CURRICULUM VITAE

Muhammad Azhar Nadeem, PhD

PERSONAL INFORMATION

Place of Birth : Multan (Pakistan)

Marital Status : Married

Gender : Male

Language Known : **Urdu** (National Tongue)

: **English** (Fluent)

Present Address : Department of Field Crops, Faculty of Agriculture and Natural Sciences, Bolu Abant Izzet Baysal University, Bolu, **Turkey.**

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SCHOLISTIC RECORD

- **PhD. (Field Crops)**

  3.93/4.00 CGPPA, Department of Field Crops, Faculty of Agricultural and Natural Science, Bolu Abant Izzet Baysal University Bolu-**Turkey**. 2019*y*.

- **M.Sc *(Hons.) Agronomy***

  First Division (**3.59/4.00 CGPA)** from the department of Agronomy, faculty of Agricultural sciences and technology, Bahauddin Zakariya University, **Multan, Pakistan** in 2014*y*.

- **B.Sc. *(Hons.)Agriculture***

  First Division (**3.72/4.00 CGPA**) from department of Agronomy, faculty of Agricultural sciences and technology, Bahauddin Zakariya University, **Multan, Pakistan** in 2012y.

THESIS

- ***M.Sc Thesis***

  Isolation of *Psb* (Phosphorus solubilizing bacteria) and their effect on the growth and yield of direct seeded and nursery transplanted rice. Department of Agronomy, faculty of Agricultural sciences and technology, Bahauddin Zakariya University **Multan, Pakistan.**

Supervisor: Nazim Hussain

- ***Ph.D Dissertation***

  Identification of Genomic Regions for Various Agronomic Traits in Turkish Common Bean Germplasm with Genome Wide Association Studies (GWAS). Department of Field Crops, Faculty of Agricultural and Natural Science, Bolu Abant Izzet Baysal University Bolu-Turkey

Supervisor: Faheem Shehzad Baloch

BIOINFORMATICS AND STATISTICAL SKILLS

Great expertise for various bioinformatics Tools like:

- TASSEL software for Genome wide association Studies (GWAS) analysis.
- R software for both GWAS and genetic diversity analysis.
- Genes Annotation/ Functional analysis using Phytozome/NCBI.
- Structure software for population structure analysis.
- Pophelper and Admixture for population structure analysis.
- POPGENE, DARWIN and GenAlEx for genetic diversity analysis.
- XLSTAT and JUMP for phenotypic data analysis.

Collaboration with international Universities/Institutes

1. Far Eastern Federal University, Vladivostok, Russian federation
2. Chonnam National University, Chonnam, Korea
3. CREA Research Center for Cereal and Industrial Crops, Bologna, Italy
4. Bahauddin Zakariya University, Multan, Pakistan

PUBLICATIONS

1. **Nadeem MA**, Habyarimana E, Çiftçi V, Nawaz MA, Karaköy T, Comertpay G, Shahid MQ, Hatipoğlu R, Yeken MZ, Ali F, Ercişli S. Characterization of genetic diversity in Turkish common bean gene pool using phenotypic and whole-genome DArTseq-generated silicoDArT marker information. **PloS one**. **2018** Oct 11;13(10):e0205363. (**Impact factor: 2.8**).

2. Baloch FS, Alsaleh A, Shahid MQ, Çiftçi V, de Miera LE, Aasim M, **Nadeem MA**, Aktaş H, Özkan H, Hatipoğlu R. A Whole Genome DArTseq and SNP Analysis for Genetic Diversity Assessment in Durum Wheat from Central Fertile Crescent. **PloS one**. **2017** Jan 18;12(1):e0167821. (**Impact factor: 2.8**).

3. Ali F, Yılmaz A, **Nadeem MA**, Habyarimana E, Subaşı I, Nawaz MA, Chaudhary HJ, Shahid MQ, Ercişli S, Zia MA, Chung G. Mobile genomic element diversity in world collection of safflower (Carthamus tinctorius L.) panel using iPBS-retrotransposon markers. **PloS one**. **2019** Feb 26;14(2):e0211985. (**Impact factor: 2.8**).

