

CURRICULUM VITAE

Prof. Dr. Amjad Hameed

Deputy Chief Scientist (SPS-XI)

Professor (NIAB-C PIEAS)

Pakistan Atomic Energy Commission

Nuclear Institute for Agriculture and Biology (NIAB)

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1 PERSONAL INFORMATION

Father's Name: Abdul Hameed
Date of Birth: 05 -06 – 1977
Nationality: Pakistani
Religion: Islam
Marital Status: Married
C.N.I.C. 33100-5581544-1
Birth place: Faisalabad, Pakistan
Official Address: Marker Assisted Breeding Group, Plant Breeding & Genetics Division, **Nuclear Institute for Agriculture and Biology (NIAB)**, P.O. Box: 128, Faisalabad, Pakistan
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Web pages: HEC: <http://sc.hec.gov.pk/aphds/submit.asp?supid=3460>
Google scholar: <http://scholar.google.com.pk/citations?user=FTEbrD4AAAAJ>
Researchgate: https://www.researchgate.net/profile/Amjad_Hameed2/?ev=hdr_xprf
ORCID: <https://orcid.org/0000-0002-1108-5869>
Web of Science Researcher ID: E-5011-2011
Scopus ID: 58717834400

2 ACADEMIC PROFILE

Degree	Subject	Year	DIV.	BOARD/UNIVERSITY
PhD	Biochemistry	18-Feb. 2010		Quaid-i-Azam University Islamabad
M Phil	Biochemistry/Mol. biology	2002	First	Quaid-i-Azam University Islamabad
M Sc.	Biochemistry	1999	First	University of Agriculture Faisalabad
B Sc.	Chem. Zoo. Bot.	1997	First	Punjab University Lahore
H.S.S.C	Science (Premedical)	1995	First	Faisalabad Board
S.S.C.	Science	1993	First	Faisalabad Board

3 AWARDS.

1. Awarded **PAEC performance GOLD MEDAL** on 28 May 2013.
2. Received **Research Productivity Award** in **2011, 2012** and **2013** (category E) from Pakistan Council for Science and Technology (PCST), Government of Pakistan.

4 DISTINCTIONS/HONORS/SCHOLARSHIPS

1. Declared as **productive scientist** since **2006** by PCST (**Sc.ID. 146**).
2. Among top **3% scientists of Pakistan** and **Number 1 scientist in NIAB** (since 2018 international AD Scientific Index).
3. Scientific Talent Hunt Scholarship from University Grants Commission (UGC), Islamabad, Pakistan, for M Phil studies.
4. On **approved** list of Higher Education Commission (HEC) **PhD supervisors**. <http://sc.hec.gov.pk/aphds/submit.asp?supid=3460>

5 PROJECTS/COMPETITIVE GRANTS (19 grants).

5.1 As Principal Investigator: (PKR 5.298/- M)

1. PSF funded project entitled “DNA fingerprinting and barcoding of commercially important field crops” PSF-NSLP-CP-/P-NIAB (1062) amounting **Rs. 4.043 million** (2024-2025).
2. PSF funded project entitled “Studying the role of anti-oxidant enzymes in controlling programmed cell death (PCD) triggered in plants in response of exogenous stresses” Project No: P-NIAB-Bio (353), Cost: Rs. 8, 72010/- (**2008-2011**).

5.2 As Co-Principal Investigator: (PKR 27.59M)

1. Development of cotton genotypes having higher lint yield, superior seed nutritive quality and germination by using induced mutations and physio-biochemical approaches. Project no. PSF/NSLP//P-NIAB (**1027**) **Rs. 2.634M** (2023-2026).
2. Adoption of fine grain rice to multiple adversities under climate change scenario Project no. PSF/NSLP//P-NIAB (**916**) **Rs. 2.634M** (2023-2026).
3. Breeding high yielding tomato hybrids resilient to diseases and drought. Pakistan Science Foundation, Project no. PSF/NSLP/P-NIAB (**853**), 2022-25 **Rs. 4.51 Million**
4. ALP funded project entitled “Development of High Yielding Cotton Germplasm for Low Moisture Conditions: Project No. ALP-CS163 (2022-2026) (**Rs. 5.1M**)
5. Development of high yielding, herbicide tolerant and input responsive chickpea through mutation breeding and molecular approaches” (**PKR 6.28M**) ALP-CS209 (July **2020-2023**)
6. ALP funded project entitled “Development of heat tolerant cotton varieties having enhanced resilience against changing climate scenario” Project No: ALP-CS197 (March **2016 to March 2019**), (**Rs. 8.75 Million**)
7. Pakistan Science Foundation funded project entitled “Improvement of Low Phytate Basmati Rice”. Project no. PSF/NSLP/P-NIAB (149) (**May 2012 to May 2015**) (Rs.2,434,944)

5.3 As Principal Team Scientist: (PKR 86.852M+ 88000 Euro)

1. PAEC funded Project-1/PBGD worth Rs. 10.00 million (2024-2027).
2. PAEC project-5 (100M) grant entitled development of germplasm for hybrid seed production in rice, wheat, tomato, rapeseed and okra (phase-I): founded by PAEC, PKR 100 Million, 2024-2027
3. PARB Project 20-400 (**2022-2027**) entitled, “Development of Mungbean genotypes having high yield potential and resistance against diseases alongwith Screening of Mungbean germplasm against Bugs/Spinola.” amounting Rs. 19.989 million (NIAB Share PKR. 8.441 million)
4. PARB Project 20-399 (**2022-2027**) entitled, “Development of lentil genotypes having high yield potential and resistance against diseases” amounting Rs. 19.989 million (NIAB Share PKR. 8.441 million)
5. PSDP Project No. 829 entitled (**2021-2024**) “Development of Cotton Germplasm against Abiotic and Biotic Stresses through Omics” (PKR 53 Million).
6. PSF funded project entitled “Effect of antioxidant resveratrol and quercetin supplementation to semen extender on post-thawed sperm quality and fertility in goats”. Project No. PSF/NSLP/P-NIAB (785) (July 2021 to Jan 2024) (**Rs.4,6/-**).
7. Development of indigenous tomato hybrids and lines better adapted to normal and stress environments (**Rs: 3.0 million**) ALP. No. CS-220 (**April 2019-March, 2022**)
8. IAEA CRP Project entitled “Breeding of development of high yielding chickpea varieties/germplasm tolerant to pod borer through mutagenesis and other related techniques./ 8900 Euro/year, 44000 Euro/5 years **2019-2023**, IAEA-CRP-23612
9. AIP-CIMMYT Project No. 1 Induction of blight and virus resistance in tomato. Rs, 2.5 million (Oct **2017** to Sep, **2019**).
10. Breeding for high yielding long grain rice with adaptation to high temperatures” amounting to € 8,400/- per year under IAEA-CRP (D23029) “Climate Proofing of Food Crops: Genetic Improvement for Adaptation to High Temperatures in Drought Prone Areas and Beyond” for the years **2011-2015**. IAEA-CRP-16589.
11. PSF funded project entitled “Development of high yielding and disease resistant hybrid of tomato”. Project No. PSF/NSLP/P-NIAB (164) (**May-2012 to May-2015**) (Rs.3,975,144/-).

6 PROFESSIONAL EXPERIENCE

1. Since 1st Dec 2024 working as **Deputy Chief Scientist** (SPS-XI) at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, Pakistan and engaged in different research activities, like biochemical and molecular studies on programmed cell death (apoptotic) in plant system, plant antioxidant defence response to biotic and biotic stress, and proteomic studies for stress induced proteins etc.
2. From 1st Dec 2013 to 30-11-2024 as **Principal Scientist** (SPS-X) at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, Pakistan and engaged in different research activities, like biochemical and molecular studies on programmed cell death (apoptotic) in plant system, plant antioxidant defence response to biotic and biotic stress, and proteomic studies for stress induced proteins etc.
3. From 01-12-2004 to 30-11-2013 worked as **Senior Scientist** (SPS-IX) at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, Pakistan and engaged in different research activities, like biochemical and molecular studies on programmed cell death (apoptotic) in plant system, plant antioxidant defence response to biotic and biotic stress, and proteomic studies for stress induced proteins etc.

- From 29-08-2002 to 30-11-2004 worked as **Scientific Officer** (SPS-VIII) at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, Pakistan and engaged in different research activities, like apoptotic studies in plant system and plant defense response, plant antioxidant response to biotic and biotic stress etc.
- For M. Phil worked as Junior Research Assistant (JRA) at the Department of Biological Sciences, Quaid-i-Azam University, Islamabad and Health Biotechnology Division, National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad (Feb2000 to Feb2002) Pakistan.
- For M.Sc. worked as Research fellow at the Department of Biochemistry, University of Agriculture Faisalabad (Dec1997 to Dec1999) Pakistan.

7 MANAGEMENT LEADERSHIP EXPERIENCE

- Since May 03, 2024 serving as **Professor** at Nuclear Institute for Agriculture and Biology College PIEAS (NIAB-C PIEAS), Faisalabad, Pakistan
- Since Sep., 2020 serving as **Group Leader**, Marker Assisted Breeding Group, Plant Breeding & Genetics Division, **NIAB**, Faisalabad, Pakistan
- From Jan 03, 2021 to Feb., 2025 served as **PhD Research Coordinator** at NIAB Constituent college PIEAS (NIAB C PIEAS), Faisalabad, Pakistan
- Since Jan 2021 serving as **Convener/Officer Incharge NIAB Commercial Analytical Services**
- Since Jan 01, 2024 to 21-02-2025 served as Convener/Officer Incharge NIAB library affairs and institutional publication evaluation/review
- From 29-08-2022 to 30-12-2023 served as Convener/Officer Incharge NIAB institutional project evaluation

8 THESIS AND DISSERTATION TITLES

PhD: Comparative studies on apoptosis in wheat (*Triticum aestivum* L.) under normal and stress condition(s).

M. Phil: Pathological and Molecular studies on diabetic patients

M.Sc.: Biodisposition kinetics (pharmacokinetics) of ofloxacin in male volunteers following oral administration.

9 EXPERIENCE IN TECHNIQUES

(1) DNA extraction (2) Agarose Gel electrophoresis of DNA (3) Polyacrylamide gel electrophoresis (PAGE) (4) Polymerase chain reaction (PCR) (5) Pulse field gel electrophoresis (6) RNA extraction (7) cDNA synthesis (8) RT-PCR (9) Restriction sites analysis by restriction enzymes. (10) SSCP (Single Stranded Conformation Polymorphism) (11) Spectrophotometry (12) RAPDs and SSR analysis. (13) CELL-I enzyme isolation for TILLING.

10 PRODUCTS/PATENTS (18 MAS based Crop varieties)

18 Crop varieties as Associate Marker Assisted Breeder and contributing scientist

No.	Title	Names of Main Scientist & Team Members	Approval Authority (Federal/Provincial)	Reference No. & Date of Approval Letter	Major Feature & Commercial Status (3-4 bulleted)
1.	NIAB-JAUHAR (tomato)	Dr. M. Yussof Saleem DR. Muhammad Asghar, Dr. Qamer Iqbal Dr. Abdul rehman Khan Mr. Khalid Pervair Akhtar Prof. Dr. Amjad Hameed Dr. Mahmood ul- hassan	Approved by Punjab Seed Council for general cultivation in Punjab province	49 th meeting of Punjab Seed Council held on 25-10-2017.	Good yield potential (> 35 t ha ⁻¹) and is tolerant to fruit borer, leaf miner, blight, grey mold and <i>fusarium wilt</i> . It is also rich in Vitamin A&C, calcium, potassium, iron, phosphorus and lycopene. i. MAS for late blight (<i>Phytophthora infestans</i>) resistance gene (<i>Ph-3</i>). ii. Hybridity testing iii. Nutritive quality analysis (vitamin C, A, beta carotene, lycopene and antioxidants) DNA fingerprinting
2.	NIAB-GOHAR (tomato)	Dr. M. Yussof Saleem DR. Muhammad Asghar, Dr. Qamer Iqbal Dr. Abdul rehman Khan Mr. Khalid Pervair Akhtar Prof. Dr. Amjad Hameed Dr. Mahmood ul- hassan	Approved by Punjab Seed Council for general cultivation in Punjab province	49 th meeting of Punjab Seed Council held on 25-10-2017.	Good yield potential (> 40 t ha-1) and is tolerant to fruit borer, leaf miner, blight, grey mold and <i>fusarium wilt</i> . It is fairly tolerant to high temperature and is rich in calcium, potassium, iron, zinc, vitamins A and vitamin C. i. MAS for late blight (<i>Phytophthora infestans</i>) resistance gene (<i>Ph-3</i>). ii. Hybridity testing.

					iii. Nutritive quality analysis (vitamin C, A, beta carotene, lycopene and antioxidants) DNA fingerprinting
3.	NIAB TOMATO-21 (tomato)	Dr. M. Yussof Saleem DR. Muhammad Asghar, Dr. Qamer Iqbal Dr. Abdul rehman Khan Mr. Khalid Pervair Akhtar Prof. Dr. Amjad Hameed Dr. Noor Abid Saeed	Approved by Punjab Seed Council for general cultivation in Punjab province	55th meeting of Punjab Seed Council held on 20-09-2021	Yield potential of this determinate tomato hybrid is >45 tons/ha and it is tolerant to blight, tomato mosaic virus (ToMV), tomato leaf curl new delhi virus (ToLCNDV) and Phyllody. This hybrid has wider adaptability across the mega environments in Punjab. i. MAS for ToMV and TYLCV resistance genes (<i>Tm-2²</i> <i>Ty2</i> and <i>Ty3</i>) ii. Hybridity testing iii. Nutritive quality analysis (vitamin C, A, beta carotene, lycopene and antioxidants) DNA fingerprinting
4.	NIAB Mung 2021 (mungbean)	Dr. Ghulam Abbas Dr. M. Jawad Asghar Khalid Pervaiz Akhtar Prof. Dr. Amjad Hameed	Approved by Punjab Seed Council for general cultivation in Punjab province. Registered by Plant Breeders' Rights Registry (PBRR), Govt. of Pakistan and Certificate of Plant Variety Protection was granted	No. PSC/HQ-Coord/21/44/52-106 Dated 26-02-2021 Registration No. 54-MB/75-2023 Dated 20-01-2023	Mung x Mash recombinant with improved nutritional quality & Bold seed size suitable for Daal factories. i. Genetic Confirmation of Mungbean (<i>Vigna radiata</i>) and Mashbean (<i>Vigna mungo</i>) Interspecific Recombinants using molecular markers. DNA fingerprinting Punjab Seed Corporation and seven private seed companies (under Agreement with NIAB) are engaged in multiplication and sale of quality seed to meet the farmer demands.
5.	Abbas Mung (mungbean)	Dr. Ghulam Abbas Dr. M. Jawad Asghar Khalid Pervaiz Akhtar Prof. Dr. Amjad Hameed	Approved by Punjab Seed Council for general cultivation in Punjab province. Registered by Plant Breeders' Rights Registry (PBRR), Govt. of Pakistan and Certificate of Plant Variety Protection was granted	No. PSC/HQ-Coord/21/44/52-106 Dated 26-02-2021 Registration No. 51-MB/76-2023 Dated 20-01-2023	Wider adaptability & Better Cooking Quality. Punjab Seed Corporation and six private seed companies (under Agreement with NIAB) are engaged in multiplication and sale of quality seed to meet the farmer demands.
6.	NIAB S-39 (Rice)	Dr. Zia-ul-Qamar, DCS Dr. M. Ashraf, PS Dr. M. Rashid, DCS Dr. Adeel Khan (JS) Dr. Amjad Hameed (DCS) Mr. Qamar Islam (SA-1) Mr. Ahmad Sarfraz (SA-1)	Approved by Punjab Seed Council (PSC)	Approved in 56th meeting of PSC; dated 24-3-2023	<ul style="list-style-type: none"> • Aromatic, Basmati, • Extra-long grain, • Good Cooking quality • heat tolerant • Lodging resistance Since release Pre-Basic Seed Sold:385.5 kg i. DNA fingerprinting MAS for heat tolerance
7.	NIAB HT-18 (Rice)	Dr. Zia-ul-Qamar, DCS Dr. M. Ashraf, PS Dr. M. Rashid, DCS Dr. Adeel Khan (JS) Dr. Amjad Hameed (DCS) Mr. Qamar Islam (SA-1) Mr. Ahmad Sarfraz (SA-1)	Approved by Punjab Seed Council (PSC)	Approved in 56th meeting of PSC; dated 24-3-2023	<ul style="list-style-type: none"> • Aromatic, Basmati, • Extra-long grain, • heat tolerant • Since release Pre-Basic Seed Sold:130 kg

