

CURRICULUM VITAE

Faheem Shahzad BALOCH; PhD

Nationality: Turkey
Current Position: Associate professor
Languages: Turkish (fluent)
Urdu, (mother tongue)
English (fluent)
Address: Department of plant protection, Faculty of Agricultural sciences and technologies, Sivas University of science and Technology, Sivas, Turkey
Phone: (Office): (+90 346) 219 13 98
GSM: +905455404239
Fax: (+90 346) 219 16 78
E-mails: balochfaheem13@gmail.com (preferred)
faheem.baloch@sivas.edu.tr (Official)

Scholistic Records:

2000-2004: **BSc (Hons) Agriculture,**
Department of Agronomy, University College of agriculture,
Bahuddine Zakariya University, Multan, Pakistan

2004-2006: **MSc Agronomy,**
Department of Agronomy, University College of agriculture,
Bahuddine Zakariya University, Multan, Pakistan
Thesis: Effect of Soil applied Zinc Sulphate on Wheat
Supervisor: Assistant Prof. Dr. Muhammad Aslam Khan (Late)

2007-2012: **PhD Field Crops Biotechnology,**
Department of Field Crops, Faculty of Agriculture,
University of Çukurova, Adana, Turkey
Thesis: QTL mapping of some agronomic traits in bread wheat
Supervisor: Prof. Dr. Rüştü Hatipoğlu

Work Experiences:

Period: January 2013-31 December 2015
Position: **Assistant professor**
Institution: Niğde Ömer Halis Demir Üniversitesi/Faculty of agricultural sciences and Technologies, Department of agricultural Genetic engineering
Niğde, Turkey
Status: Academic staff at foreign national quota

Period: January 2015-31 December 2017
Position: **Assistant professor**
Institution: Bolu Abant İzzet Baysal Üniversitesi/Faculty of agricultural and natural sciences /Department of Field Crops

Status: Bolu, Turkey
Academic staff at foreign national quota

Period: January 2018-31 December 2018

Position: **Assistant professor**

Institution: Bolu Abant izzet Baysal Üniversitesi/Faculty of agricultural and natural sciences /Department of Field Crops
Bolu, Turkey

Status: Regular staff at Turkish citizen status

Period: November 2018-August 2020

Position: **Associate professor**

Institution: Bolu Abant izzet Baysal Üniversitesi/Faculty of agricultural and natural sciences /Department of Field Crops
Bolu, Turkey

Status: Regular staff at Turkish citizen status

Period: August 2020-Continued

Position: **Associate professor**

Institution: Sivas university of science and technology/Faculty of agricultural sciences and Technology
Sivas, Turkey

Status: Regular staff at Turkish citizen status

Summary of profil:

Working areas	Total
SCI/SCIE/ESCI articles (Web of Knowledge)	71
Senior Author in articles (Corresponding author: SCI/SCIE/ESCI)	22
National/International peer review articles	08
Book edited	01
Book Chapters	08
SCI/SCIE/ESCI Journal Editorship	01
Posters in national and international conferences	23
Conference oral presentation	23
Journal editorship (SCI/SCIE/ESCI)	01
Special issue editorship (SCI/SCIE/ESCI)	01
Invited speaker	05
TÜBİTAK Project (Principal investigator)	02
Completed TÜBİTAK Proje (Researcher)	02
Agricultural ministry project (TAGEM)-Researcher	01
University BAP Projesi-	19
Hongkong international collaboration (Principal investigator-Turkish side)	01
MSc students (Completed)	02
MSc (Continued)	01
Msc (Co supervised)	01
PhD students (Completed)	01
PhD students (Continued)	01
PhD (co-supervised)	01

PhD student incoming with TUBİTAK fellowship	01
Supervised Post Doc	01

Research Profiles:

Google Scholar: <https://scholar.google.com.tr/citations?user=5ZvxK7gAAAAJ&hl=en>

ORCID: <https://orcid.org/my-orcid>

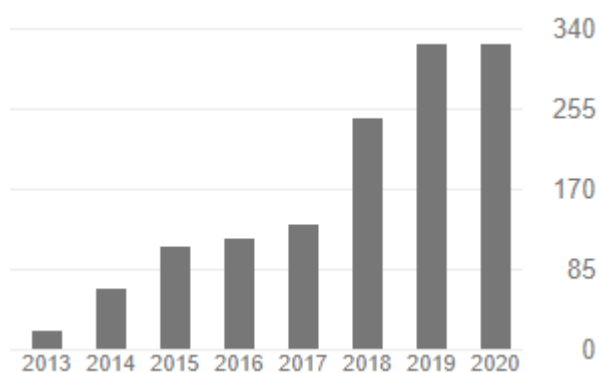
Scopus: <https://www.scopus.com/authid/detail.uri?authorId=25824197600>

Web of Sciences: <https://app.webofknowledge.com/author/#/record/1069689>

Research gate: https://www.researchgate.net/profile/Faheem_Baloch2

Total Citations: 1400 (Google Scholar)

H-index: Web of Science: **16**; Google Scholar: **20**; Scopus: **16**



Main research areas

Scientific activity includes

- Use of DNA molecular markers in plant sciences
- Genome wide association mapping (GWAS) and populations structure analysis.
- Genome profiling and diversity analysis.
- Genetic linkage mapping and Identification of quantitative trait loci (QTL).
- Simultaneous marker-assisted selection for several traits.
- Genomic Selection.
- Varietal identification of crops and genetic purity testing based on DNA.
- Researches on plant molecular evolution and differentiation of genepools, domestication syndrome using molecular markers for evaluation and utilization of plant genetic resources and functional characterization.
- Functional characterization of genes of interest

A. Peer reviewed publications (SCI/SCIE, ESCI)

2008

1. Khan, M. A., Fuller, M. P., **Baloch, F. S.** 2008. Effect of soil applied zinc sulphate on wheat grown on a calcareous soil in Pakistan. **Cereal Research Communications** 36(4), pp: 571-582 (SCI).

2009

2. Yücel, C., **Baloch, F. S.**, Özkan, H. 2009. Genetic analysis of some grain physical properties of bread wheat grain (*Triticum aestivum* L. em Thell). **Turkish Journal of Agriculture and Forestry** 33(6), pp: 525-535.

2010

3. Yediay, F. E., **Baloch, F. S.**, Kilian, B and Özkan, H. 2010. Testing of rye –specific markers located on 1RS chromosome and distribution of 1AL.RS and 1BL.RS translocations in Turkish wheat (*Triticum aestivum* L., *T. durum* Desf.) varieties and landraces. **Genetic Resources and Crop Evolutions**, 57 (1), pp: 119-129.
4. **Baloch, F. S.**, Kurt, C., Arıoğlu, H and Özkan, H. 2010. Assaying of diversity among Soybean (*Glycin max* L.) and peanut (*Archis hypogaea* L.) genotypes at DNA level. **Turkish Journal of Agriculture and Forestry**, 34, pp: 285-301.
5. Yücel, C., **F. S. Baloch.**, Hatipoğlu, R., Özkan, H. 2010. Genetic analysis for pre-harvest sprouting in bread wheat (*Triticum aestivum* L. em Thell). **Turkish Journal of Agriculture and Forestry** 35: 9-22.
6. Özer, S., Karaköy, T., Toklu, F., **Baloch, F. S.**, Kilian, B and Özkan, H. 2010. Nutritional and physico-chemical variations among Turkish kabuli chickpea (*Cicer arietinum* L) landraces. **Euphytica**, 175, pp: 237-249.