4. Karık Ü, **Nadeem MA**, Habyarimana E, Ercisli S, Yildiz M, Yilmaz A, Yang SH, Chung G, Baloch FS. Exploring the genetic diversity and Population structure of Turkish laurel germplasm by iPBS-retrotransposon marker system (**Agronomy**). (**Impact factor: 2.25**). **2019**. 9(10), 647; https://doi.org/10.3390/agronomy9100647.

5. Yildiz M, Koçak M, **Nadeem MA**, Cavagnaro P, Barboza K, Baloch Fs, Argün D, Keleş D. Genetic diversity analysis in the Turkish pepper germplasm using iPBS retrotransposon-based markers. **Turkish Journal of Agriculture and Forestry. 2019**:43. DOI: 10.3906/tar-1902-10. (**Impact factor: 1.73**)

6. Ali F, Yilmaz A, **Nadeem MA,** Nawaz MA, Arslan Y, Chaudhary HJ, Shahid MQ, Ercişli S, Chung G, Baloch FS. Investigation of Morpho-Agronomic Performance and Selection Indices in the International Safflower Panel for Breeding Perspectives. (**Turkish journal of agriculture and forestry**). **2019**. DOI: 10.3906/tar-1902-49. (**Impact factor: 1.73**).

7. Yaldiz G, Camlica M, **Nadeem MA**, Nawaz MA, Baloch FS. Genetic diversity assessment in Nicotiana tabacum L. with iPBS-retrotransposons. Turkish Journal of Agriculture and Forestry. **2018**. Jun 1;42(3):154-64. (**Impact factor: 1.73**).

8. **Nadeem MA**, Nawaz MA, Shahid MQ, Doğan Y, Comertpay G, Yıldız M, Hatipoğlu R, Ahmad F, Alsaleh A, Labhane N, Özkan H. DNA molecular markers in plant breeding: current status and recent advancements in genomic selection and genome editing. Biotechnology & Biotechnological Equipment. **2018**. Nov 1:1-25. (**Impact factor: 1.09**).

9. Arystanbekkyzy M, **Nadeem MA**, Aktas H, Yeken MZ, Zencirci N, Nawaz MA, Ali F, Haider MS, Tunc K, Chung G, Baloch FS. Phylogenetic and taxonomic relationship of Turkish Wild and Cultivated Emmer (Triticum turgidum ssp. dicoccoides) Revealed By iPBS-Retrotransposons Markers. International Journal of Agriculture and Biology. **2019**. DOI: 10.17957/IJAB/15.0876. (**Impact factor: 0.802**).

10. Ekincialp A, Erdinc C, Turan S, Cakmakci O, **Nadeem MA,** Baloch FS, Sensoy S. Genetic characterization of Rheum ribes L. (wild rhubarb) genotypes in Lake Van Basin of Turkey through ISSR and SSR markers. International Journal of Agriculture and Biology. **2018**. DOI: 10.17957/IJAB/15.0958. (**Impact factor: 0.802**).

11. Erdemci I, AKTAŞ H, **Nadeem MA**. Effect of fertilization and seed size on nodulation, yield and yield components of chickpea (cicer arietinum l.). Applied

ecology and environmental research. **2017.** Jan 1;15(1):563-71. (**Impact factor: 0.721**).

12. Ali F, Yılmaz A, **Nadeem MA**, Habyarimana E, Yilmaz A, Nawaz MA, Khalil IH, Chaudhary HJ, Ercişli S, Chung G, Chaudhary HJ, Baloch FS. Molecular characterization of genetic diversity and similarity centers of safflower accessions with ISSR markers. **2019**. (Accepted in **Brazilian Journal of Botany**). (**Impact factor: 0.958**).

13. Karaköy T, **Nadeem A**, Ton A, Çilesiz Y, Anlarsal AE, Hatipoğlu R. Characterization and selection of alfalfa cultivars based on agronomic and Quality characteristics information from continental climatic conditions of Turkey. Fresenius environmental bulletin. FEB_19_00834. (**Accepted**) (**Impact factor: 0.34**).

14. Tahir M, **Nadeem A**, Hussain N, Ijaz M, Shahid M, Khan MB, Ali H. Plant growth promoting rhizobacteria improve growth of nursery transplanted rice under agro ecological conditions of Southern Punjab. Environ Plant Syst. **2015**;1:22-7. (Non Sci).