8.	NIAB RC-195 (Rice)	Dr. Zia-ul-Qamar, DCS Supporting team Dr. M. Ashraf, PS Dr. M. Rashid, DCS Dr. Adeel Khan (JS) Dr. Amjad Hameed (DCS) Mr. Qamar Islam (SA-1) Mr. Ahmad Sarfraz (SA-1)	Approved by Punjab Seed Council (PSC)	Approved in 56th meeting of PSC; dated 24-3-2023	<ul style="list-style-type: none"> • Coarse rice • Non aromatic • Heat tolerant • High yield • Long grain • Highly lodging resistant Pre-Basic Seed Sold:531.5 kg
9.	NIAB ST-9 (Rice)	Dr. Zia-ul-Qamar, DCS Supporting team Dr. M. Ashraf, PS Dr. M. Rashid, DCS Dr. Adeel Khan (JS) Dr. Amjad Hameed (DCS) Mr. Qamar Islam (SA-1) Mr. Ahmad Sarfraz (SA-1)	Approved by Punjab Seed Council (PSC)	Approved in 56th meeting of PSC; dated 24-3-2023	<ul style="list-style-type: none"> • Coarse rice • Non aromatic • Heat tolerant • High yield • Long grain • Highly lodging resistant Pre-Basic Seed Sold:532 kg
10.	NIAB Diamond Basmati (Rice)	Dr. Zia-ul-Qamar, DCS Supporting team Dr. M. Ashraf, PS Dr. M. Rashid, DCS Dr. Adeel Khan (JS) Dr. Amjad Hameed (DCS) Mr. Qamar Islam (SA-1) Mr. Ahmad Sarfraz (SA-1)	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Recommended by the Variety Evaluation Committee (VEC) in its meeting held on 26-12-2023	<ul style="list-style-type: none"> • Aromatic, Basmati, • Extra-long grain, • High yielding • Lodging resistant • Good cooking quality traits
11.	NIAB-Ababeel (chickpea)	Dr. M. Azeem Asad Dr. Tariq Mehmood Shah Mr. Khalid Pervaiz Akhtar Irem Waqar Mariyah Aslam Prof. Dr. Amjad Hameed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Ref. No. 1014 (PSDP Pulses) PSD Dated:29-04-2024	<ul style="list-style-type: none"> • High yielding • Climate resilient • Diseases tolerant
12.	NIAB-Buraq (chickpea)	Dr. M. Azeem Asad Dr. Tariq Mehmood Shah Mr. Khalid Pervaiz Akhtar Irem Waqar Mariyah Aslam Prof. Dr. Amjad Hameed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Ref. No. 1014 (PSDP Pulses) PSD Dated:29-04-2024	<ul style="list-style-type: none"> • High yielding • Climate resilient • Diseases tolerant
13.	NIAB-Sahar (chickpea)	Dr. M. Azeem Asad Dr. Tariq Mehmood Shah Mr. Khalid Pervaiz Akhtar Irem Waqar Mariyah Aslam Prof. Dr. Amjad Hameed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Ref. No. 1014 (PSDP Pulses) PSD Dated:29-04-2024	<ul style="list-style-type: none"> • High yielding • Climate resilient • Diseases tolerant
14.	NIAB-Marvi (chickpea)	Dr. M. Azeem Asad Dr. Tariq Mehmood Shah Mr. Khalid Pervaiz Akhtar Irem Waqar Mariyah Aslam Prof. Dr. Amjad Hameed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Ref. No. 1014 (PSDP Pulses) PSD Dated:29-04-2024	<ul style="list-style-type: none"> • High yielding • Climate resilient • Diseases tolerant
15.	NIAB-Supreme (chickpea)	Dr. M. Azeem Asad Dr. Tariq Mehmood Shah Mr. Khalid Pervaiz Akhtar Irem Waqar Mariyah Aslam Prof. Dr. Amjad Hameed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Ref. No. 1014 (PSDP Pulses) PSD Dated:29-04-2024	<ul style="list-style-type: none"> • High yielding • Climate resilient • Diseases tolerant
16.	NIAB tomato-2025	Dr. M. Yussof Saleem DR. Muhammad Asghar, Dr. Qamer Iqbal Dr. Abdul rehman Khan Mr. Khalid Pervair Akhtar Prof. Dr. Amjad Hameed Dr. Noor Abid Saeed	Recommended by Federal Variety Evaluation Committee (VEC), PARC, Islamabad	Minutes of VEC meeting on horticultural crops F. No. 4-4/Vec/Sec/Gen-MOM/ dated 19-08-2025	High yielder with 44t/ha with tolerance to diseases (viruses and blight)

17.	MMH 7142 (Candidate line of Mungbean)	Dr. M. Jawad Asghar (PS), M. Shahid (SS), Maria Ghaffar Awan (SS) Khalid Pervaiz Akhtar (DCS) Prof. Dr. Amjad Hameed (DCS)	Registered by FSC & RD (DUS Studies completed & submitted to VEC)	F.No. FSCRD/DUS/MUNGBEAN (MMH 7142)/2023-24/345 dated 29-05-2025	<ul style="list-style-type: none"> • Mung x Mash recombinant • Improved nutritional quality Will be commercialized after approval and registration by PBRR
18.	LHM 17021 (Candidate line of Lentil)	Dr. M. Jawad Asghar (PS), Maria Ghaffar Awan (SS) M. Shahid (SS), Khalid Pervaiz Akhtar (DCS) Prof. Dr. Amjad Hameed (DCS)	Registered by FSC & RD (DUS Studies completed & submitted to VEC)	VEC meeting awaited	<ul style="list-style-type: none"> • Bold seed size & short duration as compared to existing cultivars Will be commercialized after approval and registration by PBRR

PUBLICATIONS: (Total impact factor = **329.838**, Citation = **6694**, H-index = **43**, i10-index = **103**)

10.1 Papers published in peer reviewed Journals:

YEAR 2026 (papers = 01, IF= 8.7)

- 1) Gul Zaib, Kong Zhiwei, Anjaleena Yaseen, **Amjad Hameed**, Shakeel Ahmed Tunio, Muhammad Ismail Chughtai and Tarique Hussain., **2026**. Maternal antioxidant supplementation enhances oxidative balance, milk quality, and neonatal growth in Beetal goats. *Vet. World.* 2026;19(1):111–124. <https://doi.org/10.14202/vetworld.2026.111-124> (**IF: 2.0**) (CS:4.2)
- 2) Ayehsa Gill et al., 2026. Antioxidant-driven microbial shifts preserve reproductive function under cadmium exposure in a rabbit model, **Scientific Reports** (2026). Accepted (**IF: 3.9**) (**CS:6.2**)
- 3) Ayesha Wadood, **Amjad Hameed***, Muhammad Yussouf Saleem, Abdul Rehman Khan and Saba Akram. **2026**. Multivariate analysis highlights genetic structure in Olive (*Olea Europaea* L.) germplasm using Resource-Efficient RAPD marker system. **Molecular Biology Reports** 53, 379 (2026). <https://doi.org/10.1007/s11033-026-11548-w> (**IF: 2.8**) (CS:6.2)

YEAR 2025 (papers = 11, IF= 40.2)

- 4) Ariba Shamail, Abdul Rehman Khan, **Amjad Hameed**, Saba Akram, Khalid Pervaiz Akhtar and Madiha Shafique, 2025. Yield performance and disease response of novel tomato hybrids under field conditions. *J. Agric. Res.*, 2025, Vol. 63(4):291-303. DOI: <https://doi.org/10.58475/pynahy04> (HEC Cat. Y)
- 5) Sahar Nadeem, Muhammad Kashif Riaz Khan, and **Amjad Hameed***. 2025. Screening and Biochemical Profiling of 'Mac-07' Crosses for Resistance to CLCuD under field and glasshouse conditions 2025. *BMC Plant Biol* 25, 1317 (2025). <https://doi.org/10.1186/s12870-025-07250-x> (**IF: 4.8**) (CS:9.5)
- 6) Nimra Talib, Anjaleena Yaseen, Rehana Kausar, Yasin Mubashir, Ehsan Rashid, Aysha Sameen, Muhammad Usman Mazhar, **Amjad Hameed**, Muhammad Ismail Chughtai and Tarique Hussain*, 2025. Periparturient high-fat diet supplementation improves hematological indices, milk biochemical composition and productive performance of Goats (*Capra hircus*) *BioMed Research International*. DOI: 10.1155/bmri/5213614 (**IF: 2.3**) (CS:7.9)
- 7) Dildar Hussain Kalhoro ,Tarique Hussain, **Amjad Hameed**, Wajid Ishaque , Muhammad Atif Riaz , Ghulam Murtaza ,Muhammad Ismail Chughtai ,Yasin Mubashir ,Hafiz Noubahar Hussain ,Muhammad Usman Mazhar and Azizeh ShadiDizaji., **2025**. Evaluating the nutritional contents and antioxidant status of fruit peels as an enriched source of functional food **Cogent Food & Agriculture** Vol. 11 no. 1 2578319. <https://doi.org/10.1080/23311932.2025.2578319>. (**IF: 2.3**) (CS:2.8)
- 8) Murtaza G, Kausar R, Sial S, **Hameed A**, Rehan S, Kanwal A and Sharif MU, 2025. Targeting diabetic wound healing through tissue regeneration with silver, copper, and zinc nanoparticles in streptozotocin-induced diabetic albino rat model. *Pak Vet J.* 45(3): 1244-1252. <http://dx.doi.org/10.29261/pakvetj/2025.223> online 25 Aug. 2025 (**IF: 5.4**) (**CS:4.2**)
- 9) A. Hameed, M.A. Qayyum, **A. Hameed**, R. Noreen, H. Umbreen, T. Farooq, H. Mehmood, S. Ilyas, Priming with chitosan-based nanocomposite modulates biochemical attributes and reduces cadmium toxicity in wheat (*Triticum aestivum* L.) seedlings, **Kuwait Journal of Science**, 100484. Accepted Date: 30 July 2025 <https://doi.org/10.1016/j.kjs.2025.100484> (**IF: 1.1**) (**CS:2.5**)
- 10) Anjaleena Yaseen, Ana Laura dos Santos Munhoz Gôngora, Thiago Kan Nishimura, Gabriel Henrique Ribeiro, "Eduardo Solano Pina Santos, Alanne Tenório Nunes, Tarique Hussain, **Amjad Hameed**, Luiz Alberto Colnago, Paulo Roberto Leme, Arlindo Saran Netto and "Guilherme Pugliesi. Fetal Programming through Early Weaning Shapes the Metabotype of Nelore Heifers. **2025**. **PLoS One** 20(8): 0327152. <https://doi.org/10.1371/journal.pone.0327152> (**IF: 2.9**) (**CS:6.2**)
- 11) Fatima, S., Rashid, M., **Hameed, A.** et al. **2025**. Development of rice mutants with enhanced resilience to drought and brown spot (*Bipolaris oryzae*) and their physiological and multivariate analysis. **BMC Plant Biol** 25, 1040 (2025). <https://doi.org/10.1186/s12870-025-07024-5> (**IF: 4.8**) (**CS:9.5**)
- 12) Ayesha Wadood, Amjad Hameed* and Zia ul Qamar1,2. 2025. Molecular Genetic Diversity Estimates and Identification of Multilocus Fine and Coarse Rice Genotypes Using Microsatellite Markers. **Molecular Biology Reports** 52, 631 (2025). <https://doi.org/10.1007/s11033-025-10732-8> (**IF: 2.9**) (**CS:6.2**)

- 13) Tarique Hussain, Muhammad Hammad Fayyaz, **Amjad Hameed**, Syed Murtaza Hassan Andrabi, Rehana Kausar, Yasin Mubashir, Iqra Batool, Muhammad Shahzad and Ali Dogan Omur, **2025**. Effect of resveratrol on post-thaw motility, kinematics, structural parameters, and antioxidant/oxidant status of Kamori buck spermatozoa. **Cryobiology** 2025 Mar;118:105202. <https://doi.org/10.1016/j.cryobiol.2025.105202> Epub 2025 Feb 24. (IF: 2.1).
- 14) Razia Kausar*, Amjad Hameed, Jabbar Junaid, Sarmad Rehan, Tahira Iqbal, Arruje Hameed, and Muhammad Usman. **2025**. Antioxidant and oxidant profiles in thigh and breast meat of Pakistan domestic chicken breeds. **Pakistan Veterinary Journal** <http://dx.doi.org/10.29261/pakvetj/2024.305> Published online Jan. 01 (IF: 5.4) (CS:4.2)
- 15) Arruje Hameed , Muazzama Zahid , Amjad Hameed , Razia Noreen, Muhammad Ibrahim, Tahir Farooq, Majed A. Bajaber, Noureen Khalid and Perveen Kanwal, 2025. Curcumin-based priming agent confers drought tolerance in wheat seedlings: A climate-smart approach. **Industrial Crops & Products** Volume 224, February 2025, 119451 <https://doi.org/10.1016/j.indcrop.2024.119451> (IF: 6.2) (CS:9.5)
- YEAR 2024 (papers = 14, IF= 58.4)**
- 16) Syed Riaz Ahmed, Muhammad Jawad Asghar, **Amjad Hameed***, Maria Ghaffar and Muhammad Shahid. 2024. Advancing Crop Improvement through GWAS and Beyond in Mung Bean. **Front. Plant Sci.** 15:1436532. doi: 10.3389/fpls.2024.1436532 (IF: 4.8) (CS: 7.3).
- 17) Zia- ul- Qamar, Muhammad Uzair, **Amjad Hameed**, Syed Adeel Zafar and Xueyong Li. 2024. Identification of a novel mutation in the OsMRP5 gene in low phytate Basmati rice mutant and development of CAPS marker for Marker-Assisted Breeding. **Front. Plant Sci.** 15:1455219. doi: 10.3389/fpls.2024.1455219.(IF: 4.8) (CS: 7.3).
- 18) Mariam Ilyas, **Amjad Hameed*** and Tariq Mahmud Shah. 2024. Field and biochemical evaluation of glyphosate tolerant chickpea (*Cicer arietinum* L.) mutants developed through induced mutagenesis. **BMC Plant Biology** 24, 1028 (2024). <https://doi.org/10.1186/s12870-024-05733-x> (IF: 4.8) (CS:9.5)
- 19) Ayesha Safdar, **Amjad Hameed*** and Hafiz Mumtaz Hassan. **2024**. Biochemical and morpho-physiological insights revealed low moisture stress adaptation mechanisms in cotton (*Gossypium hirsutum* L.). **Scientific Reports** 14, 25942 (2024). <https://doi.org/10.1038/s41598-024-77204-0>. (IF: 3.9) (CS:6.2)
- 20) Saima Jameel, **Amjad Hameed***, Tariq Mahmud Shah and Clarice J. Coyne, 2024. Demystifying the Nutritional and Anti-Nutritional Genetic Divergence of Pakistani Chickpea (*Cicer arietinum* L.) Genetic Resource via Multivariate Approaches. **Front. Nutr.** Volume 11 1407096. doi: 10.3389/fnut.2024.1407096. (IF: 5.1) (CS:5.2)
- 21) Shahwar Fatima, Muhammad Rashid, **Amjad Hameed*** **2024**. Development of Rice Mutants with Enhanced Resilience to Drought Stress and Their Evaluation by Lab Assay, Field, and Multivariate Analysis. **Scientifica** Volume 2024, Article ID 4373987, 17 pages First published: 29 August 2024 <https://doi.org/10.1155/2024/4373987>. (IF: 3.1) (CS:6.7)
- 22) Wadood A*, **Hameed A**, Akram S and Ghaffar M. **2024**. Unraveling the impact of water deficit stress on nutritional quality and defense response of tomato genotypes. **Front. Plant Sci.** 15:1403895. doi: 10.3389/fpls.2024.1403895 (IF: 4.8) (CS: 7.3).
- 23) Fawad Ali, Main Arif, Arif Ali, Muhammad Nadeem, Emre Aksoy, Allah Bakhsh, Shahid Ullah Khan, Cemal Kurt, Dilek Tekdal, Muhammad Kashif Ilyas, **Amjad Hameed**, Yong Suk Chung and Faheem Baloch. **2024**. GWAS identifies genetic loci related to fatty acid and branched-chain amino acid metabolism and histone modifications under varying nitrogen treatments in safflower. **Functional Plant Biology** 51, FP23310. doi:10.1071/FP23310 (IF: 2.7).
- 24) Asima Noreen, Amjad Hameed* and Tariq Mahmud Shah 2024. Field screening and identification of biochemical indices of pod borer (*Helicoverpa armigera*) resistance in chickpea mutants. **Front. Plant Sci.** Volume 15 - 2024 | <https://doi.org/10.3389/fpls.2024.1335158> (IF: 4.8) (CS: 7.3).
- 25) Iqra Batool, Muhammad Hammad Fayyaz, **Amjad Hameed**, Syed Murtaza Hassan Andrabi, Rehana Kausar, Muhammad Shahzad, Yasin Mubashir, Ali Doğan ÖMÜR, Ghulam Murtaza, Allah Ditta and Tarique Hussain **2024**. Quercetin in semen extender improves frozen-thawed spermatozoa quality and in-vivo fertility in crossbred Kamori goats. **Front. Vet. Sci.** 11:1385642. doi: 10.3389/fvets.2024.1385642 (IF: 2.9)
- 26) Areeqa Shamshad, Muhammad Rashid, **Amjad Hameed***, and Hafiz Muhammad Imran Arshad. **2024**. Identification of Biochemical Indices for Brown Spot (*Bipolaris Oryzae*) Disease Resistance in Rice Mutants and Hybrids. **PLOS ONE** 19(4): e0300760. <https://doi.org/10.1371/journal.pone.0300760>. (IF: 2.6).
- 27) Fareeha Riaz, **Amjad Hameed*** and Muhammad Jawad Asghar. **2024**. Grain nutritional and antioxidant profiling of diverse lentil (*Lens culinaris* Medikus) genetic resources revealed genotypes with high nutritional value. **Frontiers in Nutrition** **Front. Nutr.** 11:1344986. doi: 10.3389/fnut.2024.1344986 (IF: 5.1).
- 28) Saba Akram*, Yussouf Saleem, Abdul Rehman Khan, Ayesha Wadood, **Amjad Hameed**, Shanza Sajjad. 2024. Identification of drought-tolerant tomato genotypes using multi-trait index at early growth stage. 2024. **Journal of Soil Science and Plant Nutrition** <https://doi.org/10.1007/s42729-024-01665-5>. (IF:3.1)
- 29) A. Hameed, W. Maqsood, **Amjad Hameed**, M. A. Qayyum, T. Ahmed and Tahir Farooq. 2024. Chitosan nanoparticles encapsulating curcumin counteract salt-mediated ionic toxicity in wheat seedlings: an ecofriendly and sustainable approach. **Environmental Science and Pollution Research**, <https://doi.org/10.1007/s11356-023-31768-y> (IF: 5.9) (CS: 8.7)
- YEAR 2023 (papers = 06, IF= 12.4)**
- 30) Mehmood N., T. Hussain, A. Hameed, A. Yaseen, A. Ahmed, M. Hussain and E. Al Jbawi. 2023. Prospective effect of vitamin E and selenium supplementation on colostrum quality in Beetal goats. **Cogent Food & Agriculture**, 9:1, 2197711, DOI: 10.1080/23311932.2023.2197711 (IF: 1.7)