2011

7. Andeden, E. E., Yediay, F. E, **Baloch, F. S.**, Kilian, B, Nachit, M and Özkan, H. 2011. Distribution of Vernalization and Photoperiod Genes (*Vrn-A1*, *Vrn-B1*, *Vrn-D1*, *Vrn-B3*, *Ppd-D1*) in Turkish Bread Wheat Cultivars and Landraces. **Cereal Research Communications** 39:352-364.
8. Yediay, F.E., Andeden, E.E., **Baloch, F.S.**, Börner, A., Kilian, B and Özkan H. 2012. The allelic state at major semi dwarfing genes in a panel of Turkish bread wheat cultivars and landraces. **Plant Genetic Resources; Characterization and Utilization** 9:423-429

2012

9. Comertpay, G., **Baloch, F. S.**, Kilian, B Ülger, AC and Özkan, H. 2012 Diversity assessment of Turkish maize landraces based on fluorescent SSR markers. **Plant Molecular Biology reporter**. 30: 261-274
10. Özer, S., Tümer, E., **Baloch, F. S.**, Karaköy, T., Toklu, F., Özkan H. 2012. Nutritional and cooking properties of Turkish field pea landraces. **Journal of Food, Agriculture and Environment** 10(2):324-329.
11. Karaköy, T., Erdem H., **Baloch, F.S.**, Toklu, F., Eker, S, Kilian B., Özkan, H. 2012. Diversity of Macro- and Micronutrients in the Seeds of Lentil Landraces. **The Scientific World Journal** vol.2012.

2013

12. Andeden, E.E., **Baloch, F.S.** Kilian, B. Özkan H. 2013. IPBS-Retrotransposons based genetic diversity and relationship among wild annual *Cicer* species. **Journal of plant Biochemistry and Biotechnology** 22(4); 453-466 DOI 10.1007/s13562-012-0175-5.

2014

13. Karaköy, T., **Baloch, F.S.**, Toklu, F., Özkan, H. 2013. Variation for selected morphological and quality-related traits among 178 faba bean landraces collected from Turkey. **Plant Genetic Resources: Characterization and Utilization** 12(1); 5–13
14. **Baloch, FS.**, Karaköy, T, Dermirbaş, A., Toklu F., Özkan H., Hatipoğlu, R. 2014. Variation of some seed mineral contents in open pollinated faba bean (*Vicia faba* L.) landraces from Turkey. **Turkish Journal of Agriculture and Forestry** 38(5); 591-602 doi: 10.3906/tar-1311-31

2015

15. Alsaleh, A., **Baloch, F.S.**, Derya, M, Azrak, M., Nachit, M., Özkan, H. 2015. Genetic Linkage Map of Anatolian Durum Wheat Derived from a Cross of Kunduru-1149 x Cham1. **Plant Molecular Biology Reporter** 33 (2), 209-220. DOI 10.1007/s11105-014-0749-6.

16. **Baloch FS.**, Derya M., Andeden EE., Alsaleh A., Comertpay G., Kilian B., Özkan H. 2014. Inter Primer Binding Site (iPBS) Retrotransposon and ISSR Diversity among Wild Lens Species. **Biochemical Systematics and Ecology** 58; 162-168 doi.org/10.1016/j.bse.2014.12.002
17. Toklu F., **Baloch FS.**, Karaköy T., Özkan H. 2015. Effect of Different Priming Applications on Seed Germination Properties, Grain Yield and Several other Plant Characters of Bread Wheat. **Turkish Journal of Agriculture and Forestry** 39: 1005-1013
18. Yıldız M., Cuevas HE., Sensoy S., Erdinc Ceknas., Ekincialp E., **Baloch FS.** 2014. Transferability of Cucurbita SSR markers for genetic diversity assessment of Turkish bottle gourd (*Lagenaria siceraria*) genetic resources. **Biochemical Systematics and Ecology** 59, 45-53
19. **Baloch FS.**, Alsaleh A, Miera LuiS., Hatipoğlu R., Çiftçi V., Karaköy T., Yıldız M Özkan H. 2015. DNA based iPBS-retrotransposon markers for investigating the population structure of pea (*Pisum sativum*) germplasm from Turkey. **Biochemical Systematics and Ecology** 61, 244-252
20. Bakhsh A., Khabbazi SD., **Baloch FS.**, Demirel U, Çalışkan ME., Hatipoğlu R., Özcan S., Özkan H. 2015. Insect resistant transgenic crops: retrospects and challenges. **Turkish Journal of Agriculture and Forestry**, 39: 531-548
21. Wang, Y., Shahid, M.Q., Ghouri, F., **Baloch F.S.**, Wang, Y., Huang, H. 2015. Evaluation of the geographical pattern of genetic diversity of Glycine soja and Glycine max based on four single copy nuclear gene loci: For conservation and utilization of soybean germplasm. **Biochemical Systematics and Ecology** 62, 229-235
22. Yıldız, M., Koçak, M., **Baloch, F.S.** 2015. Genetic bottle neck of Turkish okra germplasm and utility of iPBS retrotransposons markers for genetic diversity assessment. *Genetics and Molecular Research* 14 (3): 10588-10602.
23. Andeden, E.E., **Baloch, F.S.**, Çakır, E., Toklu, F., Özkan, H. 2015. Development, characterization, and mapping of microsatellite markers for Lentil (*Lens culinaris* Medik). **Plant Breeding** 134 (5), 589-598
24. M. Naeem, F. Ghouri, M. Q. Shahid, M. Iqbal, **F. S. Baloch**, L. Chen, S. Allah, M. Babar and M. Rana. 2015. Genetic diversity in mutated and non-mutated rice varieties. **Genetic and Molecular Research** 14 (4), 17109.

2016

25. Cömertpay, G., **Baloch, F.S.**, Andeden, E., Derya, M., Özkan, H. 2016. Population structure of rice varieties used in Turkish rice breeding programs determined using simple-sequence repeat and inter-primer binding site-retrotransposon data. **Genetic and Molecular Research** 15 (1): gmr.15017158.
26. **Baloch, F.S.**, ALSaleh,A Andeden, EE., Hatipoğlu,R., Nachit, M., Özkan, H. 2016. High levels of segregation distortion in the molecular linkage map of bread wheat representing WANA (West Asia and North Africa) region. **Turkish Journal of Agriculture and Forestry** 40: 352-364. DOI: 10.3906/tar-1508-27.
27. Shaaf S., Sharma R., **Baloch, F.S.**, Badaeva, E.D., Knüpffer, H., Kilian, B., Özkan, H. 2016. The grain Hardness locus characterized in a diverse wheat panel (*Triticum aestivum* L.) adapted to the central part of the Fertile Crescent: genetic diversity, haplotype structure, and phylogeny. **Molecular Genetic and Genomics** 291; 1259-1275
28. Saleh, A., **Baloch, F.S.**, Nachit, M., Özkan, H. (2016). Phenotypic and genotypic intra-diversity among Anatolian durum wheat "Kundurü" landraces. **Biochemical Systematics and Ecology** 65: 9-16
29. Özer, G., Bayraktar, H., **Baloch, F.S.** 2016. iPBS retrotransposons 'A Universal Retrotransposons' now in molecular phylogeny of fungal phytopathogens **Biochemical Systematics and Ecology** 68; 142-147
30. Waang Y, Shahid MQ, **Baloch FS.** 2016. Phylogeographical studies of Glycine soja: implicating the refugium during the Quaternary glacial period and large scale expansion after Last Glacial Maximum (LGM). **Turkish Journal of Agriculture and Forestry**. DOI: 10.3906/tar-1607-30

