized National Conference in 2005 as Chief organizer
31. Chief Organizer, 22nd Asia-Pacific Weed Science Conference, Lahore, March 8-12, 2010.

OUTREACH/EXTENSION ACTIVITIES:

1. Weed Control in Wheat: In-service training Course for the Agricultural Officers of D. I. Khan Division, at CCRI, Pirsabak, Nowshehra.
2. Weed Control in Orchards: In-service training Course for the Agricultural Officers of Hazara Division, at Dhodial, Mansehra.
3. Weed Control in Wheat and Maize crops in Hazara Division. 28th In-service training Course for the Agricultural Officers of Hazara Division, June 3-4, 1990 at Dhodial, Mansehra.
4. Weeds Identification and their control with special reference to the Agro-climate of Chitral District. Part of Training course to the Agriculture Extension

- personals from Chitral District, April 4, 1993.
5. Weed control measures with special reference to Orchards and Vegetable farms. September 9, 1990. USAID/NWFP Agricultural University sponsored In-service training program for field assistants and Agricultural Officers of Gadoon Amazai Area Development Project.
 6. Weed Control in Wheat, Lecture and Field demonstration of Herbicide application, sponsored by EEC, at Daggar, Bunair, December, 12, 1990.
 7. Rabbi Weeds and their control in wheat and sugarcane: In-service training course for Agricultural Field Assistants at ATI, Peshawar, February 2, 1991.
 8. Weeds of Potato and their management: In-service Training for Agricultural Officers at ATI, Peshawar, January, 30, 1991.
 9. Herbicide Safety, Sprayer Calibration, Herbicide Calculations and Weed Control in Wheat: USAID-Sponsored DAI/ADT program for Afghan refugees at ATI, Peshawar, January 31, February 1, 4, 1991.
 10. Importance and Methods of Weed Control in Potato: In-service Training course held at Mingora, Swat, March 12, 1991.
 11. Safe use of Agrochemicals/ Pesticides. Training of farmers regarding safe use of agrochemicals at Yar Hussain, District Swabi on August 24, 1992.
 12. Pesticides safety, herbicides calculation and sprayer calibration. Training of Field Assistants and Agriculture Officers from Malakand on January 19, 1993. Sponsored by PATA.
 13. Weeds and their control in wheat. Training of Agriculture Officers, January 23, 1992. Sponsored by Agriculture Extension Department.
 14. Pesticides safety, herbicides calculation and sprayer calibration. Training of Field Assistants and Agriculture Officers from Malakand on January 26, 1993. Sponsored by PATA.
 15. Pesticides safety, herbicides calculation and sprayer calibration. Training of Field Assistants and Agriculture Officers from Malakand on February 9, 1993. PATA.
 16. Weeds and their control: with reference to Chitral. Training of Agriculture Officers, January 23, 1993. Sponsored by Agriculture Extension Department and Chitral Area Development Project.
 17. Weeds and their control: in Peshawar District. Training of Field Assistants, June 22, 1993. At ATI, Peshawar. Sponsored by Agriculture Extension Department.
 18. Weeds of Wheat and their control: with reference to Peshawar District.

- Training of Agriculture Officers, November 17, 1993. At ATI, Peshawar. Sponsored by Agriculture Extension Department.
19. Yield losses in sugarcane and maize due to weeds: and their management. 86th Farmers training course, Agriculture training Institute, Peshawar.
 20. Principle Investigator for, "Slide set and a manual for weeds of Wheat" Sponsored by USAID/TIPAN.
 21. Co-Principle Investigator for, "Slide set and a manual for weeds of Rice" Sponsored by USAID/TIPAN.
- Subject matter Specialist, Directorate of Outreach, NWFP Agricultural University, Peshawar: July 1988 - 1994.
23. Weeds and their control in wheat. Training of CBO farmers of Peshawar & Swabi farmers. Nov 12, 1994 Sponsored by ATI/Agriculture Extension Department.
- Note:** Participated in a number of field days and workshops arranged for farmers throughout Khyber Pakhtunkhwa (NWFP).

RESEARCH SCHOLARS SUPERVISED:

<i>Number of M.Phil Students Supervised:</i>	30
<i>Number of M. Sc Botany students supervised:</i>	03
<i>Number of Ph.D Students Supervised:</i>	11

Detail of PhD STUDENTS Supervised:

1. Major Supervisor for Haroon Khan Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar (Completed 2012)
2. Major Supervisor for Mohammad Azim Khan Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar (Completed 2006)
3. Co-Advisor for dissertation research of Haji Khalil Ahmad, Gomal University, D.I. Khan.
4. Co-supervisor/Member Committee for Ijaz Ahmad Khan, PhD Programme, Department of Weed Science, Agricultural University, Peshawar (Completed January 2007).
5. Major Supervisor for Zahid Hussain Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar (2008 Completed).

6. Co-supervisor/Member Committee for Imtiaz Khan, Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar (Completed 2008)
7. Co-supervisor/Member Committee for Muhammad Ishfaq Khan, Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar (Completed 2009)
8. Co-Director for the dissertation research of Gul Hassan, (Ph.D student of Weed Science, Department of Crop Science, Oregon State University, Corvallis, USA). Completed (1992).
9. Co-supervisor for the dissertation research of Mohammad Iqbal, Weed Control in Wheat". Gomal University. Completed (2002)
10. Major Supervisor for Mohammad Saeed Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar. Completed (2009)
11. Major Supervisor for Bakhtiar Gul, Ph.D Programme, Department of Weed Science, Agricultural University, Peshawar. Completed (2009)

RESEARCH PROJECTS:

A. Research Projects completed:

1. **Weed Management in Wheat: (July 2003-Dec 2006):** Funded by Pakistan Science Foundation (PSF): (Rs. 1 Million).
2. **Management of Parasitic weeds in rapeseed, onion and legume crops of NWFP: (March 2002-Dec 2005)** Funded by Pakistan Agricultural Research Council (PARC) under Agricultural Linkages Program (ALP) – (Rs. 1.753 million)
3. **National Project on Weed Control, NWFP-Phase.** Funded by PARC – (Rs.1.4 million)
4. **Weed management in onion/rice cropping system of lower Swat. (Rs.1.5 Million),** PATA/Dutch funded
5. **Weed management in onion and rice (Rs. 0.2 million):** Funded by Department of Agriculture (Research).
6. **Invasive Weeds of Abbottabad/Islamabad (US \$ 0.1 million)** WWF-funded.

B. Linkage Projects:

7. P.I. Pak-Australian Linkage Project with Queensland University on “Study of Parthenium, its managing and Ecology.” (Rs. 12.5 millions).