- 31) Luqman, T., Qamar, Zu., Tabasum, A. W. H. El-Kallawy, T. Nazir, S. Attacha, S. Fiaz, M. A. Nadeem, **Amjad Hameed**, Z. M. I. Kimiko and K. Attia. **2023** Genetic characterization of coarse and basmati rice (*Oryza sativa* L.) through microsatellite markers and morpho-agronomic traits. **Genet Resour Crop Evol** (2023). <https://doi.org/10.1007/s10722-023-01620-w> (IF: 1.6)
- 32) Kausar R., A. Hameed, H. Jamil, Z. Iqbal, S. K. Bahadur, J. Jabbar and A. Sabir. 2023. Comparative analysis of buffalo and cow milk for quality characteristics and β -N-acetyl-glucosaminidase activity in non-infected animals. **Emirates Journal of Food and Agriculture**. 35(3): 203-209. doi: 10.9755/ejfa.2023.v35.i3.2965 (IF: 0.7) (CS: 1.9)
- 33) Anjaleena Yaseen, Tarique Hussain and **Amjad Hameed** 2023. Association of fecal volatiles and steroids with behavioral expression during estrous cycle of sheep (*Ovis aries*)" **Reproduction in Domestic Animals**, 58:708-716 (IF: 1.6) (CS: 3).
- 34) Anam Khalid **Amjad Hameed** and Muhammad Farrukh Tahir, 2023. Wheat Quality: A Review On Chemical Composition, Nutritional Attributes, Grain Anatomy, Types, Classification and Function of Seed Storage Proteins in Bread Making Quality. **Frontiers in Nutrition Volume 10 - 2023** <https://doi.org/10.3389/fnut.2023.1053196> (IF: 4.0). CS: 5.2).
- 35) Anam Khalid* **Amjad Hameed** 2023. Estimation of Genetic Divergence in Wheat Genotypes Based On Agro-Morphological Traits through Agglomerative Hierarchical Clustering and Principal Component Analysis. **Cereal Research Communications**. 51 (1), 217-224. DOI:10.1007/s42976-022-00287-w. (IF: 1.6)
- YEAR 2022 (papers = 12, IF= 38.511)**
- 36) Bushra Raza, **Amjad Hameed*** and Muhammad Yussouf Saleem 2022. Fruit nutritional composition, antioxidant and biochemical profiling of diverse tomato (*Solanum lycopersicum* L.) genetic resource. *Front. Plant Sci.* 13:1035163. doi: 10.3389/fpls.2022.1035163 (IF: 6.627).
- 37) Tahir Farooq, Muhammad Naveed Akram, Amjad Hameed, Toheed Ahmed & Arruje Hameed., **2022**. Nanoprimer-mediated memory imprints reduce salt toxicity in wheat seedlings by modulating physiobiochemical attributes. **BMC Plant Biology** 22, 540 (2022). <https://doi.org/10.1186/s12870-022-03912-2> (IF: 5.26)
- 38) Muhammad Yussouf Saleem, Muhammad Asghar, Khalid Pervaiz Akhtar, Mehmood-ul-Hassan, **Amjad Hameed**, Qumer Iqbal and Abdul Rehman Khan. **2022**. Registration of “NIAB Jauhar” A high yielding and disease tolerant hybrid of tomato. **Pakistan Journal of Agricultural Sciences**, 59(4), 599-605. DOI: 10.21162/PAKJAS/22.118 (IF: 0.856)
- 39) Saba Akram, Maria Ghaffar, Ayesha Wadood, Sajid Shokat, **Amjad Hameed**, Muhammad Qandeel Waheed and Mian Abdur Rehman Arif, 2022. A GBS-based genome-wide association study reveals the genetic basis of salinity tolerance at seedling stage in bread wheat (*Triticum aestivum* L.). **Frontiers in Genetics** 13:997901. doi: 10.3389/fgene.2022.997901. (IF: 4.772)
- 40) Muhammad Adil Rehman, **Amjad Hameed**, Zulfiqar Ahmad, Muhammad Imran Tipu, Faiz-ul-Hassan Shah, Tahir Mehmood, Leslie D. Bourquin, Shabbir Hussain, 2022. Postharvest Application of Aloe Vera Gel Improved Shelf Life and Quality of Strawberry (*Fragaria x ananassa Duch.*), **Emirates Journal of Food and Agriculture**, 34(7): 553-562. doi: 10.9755/ejfa.2022.v34.i7.2886. (IF: 1.04)
- 41) Zohra Zreen, **Amjad Hameed**, Shumaila Kiran, Tahir Farooq, and Mohammed Suleiman Zaroo, **2022**. A Comparative Study of Diospyros malabarica (Gaub) Extracts in Various Polarity-Dependent Solvents for Evaluation of Phytoconstituents and Biological Activities. **BioMed Research International** Volume 2022, Article ID 4746223, 16 pages <https://doi.org/10.1155/2022/4746223> (IF: 3.246)
- 42) Sahar Nadeem, Najeeb Ullah, Khalid Pervaiz Akhtar, **Amjad Hameed** and Muhammad Yussouf Saleem, **2022**. Evaluation of Tomato Hybrids for Resistance against Tomato Mosaic Virus (ToMV). **Journal of Botanical Research** Volume: 04 (2): 1-11. DOI: <https://doi.org/10.30564/jbr.v4i2.4579>.
- 43) Tahir Farooq, Zaib Un Nisa, **Amjad Hameed**, Toheed Ahmed and Arruje Hameed, **2022**. Priming with copper-chitosan nanoparticles elicit tolerance against PEG-induced hyperosmotic stress and salinity in wheat. **BMC Chemistry** (2022) 16:23 <https://doi.org/10.1186/s13065-022-00813-1>. (IF: 4.095)
- 44) Anjaleena Yaseen , Tarique Hussain, **Amjad Hameed** , Muhammad Shahzad, Muhammad Usman Mazhar, and Muhammad Ismail Chughtai, 2022. Flavonoid enriched supplementation abrogates prenatal stress and enhances goat kids performance reared in a sub-tropical environment. **Research in Veterinary Science** 146 (2022) 70–79. (IF: 2.554)
- 45) Khalid A*, **Hameed A**, Shamim S and Ahmad J **2022**. Divergence in Single Kernel Characteristics and Grain Nutritional Profiles of Wheat Genetic Resource and Association Among Traits. **Frontiers in Nutrition** 8:805446. doi: 10.3389/fnut.2021.805446 <https://www.frontiersin.org/articles/10.3389/fnut.2021.805446/full> (IF: 6.590)
- 46) Afzal A, Hussain T, **Hameed A**, Shahzad M, Mazhar MU and Yang G **2022**. Dietary Moringa oleifera Alters Periparturient Plasma and Milk Biochemical Indicators and Promotes Productive Performance in Goats. **Front. Vet. Sci.** 8:787719. doi: 10.3389/fvets.2021.787719 (IF: 3.471)
- YEAR 2021 (papers = 12, IF= 52.156)**
- 47) Muhammad Ashraf, Zial-ul-Qamar, **Amjad Hameed** and Fatma Sarsu. **2021**. Correlation of yield with early seedling performance and physio-biochemical traits in Basmati rice mutants subjected to heat stress. **Australian Journal of Crop Science** 15(09): 79-90 DOI: 10.21475/ajcs.21.15.09.sp-9
- 48) Saima Jameel, **Amjad Hameed*** and Tariq Mahmud Shah. 2021. Investigation of Distinctive Morpho-Physio and Biochemical Alterations in Desi Chickpea at Seedling Stage Under Irrigation, Heat, and Combined Stress. **Front. Plant Sci.** 12:692745. doi: 10.3389/fpls.2021.692745 (IF: 6.627).

- 49) Ali Afzal, Tarique Hussain, **Amjad Hameed**. 2021. Moringa oleifera Leaf Powder Supplementation Improves Antioxidant Status and Biochemical Indices by Attenuating Early Pregnancy Stress in Beetal Goats. **Frontiers in Nutrition**. 23 July 2021 8:700957. <https://doi.org/10.3389/fnut.2021.700957> (IF: 6.590).
- 50) RIZWAN Muhammad, ABRO Saifullah ASIF Muhammad Usman, **Hameed Amjad**, MAHBOOB Wajid, DEHO Zaheer Ahmed and SIAL Mahboob Ali. 2021. Evaluation of cotton germplasm for morphological and biochemical host plant resistance traits against sucking insect pests complex. **Journal of Cotton Research** 4, 18 (2021). <https://doi.org/10.1186/s42397-021-00093-5> (IF: 2.4).
- 51) Jameel S, **Hameed A*** and Shah TM (2021) Biochemical Profiling for Antioxidant and Therapeutic Potential of Pakistani Chickpea (*Cicer arietinum* L.) Genetic Resource. **Front. Plant Sci.** 12:663623. doi: 10.3389/fpls.2021.663623 (IF: 6.627).
- 52) Wajeeha Munawar, **Amjad Hameed*** and Muhammad Kashif Riaz Khan 2021. Differential morpho-physiological and biochemical responses of cotton genotypes under various salinity stress levels during early growth stage. **Front. Plant Sci.** 12:622309. doi: <https://doi.org/10.3389/fpls.2021.622309> (IF: 6.627).
- 53) Zobia Zahid, Muhammad Kashif Riaz Khan, **Amjad Hameed**, Muhammad Akhtar, Allah Ditta, Hafiz Mumtaz Hassan and Ghulam Farid, 2021. Dissection of Drought Tolerance in upland cotton through morpho-physiological and biochemical traits at Seedling Stage. **Front. Plant Sci.** 12:627107. doi: <https://doi.org/10.3389/fpls.2021.627107> (IF: 6.627).
- 54) Khalid, A. and **A. Hameed**. 2021. Genetic divergence in wheat genotypes based on seed biochemical profiles through agglomerative hierarchical clustering and association analysis among traits. **Pak. J. Bot.**, 53(4): 1281-1286. DOI: [http://dx.doi.org/10.30848/PJB2021-4\(7\)](http://dx.doi.org/10.30848/PJB2021-4(7)) (IF: 1.101).
- 55) Arruje Hameed, Tahir Farooq, **Amjad Hameed** and Munir Ahmad Sheikh, 2021. Sodium nitroprusside mediated priming memory invokes water-deficit stress acclimation in wheat plants through physio-biochemical alterations. 2021. **Plant Physiology and Biochemistry** Volume 160, March 2021, Pages 329-340. <https://doi.org/10.1016/j.plaphy.2021.01.037> (IF: 5.437).
- 56) Arruje Hameed, Tahir Farooq, **Amjad Hameed** and Munir Ahmad Sheikh, 2021. Silicon-mediated priming induces acclimation to mild water-deficit stress by altering physio-biochemical attributes in wheat plants. **Front. Plant Sci.** Front. Plant Sci., 19 February 12:625541. 2021 | <https://doi.org/10.3389/fpls.2021.625541> (IF: 6.627).
- 57) Arruje Hameed, Tahir Farooq, Amjad Hameed, 2021. Climate-smart seed preconditioning improves water-deficit acclamatory performance in wheat seedlings. **AGROCHIMICA** 65(4): 375-387. (IF: 0.283).
- 58) Saba Akram, Mian Abdur Rehman Arif and **Amjad Hameed** 2021. A GBS-based GWAS analysis of adaptability and yield traits in bread wheat (*Triticum aestivum* L.). **Journal of Applied Genetics**, 62, pages 27-41 (<https://doi.org/10.1007/s13353-020-00593-1> Epub 30 October 2020 (IF: 3.21)

YEAR 2020 (papers = 13, IF= 30.91)

- 59) Nasir Mahmood, **Amjad Hameed**, and Tarique Hussain 2020. Vitamin E and selenium treatment alleviates saline environment-induced oxidative stress through enhanced antioxidants and growth performance in suckling kids of Beetal goats. 2020. **Oxidative Medicine and Cellular Longevity** Volume 2020, Article ID 4960507, 16 pages <https://doi.org/10.1155/2020/4960507> (IF: 6.543)
- 60) A. Hameed, A. Khalid, **Amjad. Hameed**, T. Ahmed and T. Farooq, 2020. Nano-priming with Zn-chitosan nanoparticles regulates biochemical attributes and boost antioxidant defence in wheat seeds. *Agrochimica*, Vol. LXIV – N. 3 , 207-221. DOI <https://doi.org/10.12871/00021857201917> (IF: 0.64)
- 61) Muhammad Adil Rehman, Muhammad Rafique Asi, **Amjad Hameed** and Leslie D. Bourquin, 2020. Effect of Postharvest Application of Aloe Vera Gel on Shelf Life, Activities of Anti-Oxidative Enzymes, and Quality of ‘Gola’ Guava Fruit. **Foods**, 9, 1361. doi: <https://doi.org/10.3390/foods9101361> (IF: 4.35)
- 62) Arruje Hameed, **Amjad Hameed**, Matloob Ahmad and Tahir Farooq, 2020. Alleviation of cadmium toxicity by mercapto-triazole priming in wheat. **Archives of Agronomy and Soil Science**, Vol., 66, No. 11, 1467–1480. (IF: 3.092)
- 63) Aqsa Tabasum, Amjad Hameed and Muhammad Jawad Asghar, 2020. Exploring the Genetic Divergence in Mungbean (*Vigna radiata* L.) Germplasm Using Multiple Molecular Marker Systems. **Molecular Biotechnology**, 62(11-12):547-556. <https://doi.org/10.1007/s12033-020-00270-y> (IF: 2.695).
- 64) Anam Rasheed, Sajjad Haidar and **Amjad Hameed**, 2020. Establishment of selection criteria for fibre quality characters in segregating F4 and F5 generations of cotton (*Gossypium hirsutum* L.). *Pak. J. Bot.*, 52(5): 1777-1783, 2020. DOI: [http://dx.doi.org/10.30848/PJB2020-5\(23\)](http://dx.doi.org/10.30848/PJB2020-5(23)). (IF: 0.972).
- 65) Rizwan, M., W. Mahboob, M. Faheem, H. Shimelis, **A. Hameed**, M. A. Sial and S. Shokat. 2020. Can we exploit supernumerary spikelet and spike branching traits to boost bread wheat (*Triticum aestivum* L.) yield? **Applied Ecology and Environmental Research**. 18(5):6243-6258 DOI: 10.15666/aeer/1805_62436258 (IF: 0.711).
- 66) Tariq S, Akhtar KP, **Hameed A**, Ullah N, Amin I, Abbas G and Asghar MJ. 2020. Exogenous application of elicitors induces biochemical alterations and develops tolerance against yellow mosaic disease in mungbean. **International Journal of Phytopathology**. 09 (01) 1-16. **Scopus index**
- 67) Suhail A, Akhtar KP, **Hameed A**, Ullah N, Amin I, G Abbas. 2020. Biochemical Alterations in the Leaves of Resistant and Susceptible Mungbean Genotypes Infected with Mungbean Yellow Mosaic India Virus. **International Journal of Innovative Approaches in Agricultural Research**. 4 (1): 99-118.
- 68) Tariq Mahmud Shah, Muhammad Imran, Babar Manzoor Atta, M. Yasin Ashraf, **Amjad Hameed**, Irem Waqar, M. Shafiq, Khalid Hussain, M. Naveed, M. Aslam & Muhammad Amir Maqbool 2020. Selection and screening of drought tolerant high

yielding chickpea genotypes based on physio-biochemical indices and multi-environmental yield trials. **BMC Plant Biology** 20, 171 (2020). Vol.20 (1), p.171-171 <https://doi.org/10.1186/s12870-020-02381-9> (IF: 4.215)

- 69) Alia Ahmed, **Amjad Hameed*** and Shazia Saeed. 2020. Biochemical profile and bioactive potential of thirteen wild folk medicinal plants from Balochistan, Pakistan. **PLoS ONE** 15(8): e0231612. <https://doi.org/10.1371/journal.pone.0231612> (IF: 3.240).
- 70) Alia Ahmed, **Amjad Hameed** and Shazia Saeed. 2020. Ecological distribution, morphological and molecular characterization of zygophyllaceae from diverse ecological zones of Balochistan, Pakistan. **Applied Ecology and Environmental Research** 18(2):2445-2462. DOI: http://dx.doi.org/10.15666/aeer/1802_24452462 (IF: 0.711).
- 71) Syed Adeel Zafar , **Amjad Hameed**, Muhammad Ashraf , Abdus Salam Khan , Zia-ul- Qamar , Xueyong Li , Kadambot Siddique. 2020. Agronomic, physiological and molecular characterization of rice mutants revealed the key role of ROS and catalase in high-temperature stress tolerance. **Functional Plant biology** Apr;47(5):440-453. doi: 10.1071/FP19246. (IF: 3.101).
- 72) Arruje Hameed, T. Farooq, **Amjad Hameed**, M.A. Sheikh, 2020. Chitosan seed priming improves yield and recall defence memory under drought stress in wheat (*Triticum aestivum* L.). *Agrochimica*, Vol. LXIV N. 164(1): 59-79- January-March 2020. (IF: 0.604)