2017

31. **Baloch F.S.**, Alsaleh A., Miera Luis., Shahis, MQ., Çiftçi V., Sáenz de Miera L., Aasim M., Nadeem MA., Aktaş H., Özkan H., Hatipoğlu R. 2017. A whole genome DArTseq and SNP assay for diversity assessment in durum wheat from Fertile Crescent. **PLoS One** DOI: 10.1371/journal.pone.0167821
32. Nawaz, M.A., Yang, S.H., Rehman, H.M., **Baloch, F.S.**, Lee, J. D., Park, J.H. 2017. Genetic Diversity and population structure of Korean Wild Soybean (*Glycine soja* Sieb. and Zucc.) Inferred from Microsatellite Markers. **Biochemical Systematics and Ecology** 71: 87-96
33. Aktaş H, **Baloch FS.** 2017. Allelic variations for HMW and LMW Glutenin subunits and their association with the quality traits in Winter Bread Wheat Genotypes. **Turkish Journal of Agriculture and Forestry** 41: 127-134
34. Ghouri F, Shahid MQ, Naeem M, **Baloch FS.** 2017. The genetic diversity of wild soybean inferred from chloroplast and nuclear gene sequences. **Biochemical Systematics and Ecology** 71, 170-178
35. Nawaz MA., Mamoon H., **Baloch FS.**, Ijaz B., Chung G., Yang SH. 2017. Genome and Transcriptome-wide Analyses of Cellulose Synthase Gene Superfamily in Soybean Confirms their Differential Expression during Seed Development. **Journal of Plant Physiology** doi.org/10.1016/j.jplph.2017.04.009
36. Zheng TT., Zhang Z., Shahid MQ., Wei WL., **Baloch FS.**, Lin SQ., Yang XH. 2017. RNA-Seq reveals differential expression patterns of genes associated with carotenoid accumulation in loquat. **Acta Physiologiae Plantarum** 39 (8), 168
37. Nawaz M.A., Rehman H.R., Imtiaz M, **Baloch F.S.**, Lee JD., Yang SH., Lee S, and Chung G. 2017. Systems Identification and Characterization of Cell Wall Reassembly and Degradation Related Genes in *Glycine max* (L.) Merrill, a Bioenergy Legume. **Scientific Reports** 7 (1), 10862

2018

38. Nadeem MA, Nawaz, M.A., Shahid MQ, Cömertpay G., Yıldız, M., Doğan Y., Labhane N., Hatipoğlu R., **Baloch FS.** 2017. DNA Molecular markers in plant breeding; Current status and recent advancements in genomic selection and genome editing: A review. **Biotechnology and Biotechnological equipment** DOI: 10.1080/13102818.2017.1400401
39. Yaldız G, Çamlıca M, Nadeem MA, Nawaz MA, **Baloch FS.** 2017. Jumping elements now in tobacco (*Nicotiana tabacum*) for genetic diversity assessment. **Turkish Journal of Agriculture and Forestry** DOI: 10.3906/tar-1708-32
40. Ahmad F., Abbas T., Farman K, Akrem a., Saleem M.A., Iqbal M.U., **Baloch F.S.**, Mahmood S. 2018. High-throughput phytochemical characterization of non-cannabinoid compounds of cannabis plant and seed, from Pakistan. **Pakistan Journal of Botany** 50 (2): 639-643
41. Tsukamoto C, Nawaz M.A, Kurosaka A, Le B, Lee J.D, Son E, Yang S.H, **Baloch F.S.**, Chung G. 2018. Isoflavone profile diversity in Korean wild soybeans (*Glycine soja* Sieb. & Zucc.). **Turkish Journal of Agriculture and Forestry** 42 (4), 248-261
42. Demirel, U., Tındaş, I., Yavuz C., **Baloch F.S.**, Çalışkan, M.E. 2017. Assessing genetic diversity and molecular characterization of potato genotypes using iPBS retrotransposon marker system. **Plant Genetic Resources: Characterization and Utilization.** doi.org/10.1017/S1479262117000041
43. Huang, T., Shahid, M.Q., **Baloch, F.S.**, Lin, S., Yang X.H. Effects of Trimethylamino Oxide (TMAO) and Loading Duration on the Shoot Tip Cryopreservation of Loquat (*Eriobotrya japonica*). **Turkish Journal of Biology.** DOI: 10.3906/biy-1712-51
44. Nadeem MA, , Habyarimana E, Çiftçi V Nawaz MA Karakoy T Comertpay G Shahid, MQ, , Hatipoğlu R, Yeken MZ., Ali F., Chung G, **Baloch, FS.** 2017. Characterization of genetic diversity in Turkish common bean gene pool using phenotypic and whole-genome DArTseq-generated silicoDArT marker information. **PLOS ONE** 13 (10), e0205363