RESEARCH PUBLICATIONS: = (235)

IMPACT FACTOR/FOREIGN JOURNALS	93
LOCAL JOURNALS:	68
PROCEEDINGS:	10
ABSTRACTS:	58
BOOK CHAPTERS:	03
BOOKS (International):	03

ARTICLES IN JOURNALS OF IMPACT FACTOR/FOREIGN: = (93)

1. **A Ahmad, Qi-Jing Liu, KB Marwat, S Shah, M Amir, A Manan. 2019.** Tree distribution pattern, growing stock characteristics and Carbon mitigation potential of different forest ecosystems in Kumrat, Hindukush region of Northern Pakistan. Pak J Bot. 51(6): 2185-94.
2. **S Naveed, M Ibrar, I Khattak, KB Marwat. 2019.** Phytosociological and Heavy Metal Profile of Iphiona grantioides and Pluchia arguta (Boiss.) Anderb. Subsp. Glabra. Qaiser. Pakistan J Bot. 51 (6), 2153-2158
3. **Rabia Afza , Habib Ahmad, Z. Saqib, K.B. Marwat, and Jawad Khan. 2018.** Spatial Analysis of Vascular Flora of Ayubia National Park, KPK, Pakistan: A Classical example of Moist Temperate Himalaya. Pakistan J Bot. 55(4): 1499-1508
4. **Saeed, M., Zhaofang Huang ...and Khan B Marwat. 2016.** Effect of special arrangement and density on Weed infestation and Yield Maize (*Zea mays* L). Pakistan J Bot. 48(3): 1203-1207.
5. **Kashmir, S KB Marwat. 2016.** Temperature and salinity affect the germination and growth of *Silybum marianum* Gaertn and *Aven Fatua*. Pak J Bot 48(2): 469-76.
6. **Wahid, F.....KB Marwat. 2016.** Inoculation of Arbuscular Mycorrhizal Fungi and Phosphate solubilizing Bacteria in the presence of Rock Phosphate improves Phosphorus uptake and Growth of Maize. Pak J Bot 48(2): 739-747.
7. **Ali, A., M.A. Khan, A. Saleem, K.B. Marwat, A.U. Jan, D. Jan and S. Sattar. 2016.** Performance and Economics of growing maize under organic and inorganic fertilization and weed management. Pak. J Bot. 48(1): 311-318.
8. **Khan, M.T., Saima Hashim, Shahida Ayub, Asad Jan and K.B. Marwat.**

- 2015.** A case study of Ethnobotany and Biodiversity Conservation from Tehsil Barawal District Dir Upper, Khyber Pakhtunkhwa Pakistan. Pak. J Bot. 47(SI):7-13.
9. **Khan, M.A., F. Wahid, Umme-Kulsoom, K. B. Marwat, B. Gul, M. Inayatullah, A.M. Khattak and S.A. Khan. 2015.** Evaluating the threshold levels of *Neslia apiculata* in wheat and its effects on crop yield losses in Swat valley of Khyber Pakhtunkhwa. Pak. J Bot. 47(SI):87-91.
 10. **Ahmad, A., S.M. Nizami, K.B. Marwat and Juma Muhammad. 2015.** Annual accumulation of carbon in the coniferous forest of Dir Kohistan: an inventory based estimate. Pak. J Bot. 47(SI):115--118.
 11. **Haroon Khan, Adil, Bakhtiar Gul, Muhammad Azim Khan and K.B. Marwat -** Efficacy of aqueous extracts of different allelopathic plants on germination and growth of wheat and wild oat seeds. Pak. J Bot. 47(SI):181-185.
 12. **Khan, M., Asad Jan, Saima Hashim and K.B. Marwat -** Cloning and Agrobacterium mediated transformation of the putative promoter region of *Oryza sativa C₃H₅₂* gene into local rice variety. Pak. J Bot. 47(SI):211-218.
 13. Sharif, M., Matiullah Khan, M. Azim Khan, F. Wahid, **K.B. Marwat, A.M. Khattak and M. Naseer.** 2015. Effect of rock phosphate and farmyard manure applied with effective microorganisms on the yield and nutrient uptake of wheat and sunflower crops. Pak. J Bot. 47(SI):219-226.
 14. Khalil, A.T., Z.K. Shinwari, M. Qaiser and **K. B. Marwat.** 2014. Phyto-therapeutic claims about Euphorbeaceous plants belonging to Pakistan: an ethnomedicinal review. Pak. J Bot. 46(3):1137-44.
 15. Khan, M. A., **K.B. Marwat, B.Gul, F. Wahid, H. Khan and S. Hashim.** 2014. *Pistia stratiotes* L. (Araceae): phytochemistry, use in medicines, phytoremediation, biogas and management options. Pak J. Bot 46(3):851-60.
 16. Hashim, S., Asad Jan, **K.B. Marwat** and M. A.Khan. Phytochemistry and medicinal properties of *Ammi visnaga* (Apiaceae). Pak J.Bot. 46(3):861-67.
 17. Gul, B., **K.B. Marwat, M. Azim Khan and Haroon Khan.** Impact of tillage, plant population and mulches on phenological characters of maize. Pak. J. Bot. 46(2): 549-54.
 18. Khan, H., **K.B. Marwat, M.A. Khan and S. Hashim.** 2014. Herbicidal control of *Parthenium* weed in maize. Pak. J. Bot. 46(2): 497-504.
 19. Bakht, T., I. Ahmad, **K.B. Marwat** and Z. Hussain. 2014. Integration of row spacing, mulching and herbicides on weed management in tomato. Pak. J. Bot. 46(2):543-47.

20. Hussain, Z., **K.B. Marwat**, J. Cardina and I.A. Khan. 2013. *Xanthium strumarium* L. impact on corn yield and yield components. *Turk J Agric For.* 38(1):39-46.
21. Hashim, S., **K.B. Marwat** and A. Jan. 2014. *Ammi visnaga*, a weed and a medicinal herb. *Pak. J. Bot.* 46 (2): in print.
22. Khan, H., **K.B. Marwat**, G. Hassan, M.A. Khan and S. Hashim. 2014. Distribution of *Parthenium* weed in Peshawar valley, Khyber Pakhtunkhwa- Pakistan. *Paki. J. Bot* 46(1): 81-90.
23. Hussain, M.M., B. Ahmad, E. Rashid, S. Hashim, **K.B. Marwat** and A. Jan. 2014. In vitro antibacterial activity of methanol and water extracts of *Adiantum capillus veneris* and *Tagetes patula* against multidrug resistant bacterial strains *Pak. J. Bot.* 46(1):363-68..
24. Hashim, S., T. Bakht, **K.B. Marwat** and A. Jan. 2014. Medicinal properties, phytochemistry and pharmacology of *Tribulus terrestris* L. (Zygophyllaceae). *Paki. J. Bot* 46(1): 399-404.
25. Hussain, Z., **K.B. Marwat**, F. Munsif, A. Samad, S. Hashim and T. Bakht. 2013. Influence of intercropping in maize on performance of weeds and the associated crops. *Pak. J. Bot.* 45(5): 1729-1734.
26. Khan, M.A., **K.B. Marwat**, Z. Hussain, U. Kulsoom and S. Hashim. 2013. Weed Control effects of the Wheat-Pea intercropping. *Pak. J. Bot.* 45(5):1743-48.
27. Afridi, R.A., Z. Hussain, M.A. Khan and **K.B. Marwat**. 2013. Allelopathic effects of Rice straw extracts roots and shoots of different crops and weeds. *Pak. J. Bot.* 45(3):
28. Hussain, Z., **K.B. Marwat**, F. Munsif, A. Samad, S. Hashim and T. Bakht. Influence of intercropping in maize on performance of weeds and the associated crops. *Pak J.Bot* 45(5): 1729-1734.
29. Hussain, Z., **K.B. Marwat** and M.A. Khan. 2013. How the competition of *Xanthium strumarium* L. affects the phenological characters of Maize crop. *Pak. J. Bot.* 45(6): 1883-86)
30. Khan, M.A., S.D. Kakar, **K.B. Marwat** and I.A. Khan. 2013. Differential response of maize to weed control and combinations of macronutrients. *Sains Malaysiana.* 42(10): 1395-1401.
31. Hashim, S., **K.B. Marwat**, M. Saeed, M. Haroon, M. Waqas and S. Fahad. 2013. Developing a sustainable and eco-friendly weed management system using organic and inorganic mulching techniques. *Pak. J. Bot.* 45(2): 483-486.
32. Khan, M.A., M. Sajid, Z. Hussain, **K.B. Marwat**, K. Ali, R.A. Afridi and S. Bibi. 2013. How nitrogen and phosphorus influence the phenology of Okra. *Pak. J. Bot.* 45(2): 355-358.