YEAR 2019 (papers = 09, IF= 17.057)

- 73) Zia-ul-Qamar, **Amjad Hameed**, Muhammad Ashraf, Muhammad Rizwan and Muhammad Akhtar. 2019. Development and Molecular Characterization of Low Phytate Basmati Rice through Induced Mutagenesis, Hybridization, Backcross and Marker Assisted Breeding. **Frontiers in Plant Science**, 10, 26 November 2019 | <https://doi.org/10.3389/fpls.2019.01525> (IF: 4.401)
- 74) Anam Khalid and **Amjad Hameed**. 2019. Allelic Distribution at Microsatellite Xuhw89 locus, a Functional SSR Marker for Grain Protein Content in Pakistani Wheat Germplasm. **Cereal Research Communications**. 47(3) 409-416 DOI: <https://doi.org/10.1556/0806.47.2019.030> (IF: 0.811)
- 75) Arruje Hameed, **Amjad Hameed**, Tahir Farooq, Razia Noreen, Sadia Javed, Shaheera Batool, Ashfaq Ahmad, Tahsin Gulzar and Matloob Ahmad. 2019. Evaluation of structurally different benzimidazoles as priming agents, plant defence activators and growth enhancers in wheat. **BMC Chemistry** 13: 29. doi:10.1186/s13065-019-0546-2. (IF: 2.61).
- 76) Arruje Hameed, T. Farooq, **Amjad Hameed**, M.A. Sheikh, 2019. Sodium silicate seed priming leads to enhanced antioxidative protection of wheat (*Triticum aestivum* L.) seedlings under water-deficit stress. *Agrochimica*, Vol. LXIII - N. 2 63(2): 169-183 DOI 10.12871/00021857201926 (IF: 0.654)
- 77) Anjaleena Yaseen, Tarique Hussain, **Amjad Hameed**, Muhammad Shahzad and Nasir Mehmood, 2019. Effect of antioxidant enriched diet on reproductive and biochemical parameters during mid-pregnancy in Beetal goats. **Free Radical Biology and Medicine**, 139(Supplementary 1), S10-S57, P. S56 No. 195. <https://doi.org/10.1016/j.freeradbiomed.2019.05.021> (IF: 6.17)
- 78) Anam Khalid and **Amjad Hameed**. 2019. Characterization of Pakistani Wheat Germplasm for High and Low Molecular Weight Glutenin Subunits Using SDS-PAGE. **Cereal Research Communications** 47(2): 345-355. (IF: 0.811)
- 79) M. Waqas Gillani, M. Yussouf Saleem and **Amjad Hameed**. 2019. Relationship of path coefficient analysis and different genetic components in diverse tomato germplasm. **Pakistan Journal of Botany** 51(4): 1341-1347. (IF: 0.8) DOI: [http://dx.doi.org/10.30848/PJB2019-4\(28\)](http://dx.doi.org/10.30848/PJB2019-4(28))
- 80) Aqsa Tabasum, Nayyer Iqbal and **Amjad Hameed**. 2019. Identification of allelic variants of Xgwm261 locus for Rht8 dwarfing gene in Pakistani wheat genetic resource. **Pakistan Journal of Botany** 51(3): 941-948. DOI: 10.30848/PJB2019-3(16). (IF: 0.8)
- 81) Zohra Zreen, Shumaila Kiran, **Amjad Hameed**, Tahsin Gulzar and Tahir Farooq. 2019. Phytochemical and comparative biological studies of *Diospyros kaki* extracts. **International Journal of Biosciences**, 14(1): 207-223.

YEAR 2018 (papers =03, IF= 5.0)

- 82) Afzal Hussain, Shafaqat Ali, Muhammad Rizwan, Muhammad Zia ur Rehman, **Amjad Hameed**, Farhan Hafeez, Saud A. Alamri, Mohammed Nasser Alyemeni and Leonard Wijaya. 2018. Role of Zinc–Lysine on Growth and Chromium Uptake in Rice Plants under Cr Stress. **Journal of Plant Growth Regulation**, 37(4), 1413-1422. <https://doi.org/10.1007/s00344-018-9831-x>. (IF: 2.179)
- 83) Rana M. Sabir Tariq, Khalid P. Akhtar, **Amjad Hameed**, Muhammad Y. Saleem and Imran ul Haq. 2018. Determination of the role of Salicylic acid and Benzothiadiazole on physico-chemical alterations caused by Cucumber mosaic virus in tomato. **European Journal of Plant Pathology** 150: 911–922. DOI <https://doi.org/10.1007/s10658-017-1332-4> (IF: 1.582)
- 84) Syed Adeel Zafar, **Amjad Hameed**, Nawaz M. A., Wei MA, Mehmood Ali Noor, Muzammil Hussain, Mehboob-ur-Rahman, 2018. Mechanisms and molecular approaches for heat tolerance in rice (*Oryza sativa* L.) under climate change scenario. **Journal of Integrative Agriculture** 17 (4), 726-738. (IF: 1.337)

YEAR 2017 (papers =08, IF= 10.56)

- 85) Aneela Ulfat, Syed Abdul Majid and **Amjad Hameed**. 2017. Hormonal seed priming improves wheat (*Triticum aestivum* L.) field performance under drought and non-stress conditions. **Pakistan Journal of Botany**, Volume No. 49(4): 1239-1253. (IF: 0.865)
- 86) Anam K. Rai and **Amjad Hameed***. 2017. Seed biochemical analysis based Profiling of Diverse Wheat Genetic Resource from Pakistan. **Front. Plant Sci.** 8 doi: <https://doi.org/10.3389/fpls.2017.01276> (IF: 4.298)

- 87) Nasir F, Akhtar KP, Hameed A, Yousaf S, Gulzar T, Sarwar N, Shah TM , Kiran S. **2017**. Biochemical alterations in the leaves of different Desi and Kabuli type chickpea genotypes infected by phytoplasma, **Turkish Journal of Biochemistry**, 42(4): 409-417. (IF: 0.268)
- 88) Anam Khalid Rai, **Amjad Hameed***, Razia Noreen. **2017**. Antioxidant Potential and Biochemical analysis of *Moringa oleifera* Leaves. **Int. J. Agri. Biol.** 19(4): 941-950. (IF: 0.869)
- 89) Sidra Hameed, Khalid Pervaiz Akhtar, **Amjad Hameed**, Tehsen Gulzar, Shumaila Kiran, Sumaira Yousaf, Ghulam Abbas, Muhammad Jawad, Asghar and Nighat Sarwar. **2017**. Biochemical changes in the leaves of mungbean (*Vigna radiata*) plants infected by phytoplasma. **Turkish Journal of Biochemistry**, 42(6): 591–599. 4 Apr. 2017, from doi: <https://doi.org/10.1515/tjb-2016-0304> (IF: 0.268)
- 90) **Amjad Hameed***, Muhammad Yussouf Saleem, Khalid Pervaiz Akhtar, Muhammad Shoaib, Qumer Iqbal and Muhammad Asghar. **2017**. Molecular Confirmation of Intraspecific Tomato (*Solanum lycopersicum*) Hybrids and Their Evaluation Against Late Blight and Cucumber Mosaic Virus. **Molecular Biotechnology**, 59: 234-240. DOI 10.1007/s12033-017-0010-2 (published online 19-5-17). (IF: 1.815)
- 91) Syed Adeel Zafar, **Amjad Hameed***, Abdus Salam Khan and Muhammad Ashraf. **2017**. Heat shock induced morpho-physiological response in indica rice (*Oryza sativa* L.) at early seedling stage. **Pak. J. Bot.** 49(2) 453-463. (IF: 0.865)
- 92) R. Kausar, **Amjad Hameed**, Z. I. Qureshi and G. Muhammd **2017**. Comparative protein profiling of milk of Nili-Ravi buffaloes, Sahiwal and Cross Bred cows by SDS-PAGE. **Pak Vet J**, 37(1): 73-77. (IF: 1.312)

YEAR 2016 (papers =06, IF= 6.228)

- 93) K. P. Akhtar, M. Y. Saleem, Q. Iqbal, M. Asghar, **A Hameed**, N. Sarwar. **2016**. Evaluation of tomato genotypes for late blight resistance using low tunnel assay. **Journal of Plant Pathology** 98(3): 421-428. (IF: 1.267)
- 94) A. Hameed, Tahir Farooq, **Amjad Hameed**, M. Ibrahim, M. N. Ahmad and S.A. Bukhari. **2016**. Plasma antioxidant enzymes, lipid profiles and peroxidation products in type 2 diabetic patients with hypertension. **Oxidation communications** 39(1) 223-239. <http://scibulcom.net/ocr.php?gd=2016&bk=1> (IF: 0.459)
- 95) A. Hameed, **Amjad Hameed**, Matloob Ahmad, Tariq Saqlain, Tahir Farooq, Sana Aslam and Afshan Kanwal. **2016**. Triazole priming improves germination potential, antioxidant levels and reduces oxidative damage in wheat seeds. **Philipp. Agric. Scientist**, 99(2), 164-170. (IF: 0.248)
- 96) M. Y. Saleem, K. P. Akhtar, Q. Iqbal, M. Asghar, **A. Hameed** and M. Shoaib. **2016**. Development of tomato hybrids with multiple disease tolerance. **Pak. J. Bot.** 48(2): 771-778. [https://www.pakbs.org/pjbot/PDFs/48\(2\)/47.pdf](https://www.pakbs.org/pjbot/PDFs/48(2)/47.pdf) (IF: 0.690)
- 97) A. Khaliq, S. Ali, **Amjad Hameed**, M. A. Farooq, M. Farid, M. B. Shakoor, K. Mahmood, W. Ishaque and M. Rizwan. **2016**. Silicon alleviates nickel toxicity in cotton seedlings through enhancing growth, photosynthesis and suppressing Ni uptake and oxidative stress. **Archives of Agronomy and Soil Science** 62(5): 633-647. DOI: 10.1080/03650340.2015.1073263. (IF: 2.137)
- 98) M. A. Farooq, S. Ali, **Amjad Hameed**, S. A. Bharwana, M. Rizwan, W. Ishaque, M. Farid, K. Mahmood and Z. Iqbal. **2016**. Cadmium stress in cotton seedlings: physiological, photosynthesis and oxidative damages alleviated by glycinebetaine. **South African Journal of Botany** 104: 61-68. <http://www.sciencedirect.com/science/article/pii/S0254629916000132> (IF: 1.427)

YEAR 2015 (papers =04, IF= 6.608)

- 99) Abbas G, **Hameed A**, Rizwan M, Ahsan M, Asghar MJ and Iqbal N. 2015. Genetic Confirmation of Mungbean (*Vigna radiata*) and Mashbean (*Vigna mungo*) Interspecific Recombinants using Molecular Markers. **Front. Plant Sci.** 6:1107. doi: 10.3389/fpls.2015.0110. 7. <http://journal.frontiersin.org/article/10.3389/fpls.2015.01107/full> (IF: 4.495)
- 100) Z. Siddique, K. P. Akhtar, **Amjad Hameed**, I. Ul-Haq, M. Y. Ashraf, N. Sarwar, M. K. R. Khan. **2015**. Physiological response of cotton leaf curl burewala virus-infected plants of tolerant and susceptible genotypes of different gossypium species. **Journal of Plant Pathology** 97(3): 1-8. <http://sipav.org/main/jpp/index.php/jpp/article/view/3406> (IF: 1.038)
- 101) Hina Shahzadi, Munir Ahmed Sheikh, **Amjad Hameed**, Amer Jamil and Sajad-Ur-Rehman **2015**. Comparative antioxidant potential and bioactivity of maize (*Zea mays*) ear tissues from different genotypes. **Int. J. Agri. Biol.** 17(3): 539-546. http://www.fspublishers.org/published_papers/38479_..pdf (IF: 0.758)
- 102) Arruje Hameed, T. Farooq, **A. Hameed**, M. Ibrahim, M. A. Sheikh, S.M.A. Basra. **2015**. Wheat seed germination, antioxidant enzymes and biochemical enhancements by sodium nitroprusside priming. **Agrochimica**, Vol. 59 No. 2 93-107. (IF: 0.317)

YEAR 2014 (papers = 11, IF= 10.738)

- 103) **Amjad Hameed**, Madiha Goher and Nayyer Iqbal. **2014**. Biochemical indices of drought tolerance in wheat (*Triticum aestivum* L.) at early seedling stage. **Philippine Agricultural Scientist** 97(3): 236-242. (IF: 0.256)
- 104) Qumer Iqbal, M. Y. Saleem, Amjad Hameed and M. Asghar. **2014**. Assessment of genetic divergence in tomato through agglomerative hierarchical clustering and principal component analysis. **Pak. J. Bot.** 46(5): 1865-1870. (IF: 0.822)
- 105) A. Hameed, M. A. Sheikh, **Amjad. Hameed**, T. Farooq, S. M. A. Basra, A. Jamil. **2014**. Chitosan seed priming improves seed germination and seedling growth in wheat (*Triticum aestivum* L.) under osmotic stress induced by polyethylene glycol. **Philippine Agricultural Scientist** 97(3): 294-299. (IF: 0.256)