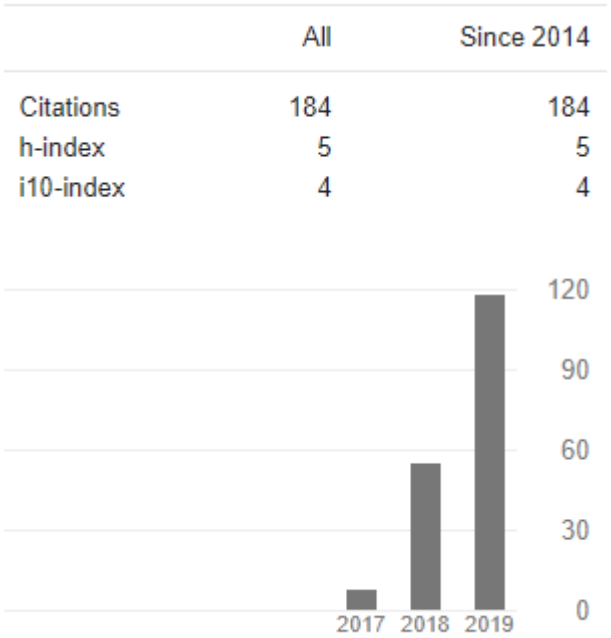
15. Yeken MZ, **Nadeem MA**, Karaköy T, Baloch FS, Çiftçi V. Characterization of Turkish Common bean Germplasm for morpho-agronomic and mineral variations for breeding perspectives in Turkey. (Kahramanmaraş Sütçü İmam University Journal of Agriculture and Nature). **2019**.22: 39-51. DOI: 10.18016/ksutarimdoga.vi.549996. (Non Sci).

TOTAL CITATIONS

According to google scholar

Citations: 184

h-index: 5:



(https://scholar.google.com.pk/citations?user=6MP3BuoAAAAJ&hl=en)

Published Book chapters

- **Nadeem MA,** Aasim M, Kırıcı S, Karık Ü, Nawaz MA, Yılmaz A, Maral H, Khawar KM, Baloch FS. Laurel (Laurus nobilis L.): A Less-Known Medicinal Plant to the World with Diffusion, Genomics, Phenomics, and Metabolomics for Genetic Improvement. InBiotechnological Approaches for Medicinal and Aromatic Plants. **2018** (pp. 631-653). Springer, Singapore.

- Aasim M, Baloch FS, **Nadeem MA**, Bakhsh A, Sameeullah M, Day S. Fenugreek (*Trigonella foenum-graecum* L.): An Underutilized Edible Plant of Modern World. InGlobal Perspectives on Underutilized Crops. **2018** (pp. 381-408). Springer, Cham.

- Aktas H, Rasheed A, Sajjad M, Cabi E, **Nadeem MA**, Baloch FS. Taxonomy, Evolution, Distribution and origin. In Hulled wheat. Nusret Zencirci. (Edtitor). Buch Gebunden, 249 Seiten, Englisch, Springer, Berlin, **2018**, 1st ed.

Submitted and Under Review Process Papers

1. **Nadeem MA,** Gündoğdu M, Ercisli S, Karaköy T, Habyarimana E, Lin X, Nawaz MA, Sameeullah M, Hatipoğlu R, Ahmad F, Chung G, Baloch FS. Uncovering Phenotypic Diversity and DArTseq Marker Loci Associated With Antioxidant Activity in Common Bean. (**Genes).** (**Impact factor: 3.331**).

2. **Nadeem MA,** Yeken MZ, Habyarimana E, Karaköy T, Nawaz MA, Hatipoğlu R, Sönmez F, Gündoğdu M, Shahid MQ, Chung G, Baloch FS. Phenotypic characterization of 183 common bean accessions for agronomic, trading, and consumer preferred plant characteristics for breeding purposes in Turkey. (**Agronomy**). (**Impact factor: 2.25**).

3. Ali F, **Nadeem MA**, Habyarimana E, Yilmaz A, Khalil IH, Chung G, Chaudhary HJ, Baloch FS. Molecular characterization of genetic diversity, population structure and similarity centers exploration in international safflower panel using whole-genome DArTseq-generated silicoDArT marker information. **2019**. (**International Journal of Molecular Sciences**). (**Impact factor: 4.18**)

4. Zia AB, **Nadeem MA,** Demirel U, Çalıskan ME. Genome-Wide Association Study Identifies Various Loci Underlying Various Agronomic and Morphological Traits in world Potato panel. (**Physiology and Molecular Biology of Plants**). (**Impact factor: 1.15**).