33. Hussain, Z., F. Munsif, **K.B. Marwat**, K. Ali, R.A. Afridi and S. Bibi. Studies on efficacy of different herbicides against weeds in Potato crop in Peshawar. Pak. J. Bot. 45(2): 487-491.
34. Hussain, Z., **K.B. Marwat**, F. Munsif, A. Samad and K. Ali. 2013. Evaluation of various herbicides and their combinations for weed control in Wheat crop. Pak. J. Bot. 45(1): 55-59.
35. Khan, R., M.A. Khan, S. Sultan, **K.B. Marwat**, I. Khan, G. Hassan and H.U. Shah. 2013. Nutritional quality of sixteen terrestrial weeds for the formulation of cost-effective animal feed. The J. Anim. & Pl. Sci. 23(1 Suppl.): 75-79.
36. Ali, H., H. Ahmad, **K.B. Marwat**, M. Yousaf, B. Gul and I. Khan. 2012. Trade potential and conservation issues of medicinal plants in District Swat, Pakistan. Pak. J. Bot. 44(6): 1905-1912.
37. Saeed, M., **K.B. Marwat**, B. Gul and Z. Hussain. 2012. Effect of weed density on leaf area index and biological yield of maize. Pak. J. Bot. 44(6): 1939-1942.
38. Hussain, Z., **K.B. Marwat**, B. Gul, M. Saeed and S. Bibi. 2012. Effect of common cocklebur density on biological yield of maize at varying populations. Pak. J. Bot. 44(5): 1627-1632.
39. Khan, H., **K.B. Marwat**, G. Hassan and M.A. Khan. 2012. Chemical control of *Parthenium Hysterophorus* L. at different growth stages in non-cropped area. Pak. J. Bot. 44(5): 1721-1726.
40. Khan, M.A., **K.B. Marwat**, A. Amin, A. Nawaz, R. Khan, H. Khan and H.U. Shah. 2012. Soil Solarization: An organic weed management approach in Cauliflower. Communic. in Soil Sci. & Pl. Analys. 43: 1847-1860.
41. Ahmad, I., U. Aiman and **K.B. Marwat**. 2012. Fortification of dairymilk with Docosaehaenoic Acid (DHA) through feed supplementation of dairy cattle feed – A new horizon in dairy industry. J. Anim. Plant Sci. 21(Sup. 1): 933-936.
42. Khan, I.A., **K.B. Marwat**, G. Hassan, R. Khan and Z. Ullah. 2012. Suppressible capability of herbicides and plant extracts against chickpea weeds. J. Anim. Pl. Sci. 21(Sup. 1): 937-939.
43. Amin, A., G. Hassan, **K.B. Marwat**, H. Rashid, N.U. Khan and H. Ali. 2012. Utilization of *Parthenium hysterophorus* L. as a source of nutrients for maize and sorghum. Afric. J. Biotech.
44. Ali, H., M. Qaisar and **K.B. Marwat**. 2012. Contribution to the Red list of Pakistan: A case study of *Delphinium nordhagenii* (Ranunculaceae). Pak. J. Bot. 44(1):27-31.
45. Jan, H.U., Z.K. Shinwari and **K.B. Marwat**. 2011. Influence of herbal dye extracted from dry wood of indigenous *Berberis Pachyacantha* Kochne in Plant Histological staining. Pak. J. Bot. 43(5): 2597-2600.

46. Khan, M.I., G. Hassan, I. Khan, **K.B. Marwat**, N.U. Khan and R. Gul. 2011. Tolerance of Chickpea (*Cicer Arietinum* L.) cultivars to the major Chickpea herbicides. Pak. J. Bot. 43(5): 2497-2501.
47. Gul, B., **K.B. Marwat**, M. Saeed, Z. Hussain and Haidar Ali. 2011. Impact of tillage, plant population and mulches on weed management and grain yield of Maize. Pak. J. Bot., 43(3): 1603-1606.
48. Khan, I.A., Z. Ullah, G. Hassan, **K.B. Marwat**, A. Jan, S.M.A. Shah and S.A. Khan. 2011. Impact of different mulches on weed flora and yield of maize. Pak. J. Bot. 43(3): 1601-1602.
49. **Marwat, K.B.**, M.A. Khan, S. Hashim, K. Nawab and A.M. Khattak. 2011. Integrated weed management in wheat. Pak. J. Bot. 43(1): 625-633.
50. Khattak, A.M., S. Pearson, K. Nawab, M.A. Khan and **K.B. Marwat**. 2011. The effects of light quality and temperature on the growth and development of geraniums. Pak. J. Bot. 43(1): 679-688.
51. Hussain, Z., **K.B. Marwat** and J. Cardina. 2011. Common Cocklebur competition in Forage Maize. Weed Tech. 25 (1): 151-158.
52. Saeed, M., **K.B. Marwat**, G. Hassan, M.A. Khan and I.A. Khan. 2010. Interference of Horse Purslane (*Trianthema portulacastrum* L.) with maize. (*Zea mays* L.) at different densities. Pak. J. Bot. 42(1): 173-179, 2010.
53. N.U. Khan, **K.B. Marwat**, G. Hassan. 2010. Genetic variation and heritability for cotton seed, fiber and oil traits in *Gossypium hirsutum* L. Pak. J. Bot. 42(1): 615-625.
54. Khan, I.A., G. Hassan, **K.B. Marwat**, I. Daur, S.M.A. Shah, N.U. Khan, S.A. Khan and Farhatullah. 2010. Interaction of wild oat (*Avena fatua* L.) with divergent wheat cultivars. Pak. J. Bot. 42(2): 1051-1056.
55. Batool, S., N.U. Khan, K. Makhdoom, Z. Bibi, G. Hassan, **K.B. Marwat**, Farhatullah, F. Muhammad, Raziuddin and I.A. Khan. 2010. Heritability and genetic potential of upland cotton genotypes for morph-yield traits. Pak. J. Bot. 42(2): 1057-1064.
56. Khan, I., G. Hassan, M.I. Khan, N.U. Khan and **K.B. Marwat**. 2010. Agronomic and polymorphism study of wild oat biotypes at DNA level. Pak. J. Bot. 42(3): 1841-1848.
57. Arif, M., I. Amin, M.T. Jan, I. Munir, K. Nawab, N.U. Khan and **K.B. Marwat**. 2010. Effect of plant population and nitrogen levels and methods of application on ear characters and yield of maize. Pak. J. Bot. 42(3): 1959-1967.
58. Daur, I., H. Sepetoglu, **K.B. Marwat** and M.N. Geverek. 2010. Nutrient removal, performance of growth and yield of Faba bean (*Vicia Faba* L.). Pak. J. Bot. 42(5): 3477-3484.
59. Jan, A., G. Ahmad, M. Arif, M.T. Jan and **K.B. Marwat**. 2010. Quality parameters of canola as affected by Nitrogen and Sulfur fertilization. J.