- 106) M. B. Shakoor, S. Ali, **Amjad Hameed**; M. Farid; S. Hussain; T. Yasmeen; U. Najeeb, S. A. Bharwana and G. H. Abbasi. 2014. Citric acid improves lead (Pb) phytoextraction in *Brassica napus* L. by mitigating Pb-induced morphological and biochemical damages. **Ecotoxicology and Environmental Safety** 109: 38-47. (IF: 2.762)
- 107) **Amjad Hameed**, Ghazala Nawaz and Tahsin Gulzar. 2014. Chemical composition, antioxidant activities and protein profiling of different parts of *Allamanda cathartica*. **Natural Product Research** 28(22): 2066-2071. (IF: 0.919)
- 108) **Amjad Hamed**, Nayyer Iqbal and Salman A. Malik. 2014. Effect of D-mannose on antioxidant defense and oxidative processes in etiolated wheat coleoptiles. **Acta Physiologiae Plantarum** 36(1): 161-167. (IF: 1.584)
- 109) M. K. Nadeem, S. Ahmed, M. Ishfaq, S. Nadeem, **A. Hameed**, A. Sohail and M. Hasnain 2014. Insecticides resistance in the field selected strains of *Bactrocera Zonata* (Saunders) (Diptera: Tephritidae). **Int. J. Biol. Biotech.**, 11 (2-3): 357-361.
- 110) Zeeshan Siddique, Khalid Pervaiz Akhtar, **Amjad Hameed**, Nighat Sarwar, Imran-UI-Haq, Sajid Aleem Khan. 2014. Biochemical alterations in leaves of resistant and susceptible cotton genotypes infected systemically by cotton leaf curl Burewala virus' **Journal of Plant Interactions** 9(1): 702-711. <http://dx.doi.org/10.1080/17429145.2014.905800> (IF: 1.11)
- 111) **Amjad Hameed** and Nayyer Iqbal. 2014. Chemo-priming with mannose, mannitol and H₂O₂ mitigate drought stress in wheat. **Cereal Res. Comm.** 42(3): 450-462. (IF: 0.607)
- 112) **Amjad Hameed**, A. Gul and T. Gulzar. 2014. Characterization of tomato germplasm through seed storage protein profiling by SDS-PAGE. **Pak. J. Bot.** 46(3): 827-832. (IF: 0.822)
- 113) S. A. Bharwana, S. Ali, M. A. Farooq, N. Iqbal, **A. Hameed**, F. Abbas, M. S. A. Ahmad. 2014. Glycine betaine-induced lead toxicity tolerance related to elevated photosynthesis, antioxidant enzymes suppressed lead uptake and oxidative stress in cotton. **Turkish J. Bot.**, 38: 281-292. DOI: 10.3906/bot-1304-65. (IF: 1.6)
- YEAR 2013 (papers = 08, IF= 6.556)**
- 114) **Amjad Hameed**, Liala Jafri and Muneer A. Sheikh. 2013. Effect of thiourea on proteins, catalase, guaiacol-peroxidase and protease activities in wheat leaves under H₂O₂ induced oxidative stress. **Iranian J. Plant Physiol.** 4(1): 857-864.
- 115) I. Afzal, F. Munir, C. M. Ayub, S. M. A. Basra, **Amjad Hameed**, F. Shah. 2013. Ethanol priming: an effective approach to enhance germination and seedling development by improving antioxidant system in tomato seeds. **Acta Scientiarum Polonorum-Hortorum** 12(4): 129-137. (IF: 0.522)
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- 117) Arruje Hameed, M. A. Sheikh, **Amjad. Hameed**, T. Farooq, S. M. A. Basra and A. Jamil. 2013. Chitosan priming enhances the seed germination, antioxidants, hydrolytic enzymes, soluble proteins and sugars in wheat seeds. **Agrochimica**, vol. LVII No. 2 (April-June) pp. 97-110. (IF: 0.314)
- 118) Fayyaz Rasool, N. A. Qureshi, S. Parveen, M. Siddique, M. Ashraf, **Amjad Hameed**, N. Khan and K. J. Iqbal. 2013. Morphometric parameters assisted study of the hatchery raised and natural populations of *Labeorohita*. **Pak. J. Zool.** 45(4): 903-907. <http://www.zsp.com.pk/pdf45/903-907%204%20PJJZ-1047-12%204-7-13%20Proof%20Read.pdf> (IF: 0.40)
- 119) Farooq M. A., S. Ali, **Amjad Hameed**, W. Ishaque, K. Mehmood and Z. Iqbal. 2013. Alleviation of cadmium toxicity by silicon is related to elevated photosynthesis, antioxidant enzymes; suppressed cadmium uptake and oxidative stress in cotton. **Ecotoxicology and Environmental Safety** 96: 242-249. <http://www.sciencedirect.com/science/article/pii/S0147651313003047> (IF: 2.482)
- 120) Fayyaz Rasool, N. A. Qureshi, S. Parveen, M. Siddique, M. Ashraf, **Amjad Hameed** and K. J. Iqbal. 2013. Principle component analysis for the variation among the populations of *Labeorohita*. **J. Ani. Plant Sci.**, 23(2) 487-492. <http://www.thejaps.org.pk/docs/v-23-2/26.pdf> (IF: 0.549)
- 121) **Amjad Hameed**, Madiha Goher and Nayyer Iqbal. 2013. Drought induced programmed cell death and associated changes in antioxidants, proteases and lipid peroxidation in wheat leaves. **Biologia Plantarum** 57 (2): 370-374. DOI: 10.1007/s10535-012-0286-9. <http://link.springer.com/article/10.1007%2Fs10535-012-0286-9> (IF: 1.74)
- YEAR 2012 (papers = 07, IF= 5.952)**
- 122) M. Shahid, M. M. Khan, **Amjad Hameed**, M. Ashraf and A. Jamil. 2012. Antioxidant enzymes and inorganic elements in seeds and leaves of four potential medicinal plants from Pakistan. **Agrochimica**, 56(6): 281-291. (IF: 0.31)
- 123) **Amjad Hameed**, M. Qureshi, M. Nawaz and N. Iqbal. 2012. Comparative seed storage protein profiling of mung bean genotypes. **Pak. J. Bot.** 44(6): 1993-1999. [http://www.pakbs.org/pjbot/PDFs/44\(6\)/26.pdf](http://www.pakbs.org/pjbot/PDFs/44(6)/26.pdf) (IF: 0.913)
- 124) Zia-ul-Qamar, J. Akhtar, M. Ashraf, M. Akram and **A. Hameed**. 2012. A multivariate analysis of rice genetic resources. **Pak. J. Bot.**, 44(4): 1335-1340. [http://www.pakbs.org/pjbot/PDFs/44\(4\)/25.pdf](http://www.pakbs.org/pjbot/PDFs/44(4)/25.pdf) (IF: 0.913)
- 125) **Amjad Hameed**, Aysha Saddiqa, Shahid Nadeem, Nayyer Iqbal, Babar M. Atta and Tariq M. Shah. 2012. Genotypic variability and mutant identification in *Cicer arietinum* L., by seed storage protein profiling. **Pak. J. Bot.** 44(4): 1303-1310. [http://www.pakbs.org/pjbot/PDFs/44\(4\)/21.pdf](http://www.pakbs.org/pjbot/PDFs/44(4)/21.pdf) (IF: 0.913)
- 126) Nayyer Iqbal, Aqsa Tabasum, **Amjad Hameed**, Muhammad Akram, Muhammad afzaal and Rubina Arshad. 2012. Evaluation of stem reserve utilization in Pakistani wheat genotypes under post anthesis chemical desiccation stress. **Pak. J. Bot.** 44(4): 1363-1367. [http://www.pakbs.org/pjbot/PDFs/44\(4\)/30.pdf](http://www.pakbs.org/pjbot/PDFs/44(4)/30.pdf) (IF: 0.913)

- 127) **Amjad Hameed**, Madiha Goher and Nayyer Iqbal. 2012. Heat stress induced cell death, changes in antioxidants, lipid peroxidation and protease activity in wheat leaves. **Journal of Plant Growth Regulation** 31(3) 283-291. (DOI 10.1007/s00344-011-9238-4. <http://link.springer.com/article/10.1007%2Fs00344-011-9238-4> (IF: 1.99)
- 128) Zaheer Ahmed, Munir Ahmad Sheikh, Amjad Hameed and Salah ud Din. 2012. Investigation of antioxidant enzymes and biochemical changes in the wheat seeds (freed) induced by different pre-sowing treatments. **World Applied Sciences Journal** 18 (1): 31-36.
- YEAR 2011 (papers = 03, IF= 4.634)**
- 129) Tabasum, A. N. Iqbal, **A. Hameed** and R. Arshad, 2011. Evaluation of Pakistani wheat germplasm for bread quality based on allelic variation in HMW glutenin subunits. **Pak. J. Bot.** 43 (3): 1735-1740. [http://www.pakbs.org/pjbot/PDFs/43\(3\)/PJB43\(3\)1735.pdf](http://www.pakbs.org/pjbot/PDFs/43(3)/PJB43(3)1735.pdf) (IF: 0.898)
- 130) Tabasum, A. A. Cheema, **A. Hameed**, M. Rashid and M. Ashraf. 2011. Radio sensitivity of rice genotypes to gamma radiations based on seedling traits and physiological indices. **Pak. J. Bot.** 43 (2): 1211-1222. [http://www.pakbs.org/pjbot/PDFs/43\(2\)/PJB43\(2\)1211.pdf](http://www.pakbs.org/pjbot/PDFs/43(2)/PJB43(2)1211.pdf) (IF: 0.898)
- 131) **Amjad Hameed**, Noreen Bibi, Javed Akhter and Nayyer Iqbal. 2011. Differential changes in antioxidants, proteases, and lipid peroxidation in flag leaves of wheat genotypes under different levels of water deficit conditions. **Plant Physiology and Biochemistry**, 49: 178-185. <http://www.ncbi.nlm.nih.gov/pubmed/21159517> (IF: 2.838)
- YEAR 2010 (papers = 4, IF= 3.571)**
- 132) **Amjad Hameed**, K. P. Akhtar, M. Y. Saleem and M. Asghar. 2010. Correlative evidence for peroxidase involvement in disease resistance against *Alternaria* leaf blight of tomato. **Acta Physiologiae Plantarum**. 32(6): 1171-1176. <http://link.springer.com/article/10.1007%2Fs11738-010-0512-z> (IF: 1.344)
- 133) **Amjad Hameed**, Madiha Goher and Nayyer Iqbal. 2010. Evaluation of seedling survivability and growth response as selection criteria for breeding drought tolerance in wheat. **Cereal Res. Comm.** 38(2): 193-203. <http://www.akademai.com/doi/pdf/10.1556/CRC.38.2010.2.5> (IF: 0.084)
- 134) **Amjad Hameed** Irfan Afzal and Nayyer Iqbal. 2010. Seed priming and salinity induced variations in wheat (*Triticum aestivum* L.) leaf protein profiles. **Seed Science and Technology** 38(1): 236-241. <http://dx.doi.org/10.15258/sst.2010.38.1.25> (IF: 0.605)
- 135) N. Iqbal, S. Farooq, R. Arshid and **A. Hameed**. 2010. Differential accumulation of high and low molecular weight heat shock proteins in Basmati rice (*Oryza sativa* L.) cultivars. **Genet. Resour. Crop Ev.** 57: 65-70. <http://link.springer.com/article/10.1007%2Fs10722-009-9451-1> (IF: 1.538)
- YEAR 2009 (papers = 5, IF= 5.119)**
- 136) N. Iqbal, A. Tabassum, H. Ali and **A. Hameed**. 2009. Evaluation of genetic diversity among breed wheat varieties and landraces of Pakistan by SSR markers. **Cereal Res. Comm.** 37(4) 489-498. <http://www.akademai.com/doi/abs/10.1556/CRC.37.2009.4.2> (IF: 0.23)
- 137) I. Afzal, F. Munir, C.M. Ayub, S.M.A. Basra, **A. Hameed** and A. Nawaz 2009: Changes in antioxidant enzymes, germination capacity and vigour of tomato seeds in response of priming with polyamines. **Seed Science and Technology** 37(3):765-770. <http://dx.doi.org/10.15258/sst.2009.37.3.23> (IF: 0.503)
- 138) N. Bibi, **A. Hameed**, H. Ali, N. Iqbal. M. A. Haq, B. M. Atta AND T. M. Shah. 2009. Water stress induced variations in protein profiles of germinating cotyledons from seedlings of chickpea genotypes. **Pak. J. Bot.**, 41(2): 731-736. [http://www.pakbs.org/pjbot/PDFs/41\(2\)/PJB41\(2\)731.pdf](http://www.pakbs.org/pjbot/PDFs/41(2)/PJB41(2)731.pdf) (IF: 0.974)
- 139) **Amjad Hameed**, T. M. Shah, B. M. Atta, N. Iqbal, M. A. Haq and H. Ali. 2009. Comparative seed storage protein profiling of kabuli chickpea genotypes. **Pak. J. Bot.**, 41(2): 703-710. [http://www.pakbs.org/pjbot/PDFs/41\(2\)/PJB41\(2\)703.pdf](http://www.pakbs.org/pjbot/PDFs/41(2)/PJB41(2)703.pdf) (IF: 0.974)
- 140) **Amjad Hamed**, Nayyer Iqbal and Salman A. Malik. 2009. Mannose-induced modulations in antioxidants, protease activity, lipid peroxidation, and total phenolics in etiolated wheat leaves. **Journal of Plant Growth Regulation**. 28: 58-65. <http://link.springer.com/article/10.1007%2Fs00344-008-9076-1> (IF: 2.438)
- YEAR 2008 (papers = 05, IF= 2.08)**
- 141) **Amjad Hameed**, N. Iqbal and S. A. Malik. 2008. New apoptotic effect of D-mannose in wheat roots. **Pak. J. Bot.**, 40(4):1609-1620. [http://www.pakbs.org/pjbot/PDFs/40\(4\)/PJB40\(4\)1609.pdf](http://www.pakbs.org/pjbot/PDFs/40(4)/PJB40(4)1609.pdf) (IF: 0.52)
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- 144) **Amjad Hameed**, Shazia Naseer, Tahira Iqbal, Hina Syed and M. Ahsanul Haq. 2008. Effects of NaCl salinity on seedling growth, senescence, catalase and protease activities in two wheat genotypes differing in salt tolerance. **Pak. J. Bot.**, 40(3): 1043-1051. [http://www.pakbs.org/pjbot/PDFs/40\(3\)/PJB40\(3\)1043.pdf](http://www.pakbs.org/pjbot/PDFs/40(3)/PJB40(3)1043.pdf) (IF: 0.52)
- 145) H. Ali, N. Iqbal, T.M. Shah B.M. Atta, **A. Hameed**, and M.A. Haq. 2008. Identification of wilt resistant genes in local chickpea genotypes using RAPD and SSR markers. **Pak. J. Phytopath.** 20(1): 113-118.
- YEAR 2002-2007 (papers = 20, IF= 4.458)**

- 146) Sohail Ahmed, Muhammad Asam Riaz, **Amjad Hameed** Malik, and Muhammad Shahid, **2007**. Effect of seed extracts of *Withania somnifera*, *Croton tiglium* and *Hygrophila auriculata* on behavior and physiology of *Odontotermes obesus* (Isoptera: Termitidae). **Biologia Bratislava** 62/6: 770-773. <http://link.springer.com/article/10.2478/s11756-007-0134-0> (IF: 0.406)
- 147) Sayed H. Raza, Habib R. Athar, Muhammad Ashraf , **Amjad Hameed**. **2007**. Glycinebetaine-induced modulation of antioxidant enzymes activities and ion accumulation in two wheat cultivars differing in salt tolerance, **Environmental and Experimental Botany**, 60(3): 368-376. <http://www.sciencedirect.com/science/article/pii/S0098847207000081> (IF: 2.301)
- 148) H. Ali, M.A. Haq, N. Iqbal, **A. Hameed**, T.M. Shah and B.M. Atta. **2007**. Allelic Variation within Single Podded Gene Characterized by STMS Marker. **Molecular Plant Breeding** 5(2): 252-254.
- 149) Irfan Afzal, Shahzad Maqsood Ahmad Basra, **Amjad Hameed** and Muhammad Farooq, **2006**. Physiological enhancement for alleviation of salt stress in wheat. **Pak. J. Bot.**, 38(5):1649-1659. [http://www.pakbs.org/pjbot/PDFs/38\(5\)/PJB38\(5\)1649.pdf](http://www.pakbs.org/pjbot/PDFs/38(5)/PJB38(5)1649.pdf) (IF: 0.29)
- 150) Shamaila Rafiq, Tahira Iqbal, **Amjad Hameed**, Zulfiqar Ali Rafiqi and Naila Rafiq, **2006**. Morphobiochemical analysis of salinity stress response of wheat. **Pak. J. Bot.**, 38(5): 1759-1769, [http://www.pakbs.org/pjbot/PDFs/38\(5\)/PJB38\(5\)1759.pdf](http://www.pakbs.org/pjbot/PDFs/38(5)/PJB38(5)1759.pdf) (IF: 0.29)
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- 153) **Amjad Hameed**, Nayyer Iqbal, Salman Akbar Malik, Hina Syed & M. Ahsanul-Haq. **2005**. Age and organ specific accumulation of ascorbate in wheat (*Triticum aestivum* L.) seedlings grown under etiolation alone and in combination with oxidative stress. **Serie Biologia (Brazil)**, Vol.17, no.1, 51-63.
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- 156) **Amjad Hameed**, Shafqat Farooq, Nayyer Iqbal, and Rubina Arshad, **2004**. Influence of exogenous application of hydrogen peroxide on root and seedling growth in wheat (*Triticum aestivum* L). **Int. J. Agri. Biol.** 6: 366-369.
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- 158) **Amjad Hameed** Nayyer Iqbal, Rubina Arshed, Shafqat Farooq, **2003**. Influence of Hydrogen Peroxide on Initial Leaf and Coleoptile Growth in Etiolated Wheat (*Triticum aestivum* L) Seedlings. **Asian Journal of Plant Sciences** 2(15): 1121-1125. (citations: 1)
- 159) **Amjad Hameed**, Wajahat Hussain, Janbaz Ahmad, Faizli-Rabbi and Javed Anver Qureshi, **2002**. Prevalence of Phenotypes and Genes of ABO and Rhesus (Rh) Blood Groups In Faisalabad Pakistan. **Pakistan Journal of Biological Sciences** 5(6): 722-724. (citations: 2)
- 160) **Amjad Hameed**, Salman Ahmad Malik, Fazli-Rabbi, Aysha Sharif, Nasir Ahmad, Wajahat Hussain, Hassan Akhtar Bokhari, Shafaqat Ali, Farwa Nurjis, Ahmad Mukhtar Khalid and Javed Anver Qureshi **2002**. Epidemiology of Diabetes Mellitus In and Around Faisalabad, Pakistan. **Pakistan Journal of Biological Sciences** 5(8): 878 -880.
- 161) **Amjad Hameed**, Tahira Iqbal, Muhammad Nawaz, Faiz Batool, Tayyba Tabassum Baig, Shafaqat Ali and Farwa Nurjis, **2002**. Pharmacokinetics of Ofloxacin in Male Volunteers following Oral Administration. **Pakistan Journal of Biological Sciences** 5(10): 1098 -1100. (citations:1)
- 162) Tayyba Tabassum Baig, Munir Ahmad Sheikh, **Amjad Hameed**, Amer Jamil, Faiz Batool, Shzia Muhammad Ali and Shafaqat Ali, **2002**. Bioconversion Of Filter Press Cake (Mud) Of Sugar Cane To Biomass Protein And Its Biological Evaluation. **Pakistan Journal of Biological Sciences**, 5 (10): 1052 - 1055.
- 163) **Amjad Hameed**, Faiz Batool, Tahira Iqbal, Tayyba Tabassum Baig, Javed Anver Qureshi, **2002**. Biodisposition Kinetics Of Ofloxacin In Pakistani Healthy Female Volunteers After Oral Administration. **Online Journal of Biological Science**, 2 (12). 775-779.
- 164) **Amjad Hameed**, Salman Ahmad Malik, Fazli-Rabbi, Aysha Sharif, Nasir Ahmad, Farwa Nurjis, Shafaqat Ali, Javed Anver Qureshi **2002**. Diabetic Complications: Influence Of Age, Sex, Family History, Duration, Glycemic Control And Obesity. **Online Journal of Biological Science**, 2 (10): 710-714.
- 165) Farzana Farukh, **Amjad Hameed**, Tahira Iqbal, R. Nawaz and Muhammad Nawaz, **2000**. In vitro interaction of Sulfamerazine with the plasma proteins of Buffaloes, Cows, Sheep, and Goats. **Pakistan Veterinary Journal**. 20(3): 147 – 150.