2019

45. Nawaz M.A., Lin X., Chan T.F., Imtiaz M.A., Rehman H.M, Ali M.A, **Baloch F.S**, Atif R.A., Yang S.H, Chung G. 2019. Characterization of Cellulose Synthase A (CESA) Gene Family in Eudicots. **Biochemical genetics** 57 (2), 248-272
46. Ali F., Yılmaz A., Nadeem M.A., Habyarimana E., Şubaşı I., Nawaz M.A., Chaudhary HJ., Shahid MQ., Ercişli S., Chung G., **Baloch. F.S**. 2018. Mobile genomic element diversity in world collection of safflower (*Carthamus tinctorius* L.) panel using iPBS-retrotransposon markers. **PLoS ONE** 14(2): e0211985. Doi.org/10.1371/journal.pone.0211985
47. Arystanbekkyzy M., Nadeem M.A., Aktas H., Yeken M.Z., Zencirci N., Nawaz M.A., Ali F., Haider M.S., Tunc K., Chung G and **Baloch F.S**. 2019. 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**. DOI: 10.17957/IJAB/15.0876
48. Ekincialp A., Erdinc Ç., Turan S., Cakmakci Ö., Nadeem M.A., **Baloch F.S.**, Senso S. 2018. 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** DOI: 10.17957/IJAB/15.0958
49. Alsaleh A., **Baloch FS.**, Nachit M., Özkan H. 2019. Identification of chromosomal regions in the genetic control of quality traits in durum wheat (*Triticum turgidum* L.) from the Fertile Crescent. **Turkish journal of agriculture and forestry** DOI: 10.3906/tar-1807-83
50. Aydin M.F., **Baloch F.S**. 2019. Exploring the genetic diversity and population structure of Turkish common bean germplasm by the iPBS-retrotransposons markers. **Legume Research** DOI: 10.18805/LR-423
51. Comertpay G, **Baloch FS**, Gungor H, Dokuyucu T, Akkaya A, Dumlupinar Z. 2019. Geographical description and molecular characterization of genetic structure and diversity using a 6K SNP array in Turkish oat germplasm. **Canadian journal of plant sciences** doi.org/10.1139/CJPS-2017-0293
52. Wang Y, Shahid M.Q., Ghouri F., Ercişli S., **Baloch F.S**, Nie F. 2019. Transcriptome analysis and annotation: SNPs identified from single copy annotated unigenes of three polyploid blueberry crops. **PLoS ONE** 14(4): e0216299. <https://doi.org/10.1371/journal.pone.0216299>
53. Wang Y., Shahid M.Q. Ghouri F., Ercişli S., **Baloch F.S**. 2019. Development of EST-based SSR and SNP markers in *Gastrodia elata* (herbal medicine) by sequencing, de novo assembly and annotation of the transcriptome. **3 Biotech**. Doi.org/10.1007/s13205-019-1823-4
54. Ghouri F, Zhu J, Yu H, Wu J, **Baloch F.S**, Liu X, Shahid M.Q. 2019. Deciphering global DNA variations and embryo sac fertility in autotetraploid rice line. **Turkish journal of agriculture and forestry**, DOI: 10.3906/tar-1901-13
55. F. Ahmad, K. Farman, M. Waseem, et al., Genome-wide identification, classification, expression profiling and DNA methylation (5mC) analysis of stress-responsive ZFP transcription factors in rice (*Oryza sativa* L.), **Gene** (2019), <https://doi.org/10.1016/j.gene.2019.144018>
56. Karık U, Nadeem M.A., Ercişli S., Chung G., **Baloch F.S**. 2019. Exploring the genetic diversity and Population structure of Turkish laurel germplasm by iPBS-retrotransposon marker system. **Agronomy**
57. Habyarimana E, Dall'Agata M, De Franceschi P, **Baloch FS**. 2019. Genome-wide association mapping of total antioxidant capacity, phenols, tannins, and flavonoids in a panel of *Sorghum bicolor* and *S. bicolor* × *S. halepense* populations using multi-locus models. **PLoS ONE** 14(12): e0225979. <https://doi.org/10.1371/journal.pone.0225979>

2020

58. Ali F., Yılmaz A., Chaudhary H. S., Nadeem M.A. Rabbi M.A., Arslan Y., Nawaz M.A. **Baloch F.S**. 2019. Investigation of morphoagronomic performance and selection indices in the international safflower panel for breeding perspectives. **Turkish journal of agriculture and forestry**, DOI: 10.3906/tar-1902-49
59. Yildiz M, Koçak M, Nadeem M.A, Cavagnaro P, Barboza K, **Baloch F.S**, Argün D, Keleş D. 2019. Genetic diversity analysis in the Turkish pepper germplasm using iPBS (inter-primer

binding site) retrotransposon-based markers. **Turkish journal of agriculture and forestry** DOI: 10.3906/tar-1902-10

60. Gan X., Jing Y., Shahid M.Q., He Y., **Baloch F.S.**, Lin s., Yang x.h., 2018. Identification, Phylogenetic analysis and Expression patterns of SAUR Gene Family in loquat (*Eriobotrya japonica*). **Turkish journal of agriculture and forestry** DOI: 10.3906/tar-1810-98
61. Nadeem M.A., Yeken M.Z., Habyarimana W., Nawaz M.A.,Karakoy T., Chung G., **Baloch F.S.** 2018. Phenotypic Characterization of 183 Turkish Common Bean Accessions for Agronomic, Trading, and Consumer-Preferred Plant Characteristics for Breeding Purposes. **Agronomy** doi.org/10.3390/agronomy10020272
62. Ali F., Nadeem M.A., Habyarimana E., Nawaz M.A., Khalil I.H., Ercizli S., Chung G., Chaudhary H.J. **Baloch F.S.** 2019. Molecular characterization of genetic diversity and similarity centers of safflower accessions with ISSR markers. **Brazilian Journal of Botany** <https://doi.org/10.1007/s40415-019-00574-7>
63. Nadeem M.A., Gündoğdu M., Karaköy T., Saracoğlu O., Habyarimana E., Lin X., Nawaz M.A., Sameeullah M., Hatipoğlu R., Ahmad F., Chung G. **Baloch F.S.** 2020. Uncovering Phenotypic Diversity and DArTseq Marker Loci Associated with Antioxidant Activity in Common Bean. **Genes**
64. Habyarimana, E.; Lopez-Cruz, M.; **Baloch, F.S.** Genomic Selection for Optimum Index with Dry Biomass Yield, Dry Mass Fraction of Fresh Material, and Plant Height in Biomass Sorghum. **Genes** 2020, 11, 61.
65. Barut B., Nadeem M.A., Karakoy T and **Baloch F.S.** 2020. DNA fingerprinting and genetic diversity analysis of world quinoa germplasm using iPBS-retrotransposon marker system. **Turkish journal of agriculture and forestry**, (2020) 44: doi:10.3906/tar-2001-10
66. Ali F., Nadeem M.A., Barut M., Habyarimana E., Chaudhary H.J., Khalil I.H., Alsaleh A., Hatipoğlu R., Karaköy T., Kurt C., Aasim M., Sameeullah M., Ludidi N., Yang S, H., Chung G., **Baloch F.S.** 2020. Genetic diversity, population structure and marker-trait association for 100-seed weight in international safflower panel using silicoDArT marker information. **Plants** 2020, 9, 652 doi:10.3390/plants9050652
67. Wang Y., Nie F., Shahid M.Q., **Baloch F.S.** 2020. Molecular footprints of selection effects and whole genome duplication (WGD) events in three blueberry species: detected by transcriptome dataset. **BMC Plant Biol** 20, 250 (2020). <https://doi.org/10.1186/s12870-020-02461-w>
68. Guizado S.J.V., Nadeem M.A., Ali F., Barut M., Habyarimana E., Gómez T.P., Santillan J.A.V., Canales E.T., Gómez J.C.C., Chung G., **Baloch F.S.** 2020. Genetic diversity and population structure of endangered rosewood from the Peruvian Amazon using ISSR marker system. **Acta Amazonica** [AA-2019-0220.R3
69. Wang Y., Shahid M.Q., Ghouri F., **Baloch F.S.** 2020. De novo assembly and annotation of the juvenile tuber transcriptome of a *Gastrodia elata* hybrid by RNA sequencing: Detection of SSR markers. **Biochemical genetics** doi.org/10.1007/s10528-020-09983-w
70. Kurt C., Demirbas A., Nawaz M.A., Chung G., **Baloch F.S.**, Altunay N. 2020. Determination of Se Content of 78 Sesame Accessions with Different Geographical Origin. **Journal of Food Composition and Analysis**, 103621.
71. Habyarimana E., Franceschi P., Ercisli S, **Baloch F.S.**, Agata. M.D. 2020. Genome-Wide Association Study for Biomass Related Traits in a Panel of *Sorghum bicolor* and *S. bicolor* × *S. halepense* Populations. *Frontiers in Plant Science*