60. **Marwat, K.B.**, S. Hashim and H. Ali. 2010. Weed management: A case study from North West Pakistan. Pak. J. Bot. Special Issue (S.I. Ali Festschrift) - 42: 341-353.
61. Khan, A., M.T. Jan, **K.B. Marwat** and M. Arif. 2009. Organic and Inorganic Nitrogen Treatments effects on plant and yield attributes of Maize in different tillage systems. Pak. J. Bot. 41(1): 99-108.
62. Khan, N.U., G. Hassan and **K.B. Marwat**. 2009. Legacy Study of Cotton Seed Traits in Upland Cotton using Griffing's Combinability Model. Pak. J. Bot. 41(1): 131-142.
63. Abbas, S.J., Farhatullah, **K.B. Marwat**, I.A. Khan and I. Munir. 2009. Molecular Analyses of Genetic diversity in *Brassica* Species. . Pak. J. Bot. 41(1): 167-176.
64. Muhammad, A., S.K. Khalil, **K.B. Marwat**, A.Z. Khan, I.H. Khalil, Amanullah and S. Arifullah. 2009. Nutritional quality and production of Soybean land races and improved varieties as affected by planting dates. Pak J. Bot. 41(2): 683-689.
65. Amanullah, **K.B. Marwat**, P. Shah, N. Maula and S. Arifullah. 2009. Nitrogen level and its time of application influence leaf area, height and biomass of maiza planted at low and high density. Pak. J. Bot. 41(2): 761-768.
66. Khan, N.U., **K.B. Marwat** and G. Hassan. 2009. Study of Fiber quality traits in upland cotton using additive-dominance model. Pak. J. Bot. 40(3):1271-1283.
67. Khan, N.U., G. Hassan and **K.B. Marwat**. 2009. Genetic Variability and Heritability in upland Cotton. Pak. J. Bot. 2009. 40(4): 1695-1705.
68. Gul, B., **K.B. Marwat**, G. Hassan, A. Khan, S. Hashim and I.A. Khan. 2009. Impact of tillage, plant population and mulches on biological yield of maize. Pak. J. Bot., 41(5): 2243-2249.
69. Khan, N.U., G.H. Hassan and **K.B. Marwat**. 2009. Diallel analyses of some quantitative traits in *Gossypium hirsutum*. Pak. J. Bot. 41(6):3009-3022.
70. Khan, M.A., R. Blackshaw and **K.B. Marwat**. 2009. Biology of Milk thistle (*Silybum marianum* Gaertn.) and Management Options for Growers in Northwest Pakistan. Weed Mgt. & Biol. 9(2): 99-105.
71. Khan, N.U., G. Hassan, M.B. Kumbhar and **K.B. Marwat**. M. A. Khan, A. Parveen, Umme-e-Aiman and M. Saeed. 2009. Combining ability analysis to identify suitable parents for heterosis in seed cotton yield, its components and lint % in upland cotton. Industrial Crops & Products. 29:108-115.
72. Khan, A., M.T. Jan, M. Arif, **K.B. Marwat** and A. Jan. 2008. Phenology and crop stand of wheat as affected by Nitrogen sources and tillage systems. Pak. J. Bot. 40(3): 1103-1112.

73. Khan, I.A., G. Hassan and **K.B. Marwat**. 2008. Interaction of Wild Oats (*Avena fatua* L.) with spring wheat (*Triticum aestivum* L.) seeded at different rates. Pak. J. Bot. 40(3):1163-67.
74. Arif, M., M.T. Jan, **K.B. Marwat** and M.A. Khan. 2008. Seed Priming Improves Emergence and yield of Soybean. Pak. J. Bot. 40(3): 1169-77.
75. **Marwat, K.B.**, M.A. Khan, A. Nawaz and A. Amin. 2008. *Parthenium hysterophorus* L.: A potential source of bioherbicide. Pak. J. Bot. 40(5):1933-1942.
76. Khan, I.A., G. Hassan, **K.B. Marwat** and I. Daur. 2008. Efficacy of some pre- and post-emergence herbicides on yield and yield component of Canola. Pak. J. Bot. 40(5):1943-1947.
77. Khan, A., S.K. Khalil, A.Z. Khan and **K.B. Marwat**. 2008. The role of seed priming in semi-arid area for Mungbean phenology and yield. Pak. J. Bot. 40(6): 2471-2480.
78. Daur, I., H. Sepetoglu, **K.B. Marwat**, G. Hassan and I.A. Khan. 2008. Effect of different levels of nitrogen on dry matter and grain yield of Faba Bean (*Vicia faba* L.). Pak J. Bot. 40(6): 2453-2459.
79. Abbas, S.J., Farhatullah, I.A. Khan and **K.B. Marwat**. 2008. Molecular and Biochemical Assessment of *Brassica napus* and indigenous. *Campestris* species. Pak. J. Bot. 40(6): 2461-2469.
80. **Marwat, K.B.** and M.A. Khan. 2007. Climatic variation and growth of Holy Thistle (*Silybum marianum* Gaertn). Pak. J. Bot. 39(2):319-327.
81. **Marwat, K.B.**, M. Arif and M.A. Khan. 2007. Effect of tillage and Zinc application method on Weeds and Yield of Maize. Pak. J. Bot. 39(5): 1583-1591.
82. Khan, M.A. and **K.B. Marwat**. 2006. Impact of crop and weed densities on competition between wheat and *Silybum marianum*. Pak. J. Bot. 38(4): 1205-1215.
83. **Marwat, K.B.**, M. Ibrar and S. Hashim. 2004. Ethnobotanical study on weeds in District Abbottabad N-W Pakistan. Acta Botanica Yunanica. Suppl. XV: 106-113.
84. **Marwat, K.B.** and E.D. Nafziger. 1990. Cocklebur and velvetleaf interference with soybean grown at different densities & planting patterns. Agron. J. 82(3): 531-534.
85. Sarir, M.S., **K.B. Marwat** and J.K. Khattak. 1984. Studies on some halophytes of Peshawar. Pak. J. Bot. 16(1): 49-51.
86. Hassan, G., M.A. Khan, **K.B. Marwat**, A. Nawaz and S. Hashim. 2008. Efficacy of some forest species extracts on wheat and two major weed in arid zones of NWFP. Japan. J. Plant Sci. 2(2): 39-42.
87. Amin, A., M.A. Khan, G. Hassan, **K.B. Marwat**, H. Rashid and K. Nawab. 2008. Weed control efficacy and Economics of Pre-emergence herbicides

- in Maize. Asian & Australasian J. Plant Sci. & Biotechnol. 2(2): 72-75.
88. Hanif, Z. and **K.B. Marwat**. 2008. RAPD and SSR of wild oats (*Avena* species) from North West Frontier Province of Pakistan. Afric. J. Plant Sci. 2(11): 133-139.
 89. Khan, I.A., G. Hassan, **K.B. Marwat** and I.A. Khattak. 2006. Yield and yield components of wheat affected by wild oats (*Avena fatua*) densities under irrigated conditions. Herbologia. 7(2): 31-39.
 90. Shamsi, I.H., G. Jilani, **K.B. Marwat** and Y. Hayat. 2006. Response to Poaceous Weed in Wheat to Post-Emergence herbicides. Caspian J. Env. Sci. 4(1): 916-922.
 91. Yousafzai, H.K., **K.B. Marwat** and M.A. Khan. 2006. Impact of herbicides on some agronomic and chemical characteristics of flue-cured Virginia tobacco. Songklanakarin J. Sci. Technol. 28(5):929-935.
 92. Khan, M.A., **K.B. Marwat** and G. Hassan. 2005. Grain yield of wheat at various seed rates under Holy thistle (*Silybum marianum* Gaertn.) densities. Herbologia. 6(3):25-33.
 93. Hayat, Y., Salahuddin and **K.B. Marwat**. 2003. Statistical analysis of Nitrogenous (N) Fertilizer demand in N-West Pakistan. Poljoprivreda I sumarstvo. 49(3-4), 2003. Podgorica.