10.2 Papers published as conference proceedings.

- 166) S. Farooq, N. Iqbal, R. Arshad, **A. Hameed** and F. Azam (2003) Electrolyte leakage and salinity susceptibility index as selection criteria for salt tolerant wheat (*Triticum aestivum* L.). Proceedings of the Tenth International Wheat Genetics Symposium, 1-6 September 2003 held at Paestum, **Italy**. Vol. 2, pp 700-702.
- 167) I. Afzal, S.M.A. Basra, **A. Hameed** and M. Farooq, 2006. Pre-sowing seed treatments for inducing salt tolerance in wheat. ZESZYTY PROBLEMOWE POSTEPOW NAUK ROLNICZYCH 2006z 509: 245-259.

10.3 Books as author

- 168) **Amjad Hameed**, Javed A. Qureshi and Salman A. Malik. Diabetes mellitus: Epidemiology, late diabetic complications and association with Hepatitis C Virus (HCV) infection. Apr 27, 2012. LAP LAMBERT Academic Publishing, Germany. ISBN-13: 978-3659103391
- 169) Arruje Hameed, Munir Ahmad Sheikh and **Amjad Hameed**. Plasma antioxidants and Type 2 diabetes mellitus: Antioxidants and diabetes. Jun 27, 2012. LAP LAMBERT Academic Publishing, Germany. ISBN-13: 978-3847378488
- 170) Ghazala Nawaz, **Amjad Hameed** and Tahsin Gulzar. Jacaranda mimosifolia and Allamanda cathartica: Phytotherapeutic potential, antioxidant potential and chemical composition. **June 9, 2013**. LAP LAMBERT Academic Publishing, Germany. ISBN-13: 978-3659402302.
- 171) Maham Saddique, **Amjad Hameed**, Syed Hammad Raza. Heat stress in crops: mechanisms, adaptation and improvement strategies. **November 27, 2013**. LAP LAMBERT Academic Publishing, Germany. ISBN-13: 978-3659484810.

10.4 Book chapters

- 172) Tahir Farooq, **Amjad Hameed**, Arruje Hameed, Chapter 13 - Emerging concept of nanofertilizers for sustainable crop plants growth and production, Editor(s): Azamal Husen, In Plant Biology, sustainability and climate change, Engineered Nanomaterials for Sustainable Agricultural Production, Soil Improvement and Stress Management, Academic Press, 2023, Pages 273-310, ISBN 9780323919333, <https://doi.org/10.1016/B978-0-323-91933-3.00003-9>.
- 173) Tahir Farooq, **Amjad Hameed**, Arruje Hameed, Chapter 15 - Engineered nanomaterials for plant disease diagnosis and management, Editor(s): Azamal Husen, In Plant Biology, sustainability and climate change, Engineered Nanomaterials for Sustainable Agricultural Production, Soil Improvement and Stress Management, Academic Press, 2023, Pages 337-355, ISBN 9780323919333, <https://doi.org/10.1016/B978-0-323-91933-3.00021-0>.
- 174) Hameed, A., **Hameed, A.**, Hussain, G., Qayyum, M. A., Farid, M. F., & Farooq, T. 2022. Chapter 21 - Recent Advances in the Design and Synthesis of Cyclic Peptidomimetics. In A. M. M. F. Phillips (Ed.), More Synthetic Approaches to Nonaromatic Nitrogen Heterocycles (Vol. 2, pp. 649-670). **United Kingdom: John Wiley & Son**.
- 175) Arruje Hameed, **Amjad Hameed**, Habibullah Nadeem, Tahir Farooq, 2021. Chapter 5 - One-pot synthesis of nanomaterials, Editor(s): Boris Kharisov, Oxana Kharissova, Handbook of Greener Synthesis of Nanomaterials and Compounds, **Elsevier**, 2021, Pages 137-176, ISBN 9780128219386, <https://doi.org/10.1016/B978-0-12-821938-6.00005-0>.
- 176) Arruje Hameed, **Amjad Hameed**, Ali Raza, and Tahir Farooq. 2020. Chapter 3 - Site-specific Incorporation of Triazole for Functionalization of Nucleotides, Oligonucleotides, and Nucleic Acids" In: Tahir Farooq (eds) "Advances in triazole chemistry" Imprint: **Elsevier** November 30, 2020. Pp 49-75. Print ISBN: 978-0-12-817113-4 <https://doi.org/10.1016/B978-0-12-817113-4.00005-6>
- 177) Asghar, M. J., **A. Hameed**, M. Shahid, M. Rizwan and F. Azeem. 2021. Chapter 16 - Mungbean Wild Genetic Resource: A Potential Source of Genetic Improvement for Biotic and Abiotic Stress Tolerance" In: Muhammad Azhar and Shabir Wani. (eds) "Wild Germplasm for Genetic Improvement in Crop Plants" Imprint: Academic Press (**Elsevier**) 2021. Pp 299-319. Print ISBN: 978-0-128-22137-2
- 178) Asghar, M. J., **A. Hameed**, M. Rizwan M. Shahid and R. M. Atif. 2021. Chapter 17- Lentil Wild genetic resource; a potential source of genetic improvement for abiotic and biotic stress tolerance" In: Muhammad Azhar and Shabir Wani. (eds) "Wild Germplasm for Genetic Improvement in Crop Plants" Imprint: Academic Press (**Elsevier**) 2021. Pp 321-341. Print ISBN: 978-0-128-22137-2
- 179) F. Azeem, M. J. Bilal, U. Ijaz, M. Zubair, I. Rasul, M. J. Asghar, G. Abbas, R. M. Atif, **A. Hameed**. 2019. Recent Advances in Breeding, Marker Assisted Selection and Genomics of Black Gram (*Vigna mungo* (L.) Hepper). In: Al-Khayri J., Jain S., Johnson D. (eds) Advances in Plant Breeding Strategies: Legumes. **Springer Nature Switzerland AG** 2019. Vol. 7: 25-52. (https://doi.org/10.1007/978-3-030-23400-3_2 Print ISBN 978-3-030-23399-0 Online ISBN 978-3-030-23400-3)
- 180) **Amjad Hameed**, T. Iqbal, Khalil-ur-Rehman and Zahoor-ul-Hassan, Chapter 6: "Thalassemia", in Khalil-ur-Rehman and Zahoor-ul-Hassan, ed: Clinical Biochemistry, Career Book Publishers, Urdu Bazar, Lahore, Pakistan Pp: 66-78, 2002.

10.5 Popular News Papers articles.

- 181) **Amjad Hameed Malik**, "New treatment and metabolic control of Diabetes" **The NEWS International**, date: 14 Nov 2002, page: 16.
- 182) M Amjad Hameed Malik, "Food insecurity at the dawn of the 21st century" DAWN ECONOMIC & BUSINESS REVIEW, June 9-15, 2003 P.III.

10.6 Keynote lectures as invited speaker.

- 183) Delivered a keynote lecture on “SNP based Molecular DNA barcode for crop identification” in national training workshop and exhibition titled "DNA Fingerprinting of Crops under Plant Breeder's Right Rules" held on June 19, 2023, at Ayub Agricultural Research Institute (AARI), Faisalabad
- 184) **Amjad Hameed**, Antioxidants and stress bio-markers: applications for screening and improvement of stress tolerance in plants. International Conference on stress biology and biotechnology challenges & management, May 21-23, 2014 IAGS, University of Punjab, Lahore Pakistan. Abstract book pp 04.

10.7 Abstracts and presentations in national/International Conferences/Symposia.

- 185) Akram, S., Ghaffar, M., Wadood, A., Shokat, S., **Hameed , A.**, Waheed, Q., & Arif, M.A.R. GBS based genome-wide association mapping of salinity tolerance in bread wheat (*triticum aestivum* l.) at seedling stage. 7th International Conference on “Climate Smart Agriculture: Innovations and Adaptations” held in University of Poonch Rawalakot Azad Jammu and Kashmir, Pakistan. June 15-17, 2022. (Abstract)
- 186) Wadood, A., **Hameed, A.** & Saleem. M. A computational approach for deciphering drought responsive candidate genes in tomato (*Solanum lycopersicum*). 7th International Conference on “Climate Smart Agriculture: Innovations and Adaptations” held in University of Poonch Rawalakot Azad Jammu and Kashmir, Pakistan. June 15-17, 2022. (Abstract)
- 187) R. Kausar, **A. Hameed**, M. Hussain, S. A. Khanum and N. A. Qureshi. Serum Profiles of Certain Oxidants, Antioxidants, Reproductive and Stress Hormones in Buffaloes (*Bubalus Bubalis*), International Symposium on Dairy Animal Reproduction (ISDAR), March 30-31 2015, Lahore Pakistan. J. Vet. & Animal Sci. 5(Sup.1), P07 page 19, 2015.
- 188) S. A. Zafar, **Amjad Hameed**, M. Ashraf and A.S. Khan. Screening for heat tolerance in rice (*Oryza Sativa* L.) through morpho-physiological profiling. International Conference on stress biology and biotechnology challenges & management, May 21-23, 2014 IAGS, University of Punjab, Lahore Pakistan. Abstract book pp 15. (oral presentation)
- 189) M. Y. Saleem, M. Asghar, K.P. Akhtar, **Amjad Hameed**, Q. Iqbal and M. Shoaib. Development of high yielding and disease resistant hybrids of tomato. International Conference on stress biology and biotechnology challenges & management, May 21-23, 2014 IAGS, University of Punjab, Lahore Pakistan. Abstract book pp 14. (oral presentation)
- 190) **Amjad Hameed**. Integrated physiological and biochemical profiling for screening abiotic stress tolerance in crop plants at early seedling stage. International Conference of Biochemical and Chemical Sciences, Feb. 24-26, 2014 at University of Agriculture, Faisalabad Pakistan.
- 191) Amjad Hameed and N. Iqbal. Chemo-priming: an economic and efficient technique for mitigating drought stress in wheat. 1st International Conference on Global Environmental Changes at Government College University, Faisalabad, from 15-16 January 2013. Abstract book pp. (oral presentation)
- 192) Amjad Hameed, M. Ghoher and N. Iqbal. Biochemical indices of drought tolerance in wheat at early seedling stage. “12th National and 3rd International Conference of Botany at Quaid-i-Azam University, Islamabad, from Sep 1st to 3rd 2012. Abstract book pp. 66. (poster)
- 193) Muhammad Kashif Nadeem, **Amjad Hameed**, Sajid Nadeem, Sohail Ahmed and Muhammad Ashfaq. 2012. Biochemical mechanism of resistance in two trichlorfon resistant strains of *Bactrocera zonata* (Saunders) (Diptera tephritidae). In: 32nd Pakistan congress of zoology, March 6-8, held at G.C. University Lahore, Pakistan. Abstract book pp. 139-140.
- 194) **Amjad Hameed**, N. Iqbal and S. A. Malik. 2008. New apoptotic effect of D-mannose in wheat roots. (Oral presentation). In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 43.
- 195) **A. Hameed**, T. M. Shah, B. M. Atta, N. Iqbal, M. A. Haq and H. Ali. 2008. Comparative seed storage protein profiling of kabuli chickpea genotypes. (Poster) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 44.
- 196) N. Bibi, **A. Hameed**, H. Ali, N. Iqbal, M. A. Haq, B. M. Atta and T.M. Shah. 2008. Water stress induced variation in protein profiles of germinating cotyledons of chickpea genotypes. (Poster) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 100.
- 197) H. Ali, N. Iqbal, M. A. Haq, T. M. Shah, B. M. Atta and **A. Hameed**. 2008. Detection of Qtls for blight resistance in chickpea genotypes with DNA based markers. (Oral presentation) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 20.
- 198) N. Iqbal, A. Tabassum, H. Ali and **A. Hameed**. 2008. Quantitative Assessment of genetic diversity in wheat germplasm using microsatellite markers. (Oral presentation) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 152.
- 199) A. Tabasum, N. Iqbal, H. Sayyed and **A. Hameed**. 2008. Characterization of wheat genotypes and land races for High Molecular Weight (HMW) glutenin subunits involved in bread making quality. (Poster) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 152.
- 200) S. Rafiq ,T. Iqbal , **A. Hameed** and N. Rafiq. 2008. Wheat (*Triticum aestivum* L.) root protein profiles. (Poster) In: International Conference of Plant Scientists, Department of Botany, University of agriculture, Faisalabad, Pakistan. Abstract book pp. 109.

- 201) H. Ali, N. Iqbal, M.A. Haq, T.M. Shah, B.M. Atta and **A Hameed**. 2008. Molecular approach to characterize chickpea genotypes for biotic stresses. In: national conference on “Recent advances in agriculture biotechnology” 18-19, march, Pakistan Academy of science, Islamabad.
- 202) N. Iqbal, A. Tabassum, H. Sayyed, and **A Hameed**. 2008. Characterization of Pakistani wheat varieties by Micosatellite markers. In: national conference on “Recent advances in agriculture biotechnology” 18-19, march, Pakistan Academy of science, Islamabad.
- 203) H. Ali, N. Iqbal, T.M. Shah, B.M. Atta, **A. Hameed** and M.A. Haq. 2007. Identification of wilt resistant genes in local chickpea genotypes using RAPD and SSR markers” In: 3rd International Conference on Plant Pathology “Future Food Security”, 19-21 Nov. University of the Punjab, Lahore.
- 204) **H. Ali**, M.A. Haq, N. Iqbal, A. Hameed, T.M. Shah and B.M. Atta. 2007. Characterization of double podded mutants of chickpea utilizing STMS marker. In: International conference on achieving sustainable pulses production in Pakistan. 20- 22 March, NARC Islamabad.
- 205) **Hameed A**, T.M. Shah, B.M. Atta, M.A. Haq, H. Sayed. 2007. Biochemical analysis of some chickpea (*Cicer arietinum* L.) chlorophyll mutants. In: International conference on achieving sustainable pulses production in Pakistan. 20-22 March, NARC Islamabad.
- 206) I. Afzal, S. M. A. Basra, M. Ashraf and **A. Hameed**. Physiological enhancement for alleviation of salt stress in spring wheat. (SCIAS 004). International symposium on strategies for crop improvement against abiotic stress, 18-20 Sep, 2006. Department of Botany, University of Agriculture Faisalabad, Pakistan.
- 207) **Amjad Hameed**, Haroon Riaz, Hina Sayed, Nayyer Iqbal, M. Ahsanul Haq & Salman Akbar Malik. Dynamics and effect of H₂O₂ on the proteolytic apparatus during early ontogenesis in wheat (*Triticum aestivum* L) (9NCPS-3-27). 9th National conference of Plant Scientists 13-15 Feb, 2006 the institute of botany, University of Sindh, Jamshoro, Pakistan. (NP)
- 208) Annam Mahmood, **Amjad Hameed**, Munir A. Sheikh, Laila Jafri and Aliya errum, Biochemical analysis and role of gibberellic acid(GA) application for abiotic stress tolerance in wheat (*Triticum aestivum* L). 18th FAOBMB Symposium, Genomics and Proteomics in health and agriculture, Lahore, Pakistan. Nov 20-23, 2005. PD2-20, pp: 197.
- 209) Laila Jafri, **Amjad Hameed**, Munir A. Sheikh, Annam Mahmood and Aliya errum, Biochemical analysis and role of reactive oxygen species (ROS) scavengers in oxidative stress tolerance in wheat (*Triticum aestivum* L). 18th FAOBMB Symposium, Genomics and Proteomics in health and agriculture, Lahore, Pakistan. Nov 20-23, 2005. PD2-12, pp: 192.
- 210) **Amjad Hameed**, H Syed, N. Iqbal and M.A Haq, Catalase dynamics during early ontogenesis in wheat (*Triticum aestivum* L) seedling growing under etiolation alone and in combination with oxidative stress. Proc. Seminar on 4th International Science Conference, Oct 6-9, 2004, Muzaffrabad, Azad Kashmir. (Oral presentation).
- 211) **Amjad Hameed**, Haroon Riaz, Munir A Sheikh, Nayyer Iqbal, Rubina Arshad and Shafqat Farooq. Exogenous H₂O₂: age and organ specific accumulation of ascorbic acid during early ontogenesis in etiolated wheat seedlings. 4th International & 14th National Chemistry Conference from May 16-18, 2004. PCSIR laboratories Lahore, Pakistan. (Oral presentation).
- 212) Rubina Arshad Syed Shahid Ali, Nayyer Iqbal, **Amjad Hameed** and Shafqat Farooq. Optimal conditions for mutagenesis by UV irradiation in Penicillin G Acylase and β-lactamase producing *E. coli*. 4th International & 14th National Chemistry Conference from May 16-18, 2004. PCSIR laboratories Lahore, Pakistan. (Oral presentation).
- 213) Rubina Arshad Syed Shahid Ali, Nayyer Iqbal, **Amjad Hameed** and Shafqat Farooq. Effect of of acridine orange on Penicillin Acylase and β-lactamase activity in *E. coli*. 24th Pakistan congress of Zoology (International). Mar-30 to April-01, 2004. Islamabad, Pakistan. (Oral presentation).
- 214) **Amjad Hameed**, Salman Akbar Malik, Nayyer Iqbal, Rubina Arshad and Shafqat Farooq, Exogenous H₂O₂: A new anti-apoptotic effect in wheat roots. 4th European Workshop on Cell Death. Istanbul, May 11th –16th, 2004. pp22. (NP)
- 215) Shafaqat Ali, **Amjad Hameed**, Farwa Nurjis, Nasir Ahmad, and Javed Anver Qureshi. Studies on Hepatitis B Virus in Diabetic and Nondiabetic Subjects. 7th International Conference on Trends in Biochemistry and Mollecular Biology, University of the Punjab, Lahore Pakistan, April, 2 – 5, 2003.
- 216) Farwa Nurjis, Shafaqat Ali, **Amjad Hameed**, Nasir Ahmad, Wajahat Hussain, and Javed Anver Qureshi. Studies on Diabetic Patients with HCV Infection. 7th International Conference on Trends in Biochemistry and Mollecular Biology, University of the Punjab, Lahore Pakistan, April, 2 – 5, 2003.
- 217) Shafaqat Ali, **Amjad Hameed**, Farwa Nurjis, Nasir Ahmad, Wajhat Hussain, and Javed Anver Qureshi. Polymerase Chain Reaction (PCR): A More Reliable Method for HBV Diagnosis. 7th International Conference on Trends in Biochemistry and Mollecular Biology, University of the Punjab, Lahore Pakistan, April, 2 – 5, 2003.
- 218) Nasir Ahmad, Aashya Sharif, Muhammad Shafique, Shafaqat Ali, Farwa Narjis, **Amjad Hameed** and Javed Anver Qureshi. Clinical and Molecular Studies of Hepatitis C Virus In and Around Faisalabad. 7th International Conference on Trends in Biochemistry and Mollecular Biology, University of the Punjab, Lahore Pakistan, April, 2 – 5, 2003.
- 219) Aaysha Sharif, **Amjad Hameed**, Fazli Rabbi, Nasir Ahmad, Wajahat Hussain and Javed, Anver Qureshi. Striking Differences in Serum / Plasma Proteins in Pakistani Diabetic Patients. 7th International Conference on Trends in Biochemistry and Mollecular Biology, University of the Punjab, Lahore Pakistan, April, 2 – 5, 2003.