A2. International/National peer reviewed Articles

1. Shah MA, Khan AI, Awan FS, Sadaqat SA, Bahadur S, **Baloch, FS.** 2017. RAPD based diversity of some tomato genetic resources actively used in Pakistani breeding program. **Turkish Journal of Agriculture Food Science and Technology** 3(3): 126-132
2. Cömertpay, G., **Faheem Shehzad Baloch.**, Erdem, H., 2017. Genetic variation for biofortifying the maize grain. **Turkish Journal of Agriculture Food Science and Technology**. 4(8): 684-691

3. Yaldiz, G., Sameeullah, M., Çamlıca, M., **Baloch, F.S.** 2017. Lack of Population Structure in Coriander Populations Based on SDS (Seed Storage Protein) Page Analysis. **Turkish Journal of Agriculture Food Science and Technology** 4 (8), 656-661
4. Gyuhwa, C., Nawaz, M. A., **Baloch, F. S.**, Le, B., Rehman, H., Akther, F., Yang S. H. 2016. Development of a Competent and Trouble Free DNA Isolation Protocol for Downstream Genetic Analyses in Glycine Species. **Turkish Journal of Agriculture Food Science and Technology**. 4(8): 700-705
5. Aktaş H., Özberk F., Erol O., **Baloch F.S.**, Doğan S., Kahraman M., Fatih Ç., 2018. Türkiye'nin Güneydoğu Anadolu Bölgesinin Buğday Genetik Kaynakları Bakımından Potansiyeli ve Sürdürülebilir Olarak Korunması. **Bahri Dağdaş Bitkisel Araştırma Dergisi**. 7 (2): 47-54, 2018
6. Yeken M.Z., Nadeem M.A., Karaköy T., **Baloch F.S.**, Çiftçi V. 2019. Determination of Turkish Common Bean Germplasm for Morpho-agronomic and Mineral Variations for Breeding Perspectives in Turkey. Kahramanmaraş Sütçü İmam Üniversitesi Tarım ve Doğa Dergisi 22, 39-51
7. Yıldız M., Koçak M., **Baloch F.S.** 2020. Van Gölü Havzasından Toplanan Terslale (*Fritillaria imperialis* L.) Genotiplerinde Genetik Farklılığın iPBS Retrotranspozon Markırları ile Belirlenmesi. **YYU Journal of Agricultural Science**, 30 (2)
8. Nadeem M.A., Çilesiz Y., Ali F., Baloch F.S., Karaköy T. 2020. Investigation of Quality and Cooking Traits Diversity in a Global Common Bean Germplasm. **Global Journal of Botanical Science**, 2020, 8, 21-29

B1. Posters in Conference Proceedings

1. Yücel, C., **Baloch, F. S.**, Özkan, H and Hatipoğlu, R. 2009. Assessment of combining ability for some morphophysiological characteristics in common wheat. Turkey 8th National Field Crops Symposium 13-17 October 2009, Hatay, Turkey.
2. Türkay, M. A., Cerit, I., Sarihan, H., Koc, N., Oztemiz, N., **Baloch, F. S** and Özkan, H. 2009. Resistance of some maize inbred lines to European corn borer (*Ostrinia nubilalis* Hübn.) and pink stem borer (*Sesamia nonagrioides* Lef.) XXI Conference of Maize and Sorghum Breeding in The Genomic Era., 21-24 June, Bergamo, Italy.
3. Özer, S., Karaköy, T., Toklu, F., **Baloch, F.S.**, Kilian, B and Özkan, H. Nutritional and physico-chemical variation in 91 landraces of Turkish Kabuli chickpea (*Cicer arietinum* L.). 5th International Food Legumes Research Conference, and 7th European Conference on Grain Legumes 26-30 April, Antalya, Turkey
4. Kurt, C., **Baloch, F.S.**, Arıoğlu, H and Özkan, H. 2010. Soybean and peanut in Turkey. Genetic diversity revealed by ISSR and SRAP analysis. 2nd International Symposium on Genomics of Plant Genetic Resources, 24-27 April, Bologna, Italy.
5. **Baloch, F. S.**, Yücel, C., Özkan, H., Hatipoğlu, R., Kurt, C and Ishaq Asif Rehmani, M. 2010. Combining ability of F1 generation from diallel cross of bread wheat for some quality traits. 2nd International Symposium on Genomics of Plant Genetic Resources, 24-27 April, Bologna, Italy.
6. Andeden, E. E., Yediay, F. E, **Baloch, F. S.**, Kilian, B, Nachit, M and Özkan, H. 2010. Allelic diversity for vernalization and photoperiod genes in Turkish bread cultivars and landraces. 8th International wheat conference, 1-4 June, St. Petersburg, Russia.
7. **Baloch, F.S.**, Sert, S., Çakır, E., Akışcan, Y., Kurt, C., Hatipoğlu, R and Özkan, H. 2010. Estimation of Genetic Relationship in Turkish and Pakistani Cotton cultivars by using ISSR markers. 1st National Molecular Biology and Biotechnology Conference. 26-29 October, Antalya, Turkey.
8. Karaköy, T., Sert, S., Toklu, F., **Baloch, F.S.**, Özkan H. Genetic variations among Turkish field pea (*Pisum sativum*) Landraces. 1st National Molecular Biology and Biotechnology Conference. 26-29 October, Antalya, Turkey.
9. Toklu, F., **Baloch, F.S.**, Karaköy, T., Özkan, H. Effect of seed priming on germination properties, yield components and grain yield of bread wheat (*Triticum aestivum* L.). 9th National Field Crops Symposium 13-17 October 2011, Bursa, Turkey (In Turkish).