-----**Other HEC recognized Journals 78**

94. Khan, H., **K.B. Marwat**, G.Hassan and M.A.Khan .2014.Socio-economic impacts of *Parthenium* (*Parthenium hysterophorus* L.) in Peshawar valley, Pakistan. Pak. J. Weed Sci. Res.19(3):275-93
95. Khan, I., **K.B. Marwat**, I.A. Khan, Haidar Ali, K. Dawar and H. Khan. 2011. Invasive weeds of Southern Districts of Khyber Pak`htunkhwa-Pakistan. Pak. J. Weed Sci. Res. 17(2): 161-174
96. Khan, M.I., G. Hassan, I. Khan and **K.B. Marwat**. 2011. Testing of herbicides at various doses on the growth stages of wild onion grown in pots. Sarhad J. Agric. 27(1): 85-91.
97. **Marwat K.B.** and B.A. Siddiqi. Root cells study of gamma irradiated maize (*Zea mays* L.) seed. Sultania. 2:9-15. (1976).
98. **Marwat, K.B.**, S.H. Siddiqi and M. Ahmad. 1982. Cytomorphological studies of colchicine induced mutants in peas. Pak. J. Agric. Res. 3(4): 219-223.
99. Siddiqui, S.H. and **K.B. Marwat**. 1983. Cytomorphological effects of colchicine on wheat. Pak. J. Agric. Res. 4(2): 120-125.
100. **Marwat, K.B.** and I. Haq. 1979. Tobacco field weeds of Peshawar Valley. Pak. Tobacco. III (2): 29-30.
101. **Marwat, K.B.**, M. Ahmad, S.Z. Shah. 1979. Soil algae of tobacco fields of Peshawar Valley. Pak. Tobacco. II (1): 21-25.

102. Siddiqui, S.H. and **K.B. Marwat**. 1980. Useful plants of Afghanistan. (Review article) 1: J. Art. St. Central Asia. II (6): 59-67.
103. **Marwat, K.B.**, S.H. Siddiqi and M. Ahmad. 1981. Useful plants of Afghanistan. (Review article) II: J. Art. St. Central Asia. IV (8) 83-91.
104. **Marwat, K.B.**, S.H. Siddiqi and M. Ahmad. 1982. A study on the liverworts of Kurrum Valley, NWFP, Pakistan. J. Pak. Study. Center. 5: 155-161.
105. Hussain, F., **K.B. Marwat** and K. Ahmad. 1985. Ecotaxonomic studies on the weeds of wheat-fields of Peshawar Valley. G.U. Res. J. 5: 27-35.
106. Shafiullah, Q. Nawaz, **K.B. Marwat** and F. Hussain. 1990. Comparative effect of some pre- and post-emergence herbicides on soybean. Pak. J. Weed Sci. Res. 3(1): 42-47.
107. Rahman, H., **K.B. Marwat**, M.Y. Khattak and M. Ashraf. 1992. Allelopathic effects of *Convolvulus arvensis* L. on wheat. Pak J. Weed Sci. Res. 5(1-2): 9-13.
108. **Marwat, K.B.**, E. Malik and I. Ahmad. 1993. Assessment of extension activities relating to weed control measures in Mansehra Tehsil. Pak J. Weed Sci. Res. 6(1-2): 33-39.
109. **Marwat, K.B.**, G.R. Marwat and F.M. Sarim. 1993. A Checklist and Key to Parasitic Weeds of Pakistan. Pak J. Weed Sci. Res. 6(1-2): 1-15.
110. Mahmood, M.T., S.A. Hussain and **K.B. Marwat**. 1994. Effect of Pre-emergence herbicides on weed control, seed germination and seedling vigor in Peach Stones nursery. Pak J. Weed Sci. Res. 7(1):67-70.
111. Hassan, G., G.W. Mueller-Warrant and **K.B. Marwat**. The influence of dose and time of application of fenoxaprop on rice genotypes. Pak J. Weed Sci. Res. 6(1-2): 23-32.
112. Siddiqui, S., S. Khalid, R.A. Shad and **K.B. Marwat**. Host range and distribution of *Orobancha aegyptiaca* and *O. cernua*: Two important parasitic weeds of crops in Pakistan. Pak J. Weed Sci. Res. 6(1-2): 61-67.
113. Kamran, S., **K.B. Marwat** and H. Rahman. 1994. Evaluation of maize (*Zea mays* L.) S₁ lines for yield and inbreeding depression. Sarhad J. Agric. 10 (5): 553-558.
114. **Marwat, K.B.**, M. Tahir, D.R. Khan and M.S. Swati. 1994. Path coefficient analysis in rice (*Oryza sativa* L.). Sarhad J. Agric. 10(5): 547-551.
115. **Marwat, K.B.**, N. Shaheen and H. Rahman. 1994. Heritability estimates and comparative performance of rice crosses resulting from tall and dwarf cultivars. Sarhad J. Agric. 10(5):559-570.
116. Khattak, M.Y., **K.B. Marwat** and A. Munting. 1994. Evaluation of rice genotypes and their tolerance to different herbicides in onion/rice and wheat/rice cropping patterns of Lower Swat. Pak. J. Weed Sci. Res. 7:1-12.

117. Zada, A., D.R. Khan, A. Said, Derawadan, M. Tahir and **K.B. Marwat**. 1998. Effect and economics of time of weeds removal on the yield and yield components of Rice (*Oryza sativa* L.). Sarhad J. Agric. 14(4): 335-338.
118. Khan, I., Z. Muhammad, G. Hassan and **K.B. Marwat**. 2001. Efficacy of different herbicides for controlling weeds in wheat crop-I. Response of agronomic and morphological traits in wheat variety Ghaznavi-98. Scientific Khyber. 14(1): 51-57.
119. Hashim, S. and **K.B. Marwat**. 2002. Invasive weeds a threat to the biodiversity: A case study from Abbottabad District, N-W Pakistan. Pak. J. Weed Sci. Res. 8(1-2): 1-12.
120. **Marwat, K.B.**, G. Hassan, M.N. Khan and M. Zubair. 2002. Effect of weed interference on transplanted Tomatoes (*Lycopersicon esculentum* Mill.). Pak. J. Weed Sci. Res. 8(1-2):19-24.
121. **Marwat, K.B.**, S. Hashim, G. Hassan and M. Riaz. 2002. Response of Onions (*Allium cepa* L.) Cultivars to Weed Management Treatments. Pak. J. Weed Sci. Res. 8(1-2): 25-31.
122. Khan, I., G. Hassan and **K.B. Marwat**. 2002. Efficacy of different herbicides for controlling weeds in wheat crop-II. Weed dynamics and herbicides. Pak. J. Weed Sci. Res. 8(1-2): 41-47.
123. Hashim, S., **K.B. Marwat** and G. Hassan. 2002. Response of Wheat Varieties to Substituted Urea Herbicides. Pak. J. Weed Sci. Res. 8(1-2): 49-55.
124. Khan, M.A., **K.B. Marwat**, G. Hassan and N. Khan. 2002. Impact of weed management on Maize (*Zea mays* L.) planted at night. Pak. J. Weed Sci. Res. 8(1-2): 57-61.
125. Marwat, M.I., H.K. Ahmad, **K.B. Marwat** and G. Hassan. 2002. Integrated weed management in sheat .I. Weed density, dry weed biomass, absolute growth rate and grain yield. Pak. J. Weed Sci. Res. 8(1-2): 81-93.
126. Khan, M.A., **K.B. Marwat**, G. Hassan and W.A. Shah. 2003. Effect of different weed free periods on the growth and yield of wheat. Pak. J. Agric. Agricl. Engg. Vet. Sci. 18(1-2):30-33.
127. Khan, M.A., **K.B. Marwat**, N. Khan and I.A. Khan. 2003. Efficacy of different herbicides on yield and yield components of maize. Asian J. Plant Sci. 2(3): 300-304.
128. Khan, N., G. Hassan and **K.B. Marwat**. 2003. Efficacy of different herbicides for controlling weeds in wheat crop at different times of application-II. Asian J. Plant Sci. 2(3): 310-313.
129. **Marwat, K.B.**, S. Hashim and G. Hassan. 2003. Prediction of onion-bulb yield under weed pressure in onion/rice cropping pattern of the lower Swat Valley, N-W Pakistan. Pak. J. Weed Sci. Res. 9(1-2): 135-130