10.8 Project reports

- 220) Final technical report of PSF project (P-NIAB-BIO-353) entitled “Studying the role of anti-oxidant enzymes in controlling programmed cell death (PCD) triggered in plants in response of exogenous stresses”

221) 2nd annual technical report of PSF project (P-NIAB-BIO-353) entitled “Studying the role of anti-oxidant enzymes in controlling programmed cell death (PCD) triggered in plants in response of exogenous stresses”

222) 1st annual technical report of PSF project (P-NIAB-BIO-353) entitled “Studying the role of anti-oxidant enzymes in controlling programmed cell death (PCD) triggered in plants in response of exogenous stresses”

11 LECTURES/PRESENTATIONS

- 1) Thalassaemia an inherited disorder” at Department of Biochemistry, University of Agriculture, Faisalabad.
- 2) SOS response in DNA repair” at Department of Biological Sciences, Quaid-i-Azam University, Islamabad.
- 3) Mechanism of protein synthesis” at Department of Biological Sciences, Quaid-i-Azam University, Islamabad.
- 4) TILLING: An advanced reserve genetics technique. Divisional seminar at NIAB on Nov. 29, 2011.

12 MEMBERSHIP OF PROFESSIONAL SOCIETIES

Life membership of Pakistan Botanical Society
 Life membership of Biotechnology Society of Pakistan
 Life member ship of Pakistan Nuclear Society (2679)

13 PROFESSIONAL TRAININGS & VISITS

1. 1st Pakistan BCH National Workshop, February 28-March 2, 2022, organized by UN Environment program / Ministry of Climate Change, Islamabad, Pakistan (Online)
2. Scientific visit to Bahri Dagdas International Agricultural Research Institute (BDIARI), Konya, Selcuk University Konya and Istanbul University, Istanbul, Turkey from 05-16 December 2016.
3. One day symposium on “DNA Barcoding: A promising tool for species identification and Biodiversity digitization” held on Jan 30, 2012 at NIBGE Faisalabad.
4. Training workshop on “Bioinformatic Applications in Biotechnology for the Young Biotechnologists” sponsored by Islamic Educational, Scientific and Cultural Organization (ISESCO), and Forman Christian College (A Chartered University) Dec. 09-11, 2011 at FC College Lahore.
5. Awareness Seminar-II ISO 9001:2008 Quality Management System-Internal audit held at NIAB on Jan 13, 2011.
6. Awareness Seminar-I ISO 9001-2008 Quality Management System held at NIAB on Jan 06, 2011
7. “Quality management and its significance in the current scenario” One day training seminar by Directorate of Quality assurance PAEC held on 22 March 2005 at NIAB, Faisalabad.
8. 29th postgraduate training course on nuclear and advanced techniques involved in agriculture and biology, held at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad, Pakistan. Sep 2000.

14 HUMAN RESOURCE DEVELOPMENT

14.1 STUDENTS SUPERVISED (TOTAL 109)

PhD (As Supervisor)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Javeria Ashiq PHA-902550-2023	Biology (NIAB/PIEAS)	Characterization of cotton germplasm for seed biochemical and nutritional attributes through integrated profiling approaches	In P.
2.	Zara Rasheed 13-7P1-009-2021	Biology (NIAB/PIEAS)	Characterization of lentil germplasm for heat stress tolerance using integrated approaches	In P.
3.	MARIAM ILYAS 13-7P1-004-2017	Biology (NIAB/PIEAS)	Screening and characterization of chickpea mutants for herbicide tolerance	2025
4.	Fareeha Riaz 13-7P1-001-2017	Biology (NIAB/PIEAS)	Characterization of lentil germplasm using biochemical and molecular approaches	2025
5.	Asima Noreen 13-7P1-003-2018	Biology (NIAB/PIEAS)	Characterization of chickpea germplasm for pod borer (<i>Helicoverpa armigera</i> Hubner) tolerance through integrated approaches	2024
6.	Bushra Raza 13-7P1-006-2016	Biology (NIAB/PIEAS)	Characterization of tomato germplasm for nutritive and heat resilient traits through integrated profiling approaches	2024
7.	Saima Jameel 13-7P1-004-2016	Biology (NIAB/PIEAS)	Characterization of Chickpea Germplasm for Yield and Seed Attributes through Different Integrated Profiling Approaches	2023
8.	Anam Khalid Rai (13-7P1-01-2014)	Biology (NIAB/PIEAS)	Characterization of Wheat Germplasm through Integrated Profiling Approaches	2019
9.	Zohra Zareen 2015-GCUF-402	Applied Chemistry (GCUF)	Phytochemical and Biological Investigations of selected species of <i>Ebenaceae</i> family	2018

In P. = In Progress, T. Sub. = Thesis Submitted, T. Def. = Thesis Defended,

PhD (As Co-supervisor)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Ghulam Muhy Ud Deen 13-7P1-003-2022	Biology (NIAB/PIEAS)	Unveiling genetic potential in rice (<i>Oryza sativa</i> L.) for thriving under abiotic stressed climate	In P.
2.	Aziz ur Rehman 13-7P1-006-2022	Biology (NIAB/PIEAS)	Effect of Moringa oleifera leaf extract and chitosan-zinc oxide nanoparticle inclusion in semen extender on post-thaw sperm quality and fertility in small	In P.

			ruminants	
3.	Rida Fatima 13-7P1-010-2020	Biology (NIAB/PIEAS)	Microbiome diversity related to different phases of reproduction and their alteration with dietary approaches in goats	In P.
4.	Ayesha Fatima 3-7P1-016-2020	Biology (NIAB/PIEAS)	Role of selenium and vitamin E in cadmium-induced reproductive toxicity and microbiota alteration in rabbits	In P.
5.	Mehak Naveed 13-7P1-006-2020	Biology (NIAB/PIEAS)	Identification and evaluation of chickpea germplasm for heat and herbicide tolerance	In P.
6.	Ayesha Arooj 13-7P1-012-2019	Biology (NIAB/PIEAS)	Evaluation of chickpea (<i>Cicer arietinum</i>) genotypes for tolerance against gram pod borer (<i>Helicoverpa armigera</i>) through phenotypic and biochemical analysis	In P.
7.	Areeqa Shamshad 13-7P1-011-2019	Biology (NIAB/PIEAS)	Development of climate resilient rice (<i>Oryza sativa</i> L.) germplasm suitable for limited water conditions through induced mutation, biochemical and molecular approaches	2025
8.	Shahwar Fatima 13-7P1-006-2018	Biology (NIAB/PIEAS)	Improving resilience to disease and water stress in rice (<i>Oryza Sativa</i> L.) through induced mutation	2025
9.	Angleena Yaseen 13-7P1-001-2019	Biology (NIAB/PIEAS)	Determination of fatty acids relationship with estrus behavior and its supplementation effect on fertility in Lohi Sheep	2025
10.	Sehar Nadeem 13-7P1-003-2019	Biology (NIAB/PIEAS)	Molecular Analysis of Cotton Leaf Curl Disease in <i>Gossypium hirsutum</i> through transcriptomic profiling.	In P.
11.	Maryam Liaqat 13-7P1-005-2018	Biology (NIAB/PIEAS)	Genetic characterization and evaluation of drought tolerance in bread wheat (<i>Triticum aestivum</i> L.) through association mapping.	In P.
12.	Ali Afzal 13-7P1-008-2017	Biology (NIAB/PIEAS)	Effect of Moringa oleifera feed supplementation on reproductive and productive performance in goats	2022
13.	Adil Rehman 13-7P1-002-2016	Biology (NIAB/PIEAS)	Quality parameters and shelf life enhancement using coating techniques for fruits and vegetables	2021
14.	Nasir Mahmood 13-7P1-007-2016	Biology (NIAB/PIEAS)	Effect of Antioxidant Supplementation on Reproductive and Biochemical Parameters during Pregnancy and Lactation in Goats	2021
15.	Saba Akram	Biology (NIAB/PIEAS)	Association mapping in bread wheat through morpho-biochemical profiling and salt stress tolerance	2021
16.	Alia Ahmed (2000/UB-2016/R-346)	Department of Botany, University of Balochistan, Quetta	Characterization of selected wild medicinal plants of Zygophyllaceae from Balochistan through integrated approaches	2020
17.	Hafiz Muhammad Fahad Raza 13-7P1-002-2014	Biology (NIAB/PIEAS)	Occurrence, exposure assessment and reduction strategies of Deoxynivalenol and T-2 mycotoxins, in wheat and corn	2020
18.	Sayed Waqas Galani	Biology (NIAB/PIEAS)	Development of Heterotic Groups for Hybrid Production in Tomato	2019
19.	Aneela Ulfat 2004-Gkig-630	Botany (University of Azad Jammu and Kashmir, Muzaffarabad)	Effect of salicylic acid and gibberellic acid on morphological and physiological changes in drought-stressed wheat (<i>Triticum aestivum</i> L.) crop	2018.
20.	Hina Shahzadi (2001-ag-414)	Biochemistry(UAF)	Effect of Zea maize phenolic on glycation end products.	2014

In P. = In Progress, T. Def. = Thesis Defended

PhD (Partial research work)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Eram Shahzadi Roll. No.:1221	Botany (GCUF)	Growth and physiological responses of mungbean { <i>Vigna radiate</i> (L.) Wilczek } to elevated tropospheric ozone and foliar application of plant growth regulators	2019
2.	Rehana Kauser 2007-GCUF-2363-126	Zoology (GCUF)	Studies to improve reproductive performance of female buffalo using estrus synchronization strategies	2014
3.	Razia Kauser (94-ag-1511)	Anatomy (UAF)	Comparative reference values of somatic cells, enzymes and some biochemical constituents in the milk from uninfected mammary glands of Nili-Ravi buffaloes, Sahiwal and cross bred cows	2014
4.	Ghulam Abbas (88-ag-1224)	P.B.G. (UAF)	Breeding Strategies to improve yield and quality traits of mungbean	2015
5.	Arruje Hameed (2004-ag-25)	Biochemistry(UAF)	Biochemical aspects of drought tolerance Induced by seed priming in wheat	2012
6.	Muhammad Kashif Nadeem (96-ag-632)	Entomology (UAF)	Determination of insecticides resistance, its mechanisms and management in fruit fly, <i>bactrocera zonata</i> (saunders) (diptera: tephritidae)	2011
7.	Fayyaz Rasool (2007-VA-517)	Fisheries (UVAS)	Studies on genetic diversity of <i>labeo rohita</i> and <i>cirrhinus mrigala</i> by using molecular markers in punjab-pakistan	2012
8.	Muhammad Shahid (95-ag-615)	Biochemistry(UAF)	Purification and characterization of bioactive peptides/proteins from medicinal plants.	2007
9.	Syed Hammad Raza (95-ag-670)	Botany (UAF)	Alleviation of the adverse effect of salinity on hexaploid wheat by exogenous application of glycinebetaine	2006
10.	Irfan Afzal (94-ag-1040)	Agronomy (UAF)	Seed enhancements to induce salt tolerance in wheat (<i>Triticum aestivum</i> L.)	2005

T. Sub. = Thesis submitted, In P. = In Progress

M. Phil (As supervisor)

25-Mar-26

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Zoha Shabeer 13-6-1-025-2023	Biology (NIAB/PIEAS)	Characterization of rice germplasm for seed nutritional quality through integrated profiling approaches	2025
2.	Wajeeha Tariq 13-6-1-023-2023	Biology (NIAB/PIEAS)	Identification of chickpea genetic resources having drought, heat and combined stress tolerance through integrated marker assisted approaches	2025
3.	Ayesha Safdar 13-6-1-004-2022	Biology (NIAB/PIEAS)	Screening of cotton genotypes with low moisture, heat and combined stress tolerance using integrated marker assisted approaches	2024
4.	Noor Fatima 13-6-1-014-2020	Biology (NIAB/PIEAS)	Genetic and Molecular Analysis of Generation Means for Seedling Vigour in Mungbean (<i>Vigna radiata</i> L. Wilczek)	2022
5.	Abdaal Ali 13-6-1-001-2019	Biology (NIAB/PIEAS)	Genetic confirmation of tomato hybrids, their biochemical and molecular evaluation for nutritional quality and disease resistance.	2021
6.	Wajeeha Munawar	Biology (NIAB/PIEAS)	Screening of salinity tolerance in cotton through morpho-physiological, biochemical and molecular approaches	2020
7.	Sadia Javaid 13-6-1-013-2017	Biology (NIAB/PIEAS)	Comparative analysis of mungbean germplasm for nutritive quality, therapeutic and antioxidant potential	2019
8.	Asima Noreen 13-6-1-003-2016	Biology (NIAB/PIEAS)	Genome Wide Analysis of APETALA2 Family and Improvement in Drought Tolerance in Chickpea by Seed Priming	2018
9.	Toba Ali	Biology (NIAB/PIEAS)	Screening of Cold tolerance in Chickpea through Physio-biochemical and Molecular Approaches.	2017
10.	Saima Jameel	Biology (NIAB/PIEAS)	Analysis of Individual and Combined Effects of Irrigation and Heat Stress in Chickpea (<i>Cicer arietinum</i>) Through Integrated Approaches	2016

M. Phil (As Co-Supervisor)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Liba Nasir	Biology (NIAB/PIEAS)		In prog.
2.	Tayyab Mateen	UOS		2025
3.	Tooba Maryam 13-6-1-022-2023	Biology (NIAB/PIEAS)	Characterization of chickpea germplasm for input responsiveness through integrated approaches	2025
4.	Areej Fatima 13-6-1-002-2023	Biology (NIAB/PIEAS)	Evaluation of antioxidant potential of resveratrol compound in tris egg yolk semen extender to improve sperm quality characteristics and fertility rate in Kajli Sheep	2025
5.	ARIBA SHAMAIL 13-6-1-003-2023	Biology (NIAB/PIEAS)	Evaluation of new Tomato hybrids for Yield and Fruit Quality	2025
6.	Tooba Basharat 13-6-1-017-2022	Biology (NIAB/PIEAS)	Evaluation of Lentil (<i>Lens culinaris</i> Medik) Genotypes Against Post Emergence Herbicides	2024
7.	Muhammad Ramzan 13-06-1-010-2022	Biology (NIAB/PIEAS)	Genetic and Physio-biochemical basis of drought and heat stress tolerance in Rice	2024
8.	TAHZEEB Zohra	IMBB UOL	Biochemical comparison of halophyte grasses on goats digestibility	2022
9.	Iram Chaudhary 13-6-1-008-2020	Biology (NIAB/PIEAS)	Effect of low storage temperature on Physiochemical and biochemical properties of fruits of different Tomato Genotypes	2022
10.	Muhammad Hunan Faiz 13-6-1-011-2020	Biology (NIAB/PIEAS)	Genetic Diversity and Stability Analysis of Local Gene Pool of Cotton (<i>Gossypium hirsutum</i> L.)	2022
11.	Shanza Sajjad 2016-AG-6529	CABB UAF	Resistance response of Potato cultivar to <i>Alternaria Solani</i>	2022
12.	Noor Fatima	Biology (NIAB/PIEAS)	Genetic and Molecular Analysis of Generation Means and Hybrid Vigour for Seedling traits in Mungbean [<i>Vigna radiata</i> (L.) Wilczek]	2022
13.	Touqeer Ahmed	Biology (NIAB/PIEAS)	Genetic characterization of mutated M5 generation of cotton through conventional and molecular approaches.	2021
14.	Sana Liaqat	CAS UAF	Evaluation of nanoparticles conferring heat stress tolerance in soybean (<i>Glycine max</i> L.)	2021
15.	Arrooj Anwaar 13-6-1002-2019	Biology (NIAB/PIEAS)	Deciphering the physiological, biochemical and molecular mechanisms associated with water deficit Stress tolerance in Tomato (<i>Solanum Lycopersicum</i>).	2021
16.	Mahnoor Nadeem 13-6-1-007-2019	Biology (NIAB/PIEAS)	Genome-Wide Analysis of bHLH (Basic Helix-Loop-Helix) Family and Evaluation of Chickpea Genotypes for Salt Stress	2021
17.	Muhammad Naveed Akram 2018-GCUF-000798	Biochemistry (GCUF)	Evaluation of Chitosan Nanoparticles Coated With Green Tea Extract as Stress Emulator in Wheat	2020
18.	Maryam Aslam 2014-GCUF-02713	Biochemistry (GCUF)	Evaluation of chitosan nanoparticles coated with Moringa oleifera plant extract as stress emulators in wheat	2020
19.	Ammar Riaz 2013-GCUF-01949	Biochemistry (GCUF)	Comparative Study of Cu-, Zn- and Ca-Chitosan Nanoparticles as Salt Stress Emulator in Wheat	2019
20.	Zaib-UN-Nisa 2013-GCUF- 02500	Biochemistry (GCUF)	Evaluation of copper chitosan nanoparticles as abiotic stress emulators in wheat	2019
21.	Tayba Afzal 2013-GCUF- 08822	Biochemistry (GCUF)	Evaluation of Calcium chitosan nanoparticles as abiotic stress emulators in wheat	2019
22.	Alvina khalid 2017-GCUF-02575	Biochemistry (GCUF)	Evaluation of Zinc Chitosan Nanoparticles as Abiotic Stress Emulators in Wheat	2019
23.	Zobia Zahid	Biology (NIAB/PIEAS)	Screening of cotton germplasm against drought tolerance	2019