10. **Baloch FS**, Bakhsh, A, Asim, M. 2011. Rubisco Small Subunit As Strong Green Tissue Specific Promoter. Current Opinion in Biotechnology (Abstract)
11. **Baloch, F.S.**, Saleh,A., Andeden, E.E., Derya, M, Kiaşin, B., Hatipođlu,R., Nachit, M., Özkan, H. 2013. Genetic linkage map of Anatolian bread wheat derived from Gerek-79 x Arrehan. XXI Internation Plant and Animal genome Congress. 11-15, San Diego, USA
12. Derya, M., **Baloch F.S.**, Andeden, E.E. Kilian, B., Özkan, H. 2013. Genetic diversity and relationship among wil annual Lens species using iPBS- retrotransposons markers. XXI Internation Plant and Animal genome Congress. 11-15, San Diego, USA
13. Derya, M., **Baloch F.S.**, Andeden, E.E. Kilian, B., Özkan, H. 2013. Microsatellite diversity and relationship in genus Lens. XXI Internation Plant and Animal genome Congress. 12-16, San Diego, USA
14. Andeden, E.E. Derya, M., **Baloch, F.S.** Kilian, B., Özkan, H. 2013. Development of SSR markers in lentil. XXI Internation Plant and Animal genome Congress. 12-16, San Diego, USA
15. Saleh, A., **Baloch, F.S.**, Derya, M., Azrak, M., Nachit, M., Özkan, H. 2013. Genetic linkage map of Anatolian durum wheat derived from Kunduru-1149 x Cham1. International Durum Wheat Symposium 27 May-1 June, Rome, Italy
16. Saleh, A., **Baloch, F.S.**, Nachit, M., Özkan, H. 2013. High genetic diversity in famous Anatolian durum wheat landraces ` Kunduru-1149` International Durum Wheat Symposium 27 May-1 June, Rome, Italy
17. Comertpay G, **Baloch, FS.**, Erdem H., Eker S, Çakır, B, Ülger AC. Türkiye Misir Genetik Kaynaklarının Kalite Ve Mikro Element İçeriklerinin Belirlenmesi. Tarla Bitkileri Kongresi, 10-13 Eylül, 2013, Konya, Turkey
18. Aasim M, Bakhsh A, **Baloch FS**, Day S, Khawar, KM, Karataş M. 2016. Preconditioning of Explants, A Tool For Enhancing In Vitro Shoot Regeneration of Legumes. 5TH International Molecular Biology and Biotechnology Congress August 25-29, 2016, Macedonia
19. Day S, Huassin N, Nawaz H, Sameeullah M, **Baloch FS**, Bakhsh A, Khawar KM, Aasim M. 2016. In vitro screening of preconditioned plumular explant of peanut to NACI. Ist International salinity conference, 19-21 December, 2016, Bahawalpur, Pakistan
20. Yeken MZ, Tekin M, **Baloch FS**, Çiftçi V. 2017. Morphologic characterization of common bean (*Phaseolus vulgaris* L.) collected from different provinces of Turkey. 5-8 October, 2017, VIII International Scientific Agriculture Symposium
21. Ali F., Nadeem M.A., Ali J., Adnan M., Yılmaz A., Khalil I.H., Chaudhary, H.J., **Baloch F.S.** Jumping element now in safflower. International Conference on Climate-Resilient Smart Soil Management Focusing on Food Security, Ecosystems & Environment. March 5-20, 2020 The University Of Haripur, Pakistan
22. Ali F., Nadeem M.A., Ali J., Adnan M., Yılmaz A., Rabbani M.A., **Baloch F.S.**, Chaudhary, H.J. Phenotypic Characterization of World Safflower Panel under Pakistani and Turkish Climatic Conditions. March 5-20, 2020 The University Of Haripur, Pakistan
23. Nadeem M.A., Ali F., Yılmaz A., **Baloch F.S.** Plant Breeding and Better Use of Crop Genetic Resources: A Possible Way to Tackle Climate Change. March 5-20, 2020 The University Of Haripur, Pakistan

B2. Conference Oral Presentations

1. **Baloch, FS**, Andeden, EE, Yediay, FE, Börner, A, Kilian B, Özkan H. Do you know the status of dwarfing genes in Turkish wheat. In: Turkey's National 9th Field Crops Conference. 12-16 September, 2011, Bursa, Turkey.
2. Comertpay G., **Baloch Fs.**, Derya M., Andeden EE., Kilian B., Sürek H., Beşer N., Özkan H. Determination of Genetic diversity in commercial rice cultivars using retrotransposond-s and SSR markers. Turkey 10th National Field Crops Symposium, 10-13 Eylül, 2013Konya Turkey. (In Turkish)

3. Hatipođlu R., Can E., Çelikleş N., Atış I., **Baloch FS**. Molecular Breeding of Forage Crops. Turkey 10th National Field Crops Symposium, 10-13 Eylül, 2013 Konya Turkey. (In Turkish)
4. Karaköy T., Toklu F., **Baloch FS**, Özkan H.2013. Determination of morphological characteristics in some wild chickpea species. Turkey 10th National Field Crops Symposium, 10-13 Eylül, 2013Konya Turkey. (In Turkish)
5. **Baloch FS**, Derya M., Andeden EE., Alsaleh A., Comertpay G., Kilian B., Özkan H. 2014. Inter priming binding pair sites (iPBS) diversity in Lens species. Ecology and Evolutionary Biology Symposium, 11-13 July, 2014, Istanbul, Turkey
6. **Baloch FS**, Use of DNA molecular markers in Crop improvement. 22-24 October 2014, KOP Symposium. Niğde University, Niğde, Turkey
7. **Baloch FS**. 2014. İç Anadolu Bölgeden Toplanan Yerel fasulye Genotiplerinde etrotro çeşitliliğın agro-morfolojik ile moleküler markörler kullanılarak incelenmesi. Niğde için benim de bir Proje var. Niğde University, 18-19, November, 2014. Niğde, Turkey
8. **Baloch FS**, Cömertbay G, Özkan H. 2015. DNA molecular markers for disease resistance in plant breeding with example in wheat. Proceedings of the Fifth International Cereal Nematode Initiative Workshop. CIMMYT, 12-15 September 2015, Ankara, Turkey
9. **Baloch FS**, İmren M, Alsaleh A, Dababat AA, Ayaz M, Toktay H. 2015. Genome wide association studies for identification of different resistance genes in wheat of Fertile Crescent. Proceedings of the Fifth International Cereal Nematode Initiative Workshop. CIMMYT, 12-15 September 2015, Ankara, Turkey
10. **Faheem Shehzad Baloch**, Ahmad Alsaleh, Enver Ersoy Andeden , Rüştü Hatipođlu and Hakan Özkan. 2015. Genetic Linkage Map of Bread Wheat from Turkey using DaT Markers. 11. Tarla Bitkileri Kongresi 7-10 Eylül 2015 Çanakkale, Turkey.
11. Tolga Karaköy, Ahmet Demirbaş, Volkan Yörük, Faruk Toklu, **Faheem Shehzad Baloch**, Aybegün Ton, A. Emin Anlarsal, Hakan Özkan. 2015. Sivas Ekolojik Koşullarında Soğuşa Dayanıklı Bezelye (*Pisum sativum* ssp. *Sativum* L. ve ssp. *Arvense* L.) Genotiplerinin Belirlenmesi. 11. Tarla Bitkileri Kongresi 7-10 Eylül 2015 Çanakkale, Turkey.
12. Tolga Karaköy, Ahmet Demirbaş, Volkan Yörük, Faruk Toklu, **Faheem Shehzad Baloch**, Hasan Durukan, Mustafa Öztürk, Aybegün Ton, A. Emin Anlarsal, Hakan Özkan. Türkiye Orijinli Bakla (*Vicia faba* L.) Genotiplerinin Soğuşa Dayanıklılık Yönünden İncelenmesi. 11. Tarla Bitkileri Kongresi 7-10 Eylül 2015 Çanakkale, Turkey
13. Gönül Cömertpay, **Faheem Shehzad Baloch**, Muazzez Derya, Enver Ersoy Andeden, Ahmad Alsaleh, Halil Sürek, Hakan Özkan. 2015. Population structure of rice varieties commonly used in the Turkish rice breeding programs, determined using simple sequence repeat and iPBS-retrotransposon data. Konuralp Çeltik Çalıştay. 14-16 December, 2015, Düzce, Turkey
14. **Faheem Shehzad Baloch**, Muhammad Sameeullah, Vahdettin Çiftçi, Muhammad Azhar Nadeem , Rüştü Hatipođlu. Genetic characterization of Turkish bread wheat landraces using iPBS retrotransposons markers. International Conference on Engineering and Natural Sciences, 24-28 May, 2016, Sarajevu, Bosnia and Herzegovina
15. Gülsüm Yıldız, Mahmut Çamlıca, **Faheem Shehzad Baloch**, Göksel Özer. Retrotransposons as molecular tool for molecular characterization of Turkish tobacco population. International Conference on Engineering and Natural Sciences 24-28 May, 2016, Sarajevu, Bosnia and Herzegovina
16. Göksel Özer, Harun Bayraktar, **Faheem Shehzad BALOCH**, Damla Şen, Fatih Tekin. Inter primer binding sites (iPBS), a novel source of genetic diversity in fungus. . International Conference on Engineering and Natural Sciences 24-28 May, 2016, Sarajevu, Bosnia and Herzegovina
17. Muhammad Sameeullah, **Faheem Shehzad Baloch**, Turan Karadeniz, Vahdettin Çiftçi. In silico identification of potential genes for the accumulation of iron in tomato fruits during development and maturation stages. International Conference on Engineering nad Natural Sciences 24-28 May, 2016, Sarajevu, Bosnia and Herzegovina
18. **Baloch FS**, Alsaleh A, Çiftçi V, Nadeem MA, Comertpay G, Aktaş H, Özkan H, Hatipođlu R. Durum wheat in central Fertile Crescent; Biodiversity, characterization and utilization.