130. Hashim, S., **K.B. Marwat** and G. Hassan. 2003. Chemical weed control efficiency in Potato (*Solanum tuberosum* L.) under agro-climatic conditions of Peshawar, Pakistan. Pak. J. Weed Sci. Res. 9(1-2): 105-110.
131. Khan, M.H., G. Hassan, **K.B. Marwat** and N.H. Shah. 2003. Effect of different herbicides on controlling weeds and their effect on yield and yield components of edible Pea. Pak. J. Weed Sci. Res. 9(1-2): 81-87.
132. Marwat, M.I., H.K. Ahmad, **K.B. Marwat** and G. Hassan. 2003. Integrated weed management in Wheat-II. Tillers m⁻², productive tillers m⁻², spikelets spike⁻¹, grains spike⁻¹, 1000 grain weight and grain yield. Pak. J. Weed Sci. Res. 9(1-2): 23-31.
133. Marwat, M.I., H.K. Ahmad, **K.B. Marwat** and G. Hassan. 2003. Influence of varieties, row spacings and weed management on different traits of wheat. Pak. J. Weed Sci. Res. 9(1-2): 13-21.
134. Hassan, G., B. Faiz, **K.B. Marwat** and M. Khan. 2003. Effects of planting methods and tank mixed herbicides on controlling grassy and broadleaf weeds and their effect on wheat cv. Fakhr-e-Sarhad. Pak. J. Weed Sci. Res. 9(1-2): 1-11.
135. **Marwat, K.B.**, Z. Hussain, I.A. Khan and B. Gul. 2003. Impact of Weed Management on Rapeseed. Pak. J. Weed Sci. Res. 9(3&4):207-214.
136. **Marwat, K.B.**, B. Gul, I.A. Khan and Z. Hussain. 2003. Efficacy of different herbicides for controlling weeds in Onion. Pak. J. Weed Sci. Res. 9(3&4): 223-228.
137. Hassan, G., H. Khan, **K.B. Marwat** and M.A. Khan. 2003. Studies on weed seed dynamics in soil seed bank of Rice-based cropping system of Pakistan. Pak. J. Weed. Sci. Res. 9(3-4): 259-264.
138. **Marwat, K.B.**, I.A. Khan, G. Hassan and N.U. Khan. 2004. Efficacy of different pre- and post-emergence herbicides for controlling weeds in chickpea. Pak. J. Weed Sci. Res. 10(1-2):51-54.
139. Khan, M.A., **K.B. Marwat** and G. Hassan. 2004. Allelopathic potential of some multipurpose tree species on wheat and some of its associated weeds. IJBB 1(3): 275-278.
140. Hanif, Z., S.A. Khan, **K.B. Marwat**, I.A. Khan and I. Khan. 2004. Important Weeds of Wheat crop of Malakandher. Pak. J. Weed Sci. Res. 10(3-4):109-112.
141. **Marwat, K.B.**, I.A. Khan, Z. Hanif and M.I. Khan. 2004. Efficacy of different herbicides for controlling grassy weeds in chickpea. Pak. J. Weed Sci. Res. 10(3-4):139-144.
142. Khan, H., **K.B. Marwat**, M.A. Khan and N.A. Khan. 2004. Distribution and control of Broomrape (*Orobanche* spp) and other major weeds in District Swabi, NWFP. Pak. J. Weed Sci. Res. 10(3-4):109-112.
143. **Marwat, K.B.**, Z. Hussain, M. Saeed, B. Gul and S. Noor. 2005. Chemical

- weed management in wheat at higher altitudes-I. Pak. J. Weed Sci. Res. 11(3-4): 103-108.
144. Bibi, S., **K.B. Marwat**, G. Hassan and B.A. Khan. 2005. Integrated weed management through herbicides and seeding densities in wheat-I. Pak. J. Weed Sci. Res. 11(3-4) 115-120.
 145. Bibi, S., **K.B. Marwat**, G. Hassan and B.A. Khan. 2005. Integrated weed management through herbicides and different seed rates in wheat-II. Pak. J. Weed Sci. Res. 11(3-4) 121-129.
 146. **Marwat, K.B.**, I.A. Khan, M.I. Khan, Z. Hussain and H. Khan. 2005. Herbicides evaluation for weed control in chickpea. Pak. J. Weed Sci. Res. 11(3-4): 147-150.
 147. **Marwat, K.B.**, M. Saeed, B. Gul, Z. Hussain and N. Iqbal Khan. 2005. Efficacy of different pre and post emergence herbicides for weed management in canola in higher altitudes. Pak. J. Weed Res. 11(3-4): 165-170.
 148. Khan, M.A., **K.B. Marwat** and G. Hassan. 2005. Wheat yield components as affected due to seed rate and holy thistle (*Silybum marianum* Gaertn.) density. Pak. J. Weed Sci. Res. 11(3-4):91-96.
 149. Khan, M.A., **K.B. Marwat**, G. Hassan and Z. Hussain. 2005. Bioherbical effects of tree extracts on seed germination and growth of crops and weeds. Pak. J. Weed Sci. Res. 11(3-4): 179-184.
 150. Shamsi, H.I. and **K.B. Marwat**. 2006. Growth dynamics of poaceous weeds influenced by herbicides with different modes of action. IJBB. 3(2):367-373.
 151. Khan, M.A. and **K.B. Marwat**. 2006. Tillering capacity of wheat at different seed rates as affected by holy thistle density. IJBB. 3(2):407-409.
 152. **Marwat, K.B.**, Z. Hussain, B. Gul and M. Saeed. 2006. Chemical weed management in wheat intercropped with sugarcane. Pak. J. Weed Sci. Res. 12(3): 145-150.
 153. Khan, I.A., G. Hassan, **K.B. Marwat** and M. Khan. 2006. Interspecific competition of tall and dwarf wheat cultivars with wild oats (*Avena fatua*). Pak. J. Weed Sci. res. 12(3): 151-156.
 154. **Marwat, K.B.**, M. Saeed, B. Gul and Z. Hussain. 2006. Performance of different herbicides in wheat (*Triticum aestivum* L.) under rainfed conditions of Kohat, Pakistan. Pak. J. Weed Sci. Res. 12(3): 163-168.
 155. Ahmad, S., A. Ali, S. Bibi, **K.B. Marwat** and G. Hassan. 2006. Ethnobotanical study of some medicinal plants of Ouch District Lower Dir, Pakistan. Pak J. Pl. Sci. 12(1): 65-71.
 156. Khan, I., **K.B. Marwat** and Z. Hussain. 2007. Chemical weed management in wheat at higher altitudes. Communic. in Agric. & Appld. Biolog. Sci. 72(2): 259-264.