5. Vasquez Guizado. S, **Nadeem MA**, Ali, F, Yilmaz A, Nawaz MA, Baloch FS. Conservation implications, genetic diversity and population structure of endangered rosewood from Peruvian Amazon using ISSR markers. (**Acta amazonica**) (**Impact factor: 1.04**).

6. Barut M, **Nadeem MA**, Karakoy T, Baloch FS. Deciphering the genetic diversity and population structure of world quinoa germplasm with iPBS-retrotransposons markers. (**Turkish journal of agriculture and forestry**). (**Impact factor: 1.73**).

7. Karaköy T, **Nadeem MA**. Assessment of micro and macro nutrients diversity in field pea germplasm. (**Pakistan Journal of Agricultural Sciences**). (**Impact factor: 0.69**).

Abstract & Conferences

- Faheem Shehzad Baloch, Muhammad Sameeullah, Vahdettin Çiftçi, **Muhammad Azhar Nadeem,** Rüştü Hatipoğlu. Genetic characterization of Turkish bread wheat landraces using iPBS retrotransposons markers. International Conference on Engineeering nad Natural Sciences, 24-28 May, 2016, **Sarajevu, Bosnia and Herzegovina.**

- Faheem Shehzad Baloch, Ahmad Alsaleh, Vahdettin Çiftçi, **Muhammad Azhar Nadeem**, Gonul comertay, Husnu Aktaş, Hakan Özkan, Rüştü Hatipoğlu. Durum Wheat in Central Fertile Crescent; Biodiversity, characterization and utilization. "The International Symposium on Biodiversity and Edible Wild Species (BEWS2017)" on 3-5 April 2017, **Antalya Turkey**.

- Faheem Shahzad BALOCH, Rüstü HATĠPOĞLU, **Muhammad Azhar NADEEM**, Mehtap YILDIZ, Mehmet Zahit YEKEN, Abdurrahim YILMAZ, Fawad ALI.

Molecular Markers in Plant Breeding: KASP; a Recent Tool in Efficient Breeding. International Agricultural Science Congress 09-12 May 2018. **Van/Turkey**.

- Faheem Shahzad BALOCH, **Muhammad Azhar Nadeem**, Muhammad Amjad Nawaz, Ephrem Habyarimana, Gonul comertay, Tolga Karakoy, Rüstü Hatġpoğlu, Vahdettin Çiftçi. 7th International Food Legumes Research Conference, Marrakesh, **Morocco**, May 06-08, 2018.

- Bean Genetic Resources in Turkey; Diversity and Characterization. Faheem Shehzad Baloch, **Muhammad Azhar Nadeem**, Tolga Karaköy, Mehmet Zahit Yeken, Rustu Hatipoğlu, Fawad Ali, Vahdettin Çiftçi. INTERNATIONAL ECOLOGY 2018 SYMPOSIUM 19-23 June 2018, **Kastamonu/TURKEY**.

- Future breeding strategies for dealing with climate change. Faheem Shehzad Baloch, **Muhammad Azhar Nadeem**, Quahir Sohail, Gonul comertay, Rüstü Hatġpoğlu. International Conference 'Climate Smart Agriculture: The way of farming for 21st Century' October 08-09, 2018 at MNS- University of Agriculture **Multan-Punjab, Pakistan**.

- Variation of some seed mineral contents in 236 bean (*Phaseolus vulgaris* L.) landraces in Turkey (2018). Tolga Karaköy Ehmet Zahit Yeken, Faheem Shahzad Baloch, **Muhammad Azhar Nadeem**, Vahdettin Çiftçi. International Agriculture Congress, Komrat, Republic Of Moldova.