International Symposium On Biodiversity And Edible Wild Species. 3-5 April 2017 in Antalya, Turkey

19. **Faheem Shehzad Baloch** DNA, Moleküler Markörlerin Bitki Islahında Kullanımı. Turkish Agricultural Ministry, TAGEM. 27 February-03 March, Antalya, Turkey
20. **Baloch FS**, Nadeem MA, Nawaz MA, Habyarimana E, Comertpay G, Karaköy T, Hatipoğlu R and Çiftçi V. 2018. Bean in Turkey: Diversity, characterization, inter-gene pool hybridization and breeding. Seventh International Food Legumes Research Conference, Marrakesh, Morocco, May 06-08, 2018
21. **Baloch, F.S.**, Hatipoğlu, R., Nadeem, M.A., Yıldız, M., Yeken, M.Z., Yılmaz, A., Ali, F., Molecular Markers in Plant Breeding: KASP; A Recent Tool in Efficient Breeding. International science congress, 9-12 May 2018. Van Turkey
22. **Faheem Shehzad Baloch**, Muhammad Azhar Nadeem, Tolga Karaköy, Mehmet Zahit Yeken, Rustu Hatipoğlu, Fawad Ali, Vahdettin Çiftçi. Bean Genetic Resources in Turkey; Diversity and Characterization. Internal symposium Ecology, 19-23 June 2018, Kasatamonu, Turkey
23. **Baloch F.S.**, Çiftçi V., Zencirci N., Nadeem M.A., Yılmaz A., Yeken M.Z. 2018. Next breeding tools mining the novel alleles in natural biodiversity for efficiently developing environment friendly crop varieties. Turkish Wheat landraces 2018 20-22 December, 2018, Bolu, Turkey

B3. Invited Speaker in national and international conferemces

1. Climate Smart Agriculture: The Way of Framing for 21st Century. 8-9, October 2018, **Multan, Pakistan**
2. Sustainable Agriculture in Changing Climate: Strategies and Management. June 19-21, 2019, Rawalakot, **Azad Jammu and Kashmir-Pakistan**
3. Participated and presented as delegate in International round table Problem of securing biodiversity in Far Eastern Region: Experience of Russia and Adjascent countries. 16 August 2019, Far Eastern Federal University, **Vladivostok, Russia**
4. International conference on research of agricultural and food technologies 03 – 05 October 2019, **Adana, Turkey**
5. International conference on health sciences and Biotechnology, 14-16 October 2019, **Uşak, Turkey**

C. International Book chapters

1. Bakhsh A, **Baloch FS**, Hatipoğlu R, Özkan H. 2015. Use of genetic engineering: benefits and health concern. In: Handbook of Vegetable Preservation and Processing. CRC Press, Taylor & Francis, Inc., Boca Raton, Florida, USA
2. Muhammad Sameeullah, Tijen Demiral, Noreen Aslam, Faheem **Shehzad Baloch**, Ekrem Gurel (2016) In silico Functional Analyses of SWEETs Reveal Cues for Their Role in AMF Symbiosis. In: Hakeem Khalid Rehman and Akhtar Mohd Sayeed (editors) Plant, Soil and Microbes - Volume 2. Mechanisms and Molecular interactions, Volume 2, pp 45-58, Springer, Switzerland
3. Nadeem M.A., Aasim M, Kırıcı S., Karık Ü., Nawaz MA., Maral H., Khawar KM. **Baloch F.S.**, 2018. Laurus nobilis. L. a less known medicinal plant to world with diffusion, genomics, phenomics and metabolomics for genetic improvement. In: Kumar N (editor). Biotechnological approaches for genetic improvement of medicinal and aromatic plants. Springer, Switzerland
4. Aasim M., **Baloch F.S.**, Nadeem M.A., Bakhsh A., Sameeullah M., Day S. (2018) Fenugreek (Trigonella foenum-graecum L.): An Underutilized Edible Plant of Modern World. In: Ozturk M., Hakeem K., Ashraf M., Ahmad M. (eds) Global Perspectives on Underutilized Crops. Springer, Cham
5. M Aasim, **FS Baloch**, A Bakhsh, M Sameeullah, KM Khawar. 2018. Biotechnological Approaches for Genetic Improvement of Fenugreek (Trigonella foenum-graecum L.). In:

Kumar N. (eds) Biotechnological Approaches for Medicinal and Aromatic Plants. Springer, Singapore

6. Aasim M, Khawar K. M, Karataş M, **Bloch F.S.**, Bakhsh. 2019. An Insight to Micropropagation of Freshwater Aquatic Medicinal Plants. In: Ozturk M, Hakeem K.R (editors). Plant and Human Health, Volume 2 Phytochemistry and Molecular Aspects. Springer Nature Switzerland.
7. Aktaş H., Rasheed A., Cabi E., **Baloch F.S.** 2020. Taxonomy, Evolution, Distribution and Origin of hulled wheat. In: Zencirci N., Ulukan H., Quallsat C.Q., Nebitt M (editors). Hulled Wheat. Amazon, Switzerland. ISBN-13: 979-8651179961
8. Özbek K., **Baloch F.S.**, Quallsat C.O. 2020. Introduction. In: Zencirci N., Ulukan H., Quallsat C.Q., Nebitt M (editors). Hulled Wheat. Amazon, Switzerland. ISBN-13: 979-8651179961

D. International Book Edited

1. Wheat Landraces. 2020. Editors: Zencirci N., **Blaoch F.S.**, Habyarimana E., Chung G. Springer Nature Switzerland

National and Interenational projects

TÜBİTAK

1. 2014: Molecular characterization and determination of genetic diversity of Turkish potatoes. Project No: TOVAG-213O234, TÜBİTAK- Researcher. (Completed).
2. 2016: Identification of genomic regions for important agronomic, Physico-chemical, mineral, antioxidant and cooking properties of common bean germplasm from Turkey with genome wide association studies (GWAS). Project No: TOVAG-215O630, TÜBİTAK, Principal investigator (Completed).
3. 2019: Identification of metal tolerance protein for accumulation of Zn in the seed and pods of common bean (*Phaseolus Vulgaris*), their molecular expression and functional characterization. Proje No: TOVAG-119O521 (Continued)
4. 2020: The Evaluation of Agricultural Characteristics of *Cephalaria syriaca* L., Which is Commonly Found in Our Country's Natural Flora, and Investigation of Potential for Breeding Material. Proje no: TOVAG- 120R015