157. **Marwat, K.B.**, Z. Hussain, M. Saeed, B. Gul and Haroon Rashid. 2007. Study of different chemicals for weed management in two wheat varieties. Pak. J. Weed Sci. Res. 13(3-4): 157-165.
158. Hussain, Z. and **K.B. Marwat**. 2008. Evaluation of herbicides for weed control in wheat at varying densities. Sarhad J. Agric. 24(3): 457-460.
159. Hussain, Z. and **K.B. Marwat**. 2008. Evaluation of different herbicides for weed control in onion. Sarhad J. Agric. 24(3): 453-456.
160. Khan, S.A., L. Khan, I. Hussain, **K.B. Marwat** and N. Akhtar. 2008. Profile of heavy Metals in Selected Medicinal Plants. Pak. J. Weed Sci. 14 (1-2): 101-110.
161. **Marwat, K.B.**, M. Saeed, Z. Hussain, B. Gul and H. Rashid. 2008. Study of various herbicides for weed control in wheat. Pak. J. Weed Sci. 14 (1-2):1-8.
- CONFERENCE PROCEEDINGS:**
162. K.B. Marwat & G. Hassan. Weeds Study in Onion/rice cropping pattern of the lower swat valley, N-W Pakistan. Pp. 201-205, Proceedings-I, 19th conference of Asian Pacific Weed Science Society (APWSS), March 17-21, 2003, Manila Philippines (ISBN 971-92585-1-9).
163. N.U. Khan, G. Hassan, K.B. Marwat and N. Khan. 2005. Herbicidal effect on weed density and grain yield of wheat. PP. 606-612. Proceedings of 20th Asian Pacific Conference. 7-11 Nov. 2005 HMC, Vietnam.
164. S. Hashim, K.B. Marwat, I.A. Khan and Z. Hussain. 2005. Efficacy of pre and post emergence herbicides for controlling weeds in chickpea in Pakistan. PP. 379-383. Proceedings of 20th Asian Pacific Conference. 7-11 Nov. 2005 HMC, Vietnam.
165. S. Hashim, K.B. Marwat and M.A. Khan. 2005. Response of weeds over-time to different herbicides in potato. PP. 384-387. Proceedings of 20th Asian Pacific Conference. 7-11 Nov. 2005 HMC, Vietnam.
166. K.B. Marwat, Z. Hussain and B. Gul. 2005. Efficacy of different herbicides for weed management in Canola in N-W Pakistan. PP. 388-393. Proceedings of 20th Asian Pacific Conference. 7-11 Nov. 2005 HMC, Vietnam.
167. K.B. Marwat, B. Gul and Z. Hussain. 2005. Efficacy of herbicides for controlling weeds in onion at higher altitudes. PP. 394-399. Proceedings of 20th Asian Pacific Conference. 7-11 Nov. 2005 HMC, Vietnam
168. I. Khan KB Marwat & I. Khan. 2007. Post emergent herbicidal control of *Asphodelus tenuifolius* in *Cicer arietinum* L. at Laksi Marwat. (pp in proceedings of 21st Asian Pacific Weed Science Society (APWSS) Conference, 2-6 October 2007 Colombo, Sri Lanka).
169. M. Saeed K.B. Marwat. Z. Hyssaub & B. Bul 2007, Chemical weed management in Wheat (*Triticum aestivum* L.) in rainfed area of Pakistan. (pp 419-423, in proceedings of 21st Asian Pacific Weed Science Society (APWSS) Conference, 2-6 October 2007 Colombo, Sri Lanka).

170. Z. Hussain & K.B Marwat. 2007. Integrated weed management in Wheat (*Triticum aestivum* L.) under rainfed conditions. (pp 157-162, in proceedings 21st Asian Pacific Weed Science Society (APWSS) Conference, 2-6 October 2007 Colombo, Sri Lanka).
171. K.B. Marwat. 2007. Integrated Weed Management in wheat at higher elevations. (pp 290-296, in proceedings of 21st Asian Pacific Weed Science Society (APWSS) Conference, 2-6 October 2007 Colombo, Sri Lanka).

ABSTRACTS(58)

172. Saima Hashim, Shahida Ayub, Asad Jan ², Bhagirath S. Chauhan Yoshiharu Fujii & Khan B. Marwat. Medicinal Properties, Phytochemistry And Pharmacology Of *Acacia modesta* (Linn.) Wall (Fabaceae). Abstracts, Wssp 14th Conference, Islamai College Peshawar, March 24-25, 2018.
173. Sundus Malik, Luqman, Saima Hashim, Asad Jan, K.B. Marwat And Shahida Naveed. Medicinal Properties, Phytochemistry And Pharmacology Of *Withania coagulans* L. (Solanaceae) Abstracts, Wssp 14th Conference, Islamai College Peshawar, March 24-25, 2018.
174. Shahida Naveed and Khan B Marwat ,2018. A new record of *Verbesina encelioides*, an invasive weed for Flora of Pakistan. Abstracts, WSSP 14th Conference, Islamai College Peshawar, March 24-25, 2018.
175. Response of Wheat Varieties to Some Post-emergence Herbicides. PWSS Abstracts Volume-III. Abst. No.3
176. Evaluation of Some Promising Maize Varieties under Weeds Pressure. PWSS Abstracts Volume-III. Abst. No. 15.
177. Genotypic Response of Maize Cultivars to Different Dates of Sowing and Weeds Pressure. PWSS Abstracts Volume-III. Abst. No. 20.
178. Response of Maize Varieties to Triazine-Based Herbicides. PWSS Abstracts Volume-III. Abst No.22.
179. Response of Maize Cultivars to Different Planting Dates and Weed Control Treatments. PWSS Abstracts Volume-III. Abst. No.37.
180. Allelopathic Effects of *Sissymbrium irio* L. on Wheat Variety Sarhad-82. PWSS Abstracts Volume-III. Abst No.42.
181. Allelopathic Effects of *Sissymbrium irio* L. on Wheat Variety-Blue Silver. PWSS Abstracts Volume-III. Abst No.43.
182. Effect of Weed Interference on Yield and Yield Components of Transplanted Tomatoes (*Lycopersicon esculentum* Mill.). PWSS Absts Vol.-III. Abst No.44.
183. Parasitic Weeds of Pakistan. PWSS Abstracts Volume-III. Abst. No.45.
184. Study of Allelopathic Effects of *Chenopodium murale* L. on Two Wheat Varieties (Pawan and Arz). PWSS Abstracts Volume-III. Abst. No.46.

185. Allelopathic Effects of *Convolvulus arvensis* L. on Two Wheat Varieties (Sonalika and Pak-81). PWSS Abstracts Vol.III. Abst. No.47.
186. Extension Activities Relating to Weed Control Measures in Mansehra Tehsil. PWSS Abstracts Vol.III. Abst. No. 49.
187. Two New Emerging Weeds of North West of Pakistan: *Phragmites australis* (Cav) Trin ex Steud and *Xanthium strumarium* L., Posing Threat to Our Future Agriculture. PWSS Abstracts Vol.III. Abst No 50.
188. Effect of Pre-emergence herbicides on weed control, seed germination and seedling vigor in Peach Stones nursery. PWSS Abst. Vol.IV, pp 30-31. 1994.
189. The influence of dose and time of application of fenoxaprop on rice genotypes. PWSS Abstracts Vol.IV, 21p, 1994.
190. Evaluation of rice genotypes and their tolerance to different herbicides in Onion/Rice and wheat/rice cropping patterns of Lower Swat. PWSS Abstracts Vol.IV, 16p, 1994.
191. Parasitic Weed Problem in Pakistan. PWSS Abstracts Volume-IV, pp 4, 1994.
192. Weeds Study during Rabi season in onion/rice cropping pattern in Lower Swat valley. PWSS Abst. Vol.IV, 2p, 1994.
193. Weeds Study during Kharif season in onion/rice cropping pattern in Lower Swat valley. PWSS Abst. Vol.IV, 1p, 1994.
194. Cytomorphological studies of colchicine induced mutants in peas (*Pisum sativum* L.). Pak. Jour. Botany 14(Abs):Abs. No.24,10p. (Feb. 1982).
195. A study of Anaphasic Bridges in mitotic cells of gamma irradiated maize and onion. First Regional Conference of Plant Scientists, April 24-26, 1982. Abst. No.36 (III), 16p. Deptt. of Botany, Peshawar Univ.
196. Studies on some aspects of weeds interference with soybean. Presented in "2nd All Pakistan Weed Science Coherence" Nov. 3-4, NARC, Islamabad.
197. Prediction of Onion-bulb yield in onion/rice cropping pattern of Swat valley, N-W Pakistan. 8th National Meeting of Plant Scientist. Feb. 24-28, 2003, Karachi, Pakistan.
198. Efficacy of different herbicides for controlling grassy weeds in chickpea. No. 12, WSSP Abstracts, 2003. 1st International Weed Science Conference, Agric. Univ. Peshawar, Pakistan.
199. Efficacy of different pre and post emergence herbicides for controlling weeds in chickpea. No. 13, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
200. Efficacy of different herbicides for controlling weeds in onion. No. 22, WSSP Abstracts, 2003. 1st International Weed Science Conference,

NWFP Agric. Univ. Peshawar, Pakistan.