- Molecular Markers in Plant Breeding: KASP a recent tool in efficient breeding (2018). Abdurrahim Yilmaz Faheem Shahzad Baloch, Rüştü Hatipoğlu, **Muhammad Azhar Nadeem**, Mehtap Yildiz, Mehmet Zahit Yeken. International Agricultural Science Congress, 09-12 May 2018, **Van/Turkey**.
- Elucidating the Various Quality Characteristics of Alfalfa Cultivars under Mediterranean Climatic Conditions of Turkey (2019). **Muhammad Azhar**

NADEEM, Yeter ÇİLESİZ, Emine Serap Kızıl AYDEMİR, Tolga KARAKÖY. II. International Agricultural Congress (UTAK 2019). 21-24 November **2019**, pp:107.

- Evaluation of Italian Grass Varieties in Terms of Some Quality Characteristics. Yeter ÇİLESİZ, **Muhammad Azhar NADEEM**, Emine Serap Kızıl AYDEMİR, Tolga KARAKÖY. II. International Agricultural Congress (UTAK 2019). 21-24 November **201**9, pp:119

Upcoming Articles/Under writing stage

1. **Nadeem MA** and Baloch FS. Genome-wide association study (GWAS) identifies DArTseq loci associated with flowering traits in Turkish common bean germplasm. (Target journal: **Turkish journal of Agriculture and Forestry**). (**Impact factor: 1.73**)
2. **Nadeem MA**, Karaköy T, Habyarimana E, Nawaz MA, Comertpay G, Shahid MQ, Chung G, Baloch FS. Genome-wide association study (GWAS) identifies novel and functionally related DArTseq loci for Fe and Zn in Turkish common bean germplasm. (Target journal: **BMC genomics**). (**Impact factor: 3.73**)
3. Yilmaz A, **Nadeem MA,** Ali F, Habyarimana E, Nawaz MA, Ercişli S, Chung G, Baloch FS. Molecular characterization of medicinally important plant *Laurus nobilis* L. using the ISSR and Scot markers. (Target journal: **Industrial crops and products**). (**Impact factor: 4.19**).
4. Baloch FS, **Nadeem MA**, Karik U, Habyarimana E, Chung G. Investigation of genetic diversity and population structure of Turkish laurel germplasm using DArTseq markers. (Target journal: **Genes**). (**Impact factor: 3.33**).

5. Vasquez Guizado. S, **Nadeem MA**, Habyarimana E, Ali, F, Yilmaz A, Nawaz MA, Hatipoğlu R, Baloch FS. Characterization of genetic diversity in Peru Aniba rosaeodora gerplasm using whole-genome DArTseq-generated silicoDArT marker information. (Target journal: **Frontiers in Plant sciences**). (**Impact factor: 4.10**).

Projects:

2016

1. Türkiyedeki Fasulye Gen Kaynaklarının Önemli Agronomik, Fiziko-Kimyasal, Mineral, Antioksiden Ve Pişirme Özelliklerinin Genomik Bölgelerinin Genom Çapı Ilişkilendirme Çalışmaları (Gwas) Ile Belirlenmesi. Project No: TOVAG-215O630, TÜBİTAK, **PhD Scholarship Holder** (**Completed**)

2017

1. Characterization of common bean using DArTseq markers. Project No: 2017.10.07.1208. **(Researcher)** (**Completed**).
2. Determination of effects of biochar and PGPR applications on wheat development and nutrient contents and soil properties. **(Researcher)** BAP Proje no: 2017.10.04.1259

2018

1. Tükiye'deki farklı bölgelerden tedarik edilen defne (*Laurus nobilis* L.) populasyonlarının moleküler karakterizasyonu. Proje No: 2018.10.01.1305. **(Researcher).** (**Completed**).

SCHOLARSHIPS/AWARDS/PRIZES/ACHEIVEMENTS

2011 : Awarded '**laptop**' under the chief minister of Punjab, Pakistan laptop scheme

2016: Awarded **"Doctoral fellowship"** under Project No: TOVAG-215O630.

2017: Awarded "Erasmus Traineeship for Italy" by the Abant Izzet baysal University with the collaboration of European union and successfully completed traineeship at Marche Polytechnic University, Ancona Italy.

2017: Awarded Partial scholarship (No course fee) from the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM IAM) Zaragoza, Spain to attend training on "Advances in breeding and agronomy for improving sustainability and quality of grain legume crops".

Skills:

1. Excellent articles and projects writing skills
2. Molecular Laboratory management and establishment
3. Good knowledge of field experimentation and pheotyping

REFERENCES

Assoc. Prof. Dr. Faheem Shehzad Baloch

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