24.	Zara Rasheed 13-6-1-020-2017	Biology (NIAB/PIEAS)	Heterosis and correlation study on some economic and Quality parameters in tomato	2019
25.	Anjaleena Yaseen 13-6-1-003-2017	Biology (NIAB/PIEAS)	Effect of Dietary Supplementation of Flavonoids on Reproductive and Biochemical Parameters During Mid and Late Pregnancy of Goats,	2019
26.	Rizwana Tabassum 2014-GCUF-24567	Biochemistry (GCUF)	Evaluation of Benzothiazine as priming agent for improving drought and cadmium (Cd) stress in wheat (<i>Triticum aestivum</i> L.).	2018
27.	Qainat Wadood (13-6-1-010-2016)	Biology (NIAB/PIEAS)	Analysis of physical and chemical mutagens in chickpea (<i>Cicer arietinum</i> L.)	2018
28.	Ashfaq Ahmad (2015-GCUF-23905)	Applied Chemistry G.C.UF	Evaluation of Effects of Benzimidazole Treatments on Wheat under drought and Salt Stress	2017
29.	Areeha Suhail (Reg. # 13-6-1-004-2015)	Biology (NIAB/PIEAS)	Biochemical Alterations in Leaves of Resistant and Susceptible Mungbean Genotypes Infected with Mungbean Yellow Mosaic India Virus	2017
30.	Ali Raza Saqib (13-6-1-001-2015)	Biology (NIAB/PIEAS)	Genetic manipulation of Mung × Mash recombinant inbred lines through introgression to recover parental genomes in new recombinants.	2017
31.	Afzal Hussain	Environmental Sciences (GCUF)		2017
32.	Anam Rasheed	Biology (NIAB/PIEAS)	Studies to Establish Selection Criteria in F4 and F5 Generations of Cotton (<i>Gossypium hirsutum</i> L.)	2016
33.	Nabila Akram	Applied Chemistry G.C.UF		2016
34.	Shamila Naz (2009-GCUF-3077-320)	Applied Chemistry (GCUF)	Priming effects of synthetic triazole on wheat seed biochemistry	2016
35.	Annam Khalid Rai Roll no. 9243	Biochemistry (GCUF)	Protein profiling and antioxidant activity of certain varieties of <i>Moringa oleifera</i> plant	2014
36.	Tariq Saqlain Roll No. 9353	Applied Chemistry (GCUF)	Study of triazole priming effects on wheat seed biochemistry and germination	2014
37.	Ghazala Nawaz (2011-GCUF-16-215)	Applied Chemistry (GCUF)	Phytotherapeutic analysis of various indigenous medicinal plants	2013
38.	Muhammad Bilal Shakoor (2007-GCUF-841-611)	Environmental Sciences (GCUF)	Citric acid assisted phytoremediation of lead by <i>brassica napus</i> l.	2013
39.	Maham Sadique (2011-GCUF-05138)	Botany(GCUF)	Effect of different exogenous osmolytes on physiological attributes of maize under elevated temperature regimes	2013
40.	Ahsan	Environmental Sciences (GCUF)	Glycine Betaine and Silicon mediated the alleviation of cadmium toxicity in cotton grown in solution culture	2012
41.	Zaheer Ahmed (2006-ag-351)	Biochemistry (UAF)	Biochemical changes in wheat seeds after hormonal and chemical treatments	2012
42.	Shamaila Rafiq (99-ag-1463)	Biochemistry (UAF)	Biochemical and morphological analysis of salinity stress response of wheat (<i>Triticum aestivum</i> L.)	2004

M.Sc. (Hon)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
43.	Sayed Adeel Zafar (2012-ag-663)	P.B.G. (UAF)	Screening of rice (<i>Oryza sativa</i> l.) germplasm for heat stress tolerance by using biochemical and molecular markers	2014
44.	Fahad Munir (2005-ag-140)	Horticulture (UAF)	Tomato seed priming.	2007
45.	Muhammad Irshad (99-ag-1389)	Agronomy (UAF)	Effect of pre sowing seed treatments for alleviation of salinity stress in wheat (<i>Triticum aestivum</i> L.)	2004

M.Sc.

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
1.	Rahila Andleeb Roll No. 7602	Applied Chemistry (GCUF)	Biological screening of Dichloromethane fraction obtained from <i>Neurada procumber</i>	2014
2.	Faisal Shahzad Roll No.7642	Applied Chemistry (GCUF)	Biological screening of hexane fraction obtained from <i>Neurada procumber</i>	2014
3.	Muhammad Samiullah Khan Miazi Roll No.7624	Applied Chemistry (GCUF)	Bioactivity test of selected Azole	2014
4.	Naila Chaman Hameed Roll No. 7603	Applied Chemistry (GCUF)	Bioactivity analysis of N-Heterocycles	2014
5.	Waqas Niaz (2011-gcuf-03782)	Applied Chemistry (GCUF)	Antimicrobial and enzyme inhibitory activities of new compounds	2013
6.	Qurtulain	Applied Chemistry (GCUF)	Antimicrobial and enzyme inhibitory activities of new compounds	2013
7.	Annam Mahmood (2003-ag-114)	Biochemistry(UAF)	Biochemical analysis of GA3 application for abiotic stress tolerance in wheat (<i>Triticum aestivum</i> L.).	2005
8.	Alyia Erum (2003-ag-181)	Biochemistry(UAF)	Proteomic analysis for oxidative stress induced changes in wheat (<i>Triticum aestivum</i> L.)	2005
9.	Laila Jafri (2003-ag-412)	Biochemistry(UAF)	Biochemical analysis and role of ros scavengers in oxidative stress tolerance in wheat (<i>Triticum aestivum</i> L.)	2005

10.	Shazia Naseer (2002-ag-1331)	Biochemistry(UAF)	Studies on mechanism of osmotic stress tolerance in wheat (<i>Triticum aestivum</i> L.).	2004
11.	Samreen Akhtar (2002-ag-1335)	Biochemistry(UAF)	Biochemical characterization of various seed priming treatments of wheat (<i>Triticum aestivum</i> L) for salinity.	2004
12.	Haroon Riaz (2001-ag-1383)	Biochemistry(UAF)	Biochemical and molecular studies on wheats (<i>Triticum aestivum</i> L.) response to oxidative stress.	2003

B.S (Hon)

No.	Name (Reg. No.)	Subject (Uni.)	Dissertation Title	Year
13.	Aysha Gul (2007-GCUF-2161-521)	Bioinformatics & Biotech. (GCUF)	Comparative seed storage protein profiling of tomato	2011
14.	Aysha Saddiqa (Roll # 1272)	Bioinformatics & Biotech.(GCUF)	Seed storage protein profiling of Chickpea genotype.	2010
15.	Memoona Qurashi	Bioinformatics & Biotech. (GCUF)	Comparative seed storage protein profiling of Mungbean genotype.	2010

14.2 Teaching and academics (since 2014) as Professor

Teaching experience as **Associate Professor** (June 2014 to April 2024) and **Professor** (May 03, 2024 to date) at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad campus (Constituent College) of Pakistan Institute of Engineering and Applied Sciences (PIEAS), Islamabad, Pakistan

Offering following postgraduate course to M.Phil. and Ph.D. students

14.2.1 As course coordinator

Bio-504 Experimental Biochemistry and Molecular Biology 4(2+2) Compulsory

Bio-601 Molecular Plant Breeding and Cytogenetics 3(3+0)

Bio-603 Computational Biology 3(2+1)

14.2.2 As Co-coordinator

Bio-605 Plant Stress Physiology and Molecular Biology 3(2+1)

Bio-512 Analytical techniques in Biology 3(2+1) Compulsory

14.3 Professional trainings conducted (National):

14.3.1 As Chief Organizer

1. Since 2019, Chief Organizer and resource person of **NATIONAL WORKSHOP ON “SCIENTIFIC WRITING”** annually held at NIAB, Faisalabad, Pakistan. (06 events)
2. Since 2011, Chief organizer and resource person of training course on “**Biochemical and Molecular Techniques in Plant Breeding**” annually held at NIAB Faisalabad, Pakistan. (14 events)
3. As Chief organizer and resource person conducted **50th Post-Graduate Training Course on Nuclear and Other Advanced Techniques in Agricultural and Biological Research** (September 11-22, 2023)

14.3.2 As resource person/trainer

4. Since 2011, resource person of annual training course “**Modern Techniques in Research on Abiotic Stress Tolerance in Plants**” held at NIAB, Faisalabad.
5. As trainer/resource person conducted a session on “**Developing skills to articulate clear objectives, methodologies, and impact for funding applications**” in a Training Workshop for Mid-Career Faculty -Research Excellence & Publication organized by directorate of Academics, University of Agriculture, Faisalabad, from August 08, to August 12, 2025.
6. Resource person of post-graduate Training Course on “**Hybrid Breeding in Tomato**” April 04-07, 2011 held at NIAB, Faisalabad.
7. Since 2004, faculty member/resource person of **postgraduate training course on nuclear and advanced techniques involved in agriculture and biology**, held annually at Nuclear Institute for Agriculture and biology (NIAB), Faisalabad, Pakistan.
8. Organizer & Resource Person of two weeks (30-07-2007 to 10-08-2007) training course on “**Biochemical and molecular markers/techniques**” specially conducted for training of Seed Analysts (04) from FSC&RD, Islamabad and FSC&RD, Tandojam (01).

14.4 Professional Trainer/Lecturer Experience in trainings conducted by IAEA:

14.4.1 Regional Training Courses

1. As trainer/lecturer delivered a talk entitled “ **TILLING: An advance reverse genetic technique**” in Regional Training Course on Mutation Breeding and other Related Techniques for the Development of Heat Tolerant Cotton Mutants, RAS/5/075, 7 – 18 November **2016**, Nuclear Institute for Agriculture & Biology (NIAB), Faisalabad, Pakistan.

14.4.2 Technical Cooperation Fellowships

2. As trainer/lecturer, participated (02 weeks on Molecular techniques including DNA extraction and quantification, Electrophoreses, gel documentation, Application of molecular markers (RAPD, SSR, ISSR, CAPS, SCAR and planning, designing and execution of TILLING (Reverse genetic techniques) experiments in crop improvement.) in IAEA Technical

Cooperation Fellowship of **Ms Ali Salwa** (EVT2300343-0001-SDN) on TC Fellowship training on Crop production with special focus on Molecular Analysis for mutation Breeding from **21 Oct. 2025 to 22 Dec. 2025**.

3. As trainer/lecturer, participated (02 weeks on Molecular techniques including DNA extraction and quantification, Electrophoreses, gel documentation, Application of molecular markers (RAPD, SSR, ISSR, CAPS, SCAR and planning, designing and execution of TILLING (Reverse genetic techniques) experiments in crop improvement.) in IAEA Technical Cooperation Fellowship of **Ms Lidia Abiael Munuo & Mr Victor Vedasto Ngaiza** on TC Fellowship training on mutation breeding for common beans including irradiating the seeds from 5th August 2024 to 4th October 2024
4. As trainer/lecturer, participated (02 weeks on Molecular techniques including DNA extraction and quantification, Electrophoreses, gel documentation, Application of molecular markers (RAPD, SSR, ISSR, CAPS, SCAR and planning, designing and execution of TILLING (Reverse genetic techniques) experiments in crop improvement) in IAEA Technical Cooperation Fellowship of **Mr. Richman William NDOLE & Mr. ROBERT CHELEO ALPHONCE** TC Fellowship training on mutation breeding for cotton (including irradiating the seeds) (EVT2307004-0002-TZA & EVT2307004-0001-TZA) from 01 July 2024 to 30 August 2024
5. As trainer/lecturer, co-supervised and conducted one month IAEA Technical Cooperation Fellowship of **Ms Alhusaini Zainab Abduljabbar Hussein** on Molecular analysis of selected mutant legume crops lines (EVT2100635-0002-IRQ) from 15th January, 2024 to 14th February 2024
- 6.

14.5 Conferences/farmer days organized

1. Participated in organizing the 2nd “National Conference on Cotton” May 5-6, 2008 held at NIAB, Faisalabad.
2. Participated in organizing “Farmers day on Rabi crops (chickpea, lentil, wheat, tomato) March 21, 2012 held at NIAB, Faisalabad.
3. Participated in organizing the 1st “National Conference on Cotton” May 2-3, 2007 held at NIAB, Faisalabad.

15 CERTIFICATES

1. English proficiency certificate from University of Agriculture Faisalabad, Pakistan.
2. Certificate from Directorate of Quality Assurance (DQA) PAEC, for attending one day seminar “Quality management and its significance in the present scenario” held at NIAB, Faisalabad on March 22, 2005.

16 SOFT SKILLS

M.S. OFFICE, XL-STAT, End Note, UVI-BAND MAP, TESSEL, STRUCTURE, “R”

17 RESEARCH INTERESTS

- Identification/utilization of biochemical and molecular markers for crop improvement
- Molecular and biochemical characterization of programmed cell death
- Plant defence mechanisms under stress.
- Proteomics.

18 Editorial Contributions

1. **Frontiers in Plant Sciences (IF= 5.7) Guest Associate Editor** (in Plant Breeding)
Review Editor (in Plant Abiotic Stress)
2. **Frontiers in Genetics (IF = 3.7) Review Editor** (in Plant Genomics)
3. **Genes (MDPI) Guest Associate Editor**

19 REVIEWER FOR INTERNATIONAL JOURNALS

1. Acta Physiologiae Plantarum (ISSN: 0137-588) Imprint: Springer. IF = **1.305**.
2. African Journal of Biotechnology (ISSN: 1684 -5315) Imprint: Academic Journals. IF = **0.574**
3. Biologia Plantarum (ISSN: 0006-3134) Imprint: Springer. IF = **1.692**.
4. Grasas y Aceites (ISSN: 0017-3495), Imprint: Spanish National Research Council. IF = **0.882**
5. Int. J. Food Sci. Technol. (ISSN: 0950-5423) Imprint: Wiley-Blackwell IF = **1.384**
6. International Journal of Vegetable Science (ISSN 1931-5260) Imprint: Taylor & Francis IF =
7. Journal of Agronomy and Crop Science (ISSN: 1439-037X) Imprint: Willy. IF = **2.151**.
8. Journal of Forestry Research (ISSN: 1007-662X) Imprint: Springer. IF =
9. Journal of Integrative Agriculture (ISSN: 2095-3119) Imprint: China. IF = **0.833**
10. Journal of plant Breeding and Crop Science (ISSN: 2006-9758) Imprint: Academic Journals.
11. Journal of Plant Growth Regulation (ISSN: 0721-7595) Imprint: Springer. IF = **1.99**
12. New Zealand J. Crop & Hort. Sci. (ISSN: 0114-0671) Imprint: Royal Society of New Zealand. IF = **0.605**
13. Pakistan Journal of Agriculture Sciences (ISSN: 0721-7595) Imprint: UAF. IF = **1.240**
14. Pakistan Journal of Botany (ISSN: 0556-3321) Imprint: Pakistan Botanical Society. IF = **0.52**
15. Philippine Agricultural Scientist (ISSN: 0031-7454) Imprint: College of Agriculture, Uni. of the Philippines Los Baños. IF = **0.605**.
16. Physiologia Plantarum (ISSN: 0031-9317) Imprint: Willy-BlackWell. IF = **2.708**.
17. Plant Physiology and Biochemistry (ISSN: 0981-9428) Imprint: Elsevier Science. IF = **2.756**

18. Science of the Total Environment (ISSN: 0048-9697) Imprint: ELSEVIER. IF = **2.60**
19. Natural Product Research
20. Plant Cell and Environment
21. Journal of Natural Fibers (ISSN: 1544-0478) Imprint: Informa UK Limited. IF = **5.323**
22. **Foods** (ISSN: 2304-8158) Imprint: MDPI (Basel, Switzerland), IF = **4.350**
23. **Plants** (ISSN: **2223-7747**) Imprint: MDPI (Basel, Switzerland), IF = **3.935**