201. Impact of weed management in rapeseed. No. 24, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
202. Studies on weed seed dynamics in soil seed bank of rice based cropping system of Pakistan. No. 26, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
203. Dormancy studies in some major weeds of rice based cropping system of Pakistan. No. 27, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
204. Distribution and control of Broomrape (*Orobancha* sp.) and other major weeds in district Swabi. No. 30, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
205. Effect of nitrogen and different herbicides on weeds pressure in Bermuda grass (*Cynodon dactylon* (L) Pers.) lawn. No. 38, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
206. Determining importance value of weeds in wheat in Peshawar. No. 39, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
207. Chemical weed control efficiency in potato (*Solanum tuberosum* L.). No. 40, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
208. Ethnopharmacogonostic study of the weeds of five crops in district Abbottabd, N-W, Pakistan. No. 40, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
209. Invasive weeds: A threat to the biodiversity. A case study from District Lakki Marwat N-W, Pakistan. No. 40, WSSP Abstracts, 2003. 1st International Weed Science Conference, NWFP Agric. Univ. Peshawar, Pakistan.
210. Khan B. Marwat, M. Ibrar and S. Hashim. 2004. Ethnobotanic study of the weeds in district Abbottabad N-W Pakistan. p 43. Asian-Pacific Forum and the 2nd National Symposium on Ethnobotany 16-19 Aug. 2004, Xishuangbanna, China.
211. G. Hassan, H. Khan, K.B. Marwat & M.A. Khan. 2005. Dormancy breaking of wild oats seeds under varying levels of temperature, GA₃ and KNO₃. 4th International Weed Science Congress (S8MT20AP06). 20-24 June 2004, Durbin, South Africa.
212. K.B. Marwat, M.I. Marwat and G. Hassan. 2004. Effect of herbicides & row spacing on wheat. 4th International Weed Science Congress (S31MT10P03).20-24 June 2004, Durbin, South Africa.

213. Invasive Weeds: A major threat to Biodiversity in Afghanistan. International Botanical Congress, Vienna Austria, 17-23 July, 2005. (ibc2005.ac.at).
214. Khan B. Marwat, M. Saeed, Z. Hussain and Bakhtiar Gul. Performance of different herbicides in Wheat under rainfed conditions of Kohat. 2005. PWSS Abstracts 6th National Weed Science Conference Abst. No.5, 3p.
215. S. Bibi, K.B. Marwat and G. Hassan. 2005. Weed management in Wheat as affected by herbicides & weed density-I. PWSS Abstracts 6th National Weed Science Conference Abst. No.7, 5p.
216. S. Bibi, K.B. Marwat and G. Hassan. 2005. Weed management in Wheat as affected by herbicides & weed density-II. PWSS Abstracts 6th National Weed Science Conference Abst. No.8, 5p.
217. K.B. Marwat, I.A. Khan, Z. Hussain and H. Khan. 2005. Efficacy of Pre and Post-emergence herbicides in Chickpea in rainfed areas. PWSS Abstracts 6th National Weed Science Conference Abst. No.24, 15p.
218. K.B. Marwat, Z. Hussain, M. Saeed & B. Gul. 2005. Efficacy of different herbicides for controlling weeds in onion at higher altitudes. PWSS Abstracts 6th National Weed Science Conference Abst. No.37, 23p.
219. K.B. Marwat, Z. Hussain, M. Saeed and B. Gul. 2005. Efficacy of different pre- & post-emergence herbicides for weed in canola at higher altitudes. PWSS Abstracts 6th National Weed Science Conference Abst. No.38, 2p.
220. H.K. Yousafzai, K.B. Marwat & M.A. Khan. 2005. Performance of herbicides against weeds in flue cured tobacco. PWSS Abstracts 6th National Weed Science Conference Abst. No.42, 26p.
221. M.A. Khan, K.B. Marwat and H. Khan. 2005. Impact of herbicides on agronomic and chemical characteristics of FCV Tobacco. Proceedings of 20th Asian-Pacific Weed Science Conference, "Six decades of weed science since discovery of 2, 4-D". 7-11 Nov. 2005, Ho Chi Minh City, Vietnam.
222. M.A. Khan and K.B. Marwat. 2005. Competition between wheat and Holy thistle at various densities. Proc. 9th National Conference of Plant Scientists, 13-15 February 2006. Pakistan Botanical Society, Institute of Botany, Univ. of Sindh, Jamshoro, Pakistan.
223. M.A. Khan and K.B. Marwat. 2005. Bioherbicidal effects of tree extracts on seed germination and growth of crops and weeds. Proceedings 9th National Conference of Plant Scientists, 13-15 Feb. 2006. Pakistan Botanical Society, Institute of Botany, Univ. of Sindh, Jamshoro, Pakistan.
224. Khan, B. Marwat. 2006. Invasive Weeds of Pakistan and their management. 17 Iranian Plant Protection Congress, 2-5, Sep. 2006, Tehran, Iran.
225. Khan B Marwat. 2006. Invasive Weeds. Nov. 19-24, 2006, 9th Arab Congress of Plant Protection, Damascus, Syria.

226. Ikramullah Khan and K. B. Marwat. 2006. Invasive weeds threat to the biodiversity, A Case Study District Lakki Marwat. International Symposium on Dry lands Ecology and Human Security (ISDEHS 2006) Dubai (UAE) Abst. No. 94/2006, 53p.
227. Saeed, M. K.B. Marwat and Ikramullah Khan. 2006. Weed Management in Dry-lands of Pakistan. International Symposium on Dry-lands Ecology and Human Security (ISDEHS 2006) Dubai (UAE) Abstract No.228/2006, 81p.
228. K.B. Marwat, Waheed Ullah and M.A. Khan. 2008. Integrated Weed Management in Maize. Abstract No: 10-7/IPM-2. Second Arab Conference of Applied Biological Pest Control, Cairo-Gizza, Egypt, April 7-10, 2008.
229. KB Marwat. Weeds – A challenge to Biodiversity in Pakistan, page 93. International Conference on Biodiversity in Middle East, 19-23 Oct. 2003. Aqaba, Jordan.

BOOK CHAPTERS:

(3)

1. **K.B. Marwat.** Weed interference with crop plants, pages 19-24. In 'Improved Weed Management', editors R.A. Shad and M.S.K. Rana, National Agricultural Research Center, Islamabad.
2. Hassan, G. and **K.B. Marwat.** 2001. Integrated Weed Management (IWM) in agricultural crops. pp 27-33, in Technologies for Sustainable Agriculture. Azam, F., M.M. Iqbal, C. Inayatullah and C.A. Malik (Eds.). Proc. Workshop Sep. 24-26, 2001. ISBN 969-8038-09-04. NIAB, Faisalabad.
3. **K.B. Marwat.** Curriculum development in applied ethnobotany in Agricultural Universities and colleges. Proceedings of workshop on curriculum development in applied ethnobotany, WWF-Pakistan. 2002.

BOOKS (International Publisher):

(03)

1. Saeed, M. and **K.B. Marwat.** 2010. Weed Management in Wheat. ISBN: 978-3-639-29127-8, VDM Publishing House Ltd. Germany.
2. Khan, M.A. and **K.B. Marwat.** 2011. Crop-Weed Competition. LAP-Lambert Academic Publishing, Germany.
3. Hussain, Z. and **K.B. Marwat.** 2011. Interference of *Xanthium strumarium* L. with Maize at various densities. ISBN: 978-3-639-35163-7, VDM Publishing House Ltd. Germany