University Research Projects (BAP)

1. 2008: The effect of seed priming application on the germination properties, yield components and grain yield in bread wheat (*Triticum aestivum* L.). Cukurova Üniversitesi-BAP. Proje No: KMYO2007BAP1 Researcher. Completed.
2. 2013: Molecular characterization of Turkish pea (*Pisum sativum* L.) landraces using iPBS-retrotransposons markers. Nigde University-BAP. Project No: FEB 2013/19-BAGEP Principal investigator. Completed.
3. 2012: Molecular, agro-morphological and quality characterization of field pea genotypes originated from Turkey. Cumhuriyet University-BAP SMYO-006. Researcher. Completed
4. 2014: Estimation of genetic diversity using PBS retrotransposons markers among Okra (*Abelmoschus esculentus* (L.)germplasm collected from the different geographic locations of turkey. Yüncü Yıl University, BAP. PROJE NO: 2014-ZF-B206, Researcher (Completed).
5. 2015: Türkiye'nin farklı bölgelerinden toplanan fasulye genotiplerinde genetik çeşitliliğin iPBS-retrotranspozonlar moleküler belirteçler kullanılarak incelenmesi. Abant İzzet Baysal University Bilim ve araştırma projesi. Proje No : 2015.10.07.873. Yürütücü (Completed).
6. 2015: Use of iPBS retrotransposons markers for genetic diversity in bread wheat. Abant İzzet Baysal University Bilim ve araştırma projesi. Proje No :2015.10.07.872. Principal investigator (Completed).

7. 2015: Development of broad-spectrum insect-resistant Tobacco Cultivars using Gene Pyramiding Strategy. Researcher. Nigde University-BAP.BAP (FEB314/10-BA6EP) (Completed).
8. 2015: Türkiye'nin farklı bölgelerinden toplanan fasulye genotiplerin agro-morfolojik karakterizasyon. Abant izzet baysal university Bilim ve araştırma projesi. Proje No :2015.10.07.873. Araştırmacı: (Completed).
9. 2015: Türkiye'nin farklı bölgelerinden toplanan tütün genotiplerinde genetik çeşitliliğin iPBS-retrotranspozonlar moleküler belirteçler kullanılarak incelenmesi. Abant izzet baysal university Bilim ve araştırma projesi. Proje No : 2015.10.07.873. Araştırmacı (Completed).
10. 2015: Evaluation of variations and genetic erosion caused by climatic changes of 21. Century of Anatolian Emmer and Einkorn populations through multidisciplinary approach and development of ex-situ strategies for their conservations. Project No: 10140, Coordinated by Boğazçi University. (Completed)
11. 2015: Use of DArTseq markers for genetic diversity assessment in durum wheat from central Fertile Crescent. Abant izzet baysal university Bilim ve araştırma projesi. Proje No :2015.10.07.896. Principal investigator (Completed)
12. 2015: Van Gölü Havzasında toplanan Terslale (*Fritillaria imperialis* L.) hatlarında genetik farklılığın iPBS retrotranspozons primerleri ile belirlenmesi. Yüncü Yıl University Bilim ve araştırma projesi Proje Numara: 2015-HIZ-ZF328 (Completed)
13. 2016: Estimation of inter-intra diversity in fungus species from different hosts using iPBS retrotransposons markers. Abant izzet baysal university Bilim ve araştırma projesi (Completed)
14. 2016: Çiftçi ve Deneme Şartlarında Bazı Alternatif Yağ Bitkilerinin Verim ve Kalite Özelliklerinin Belirlenmesi. Abant izzet baysal university Bilim ve araştırma projesi. Proje Numara. 2015.10.07.976
15. 2017: DArTseq markor kullanarak yerel fasulye genotiplerinde genom karakterizasyonu. Abant izzet baysal university Bilim ve araştırma projesi. Proje No : 2017.10.07.1208
16. 2017: Van Gölü Havzası'ndan Toplanan Yabani Ravent (*Rheum ribes* L.) Popülasyonunda IPBS Retrotranspozons Marker Yönteminin Kullanılabilirliğinin Belirlenmesi. Yüncü Yıl University, BAP
17. 2018: Türkiye'deki farklı bölgelerden tedarik edilen defne (*Laurus nobilis* L.) populasyonlarının moleküler karakterizasyonu. Abant izzet baysal university Bilim ve araştırma projesi. Proje No: 2018.10.01.1305
18. 2020: Çeşitli makarnalık buğday (*Triticum durum* Desf.) genotiplerindeki toksisitenin kadmiyuma ait doğrulanmış moleküler markerler kullanılarak değerlendirilmesi. Proje no: 6602cBİLTEM/19323
19. 2020: Sekanslama İle Genotipleme Yöntemi (GBS) Kullanılarak 205 Nohut Tek Bitki Genotipinin Moleküler Karakterizasyonu. Sivas bilim ve teknoloji üniversitesi Bilimsel araştırma proje koordinasyonu
20. Endüstriyel Kenevir (*Cannabis sativa* L.) Bitkisinin in vitro rejenerasyonu ve iPBS Retrotranspozon Marker Sistemi ile Moleküler Karakterizasyonu. Sivas bilim ve teknoloji üniversitesi Bilimsel araştırma proje koordinasyonu
21. Türkiye Orijinli Yabani Nohut Gen Kaynaklarının DArTseq Markörleri İle Genom Karakterizasyonu. Sivas bilim ve teknoloji üniversitesi Bilimsel araştırma proje koordinasyonu
22. İslahında kullanılmak üzere küresel börülce gen kaynaklarının moleküler karakterizasyonu. Sivas bilim ve teknoloji üniversitesi Bilimsel araştırma proje koordinasyonu

Agricultural Ministry projects (TAGEM):

1. 2020. Bazı Yerel Kavun Genotiplerinin Morfolojik ve Moleküler Karakterizasyonu. Proje no: TAGEM/TBAD/15/A01/P01/003. Researcher.

International collaborated projects:

1. 2019. "Phenotypic Study of Wild Soybean Collections" under agreement number TA1913647 signed between The Chinese University of Hong Kong and Bolu Abant Izzet Baysal University (Principal investigator from Turkish side)

Supervised Master, PhD students and Post Doc

A. Supervised MSc Thesis (Completed)

1. **Muhammet Fatih AYDIN**: Molecular characterization of common bean germplasm from Turkey. Abant izzet Baysal University, Institute of Natural and Applied Sciences. 2016 (GRADUATED)
2. **Zuleyha TÜRKER**: Cooking and nutritional properties of Turkish common bean genetic resources. Abant izzet Baysal University, Institute of Natural and Applied Sciences. 2019 (Graduated)

B. Co-Supervised MSc Thesis (Completed)

1. **Meerim ARISTANBEKKIZI**: Genetic characterization of some wild emmer wheat genotypes (*Triticum turgidum* subsp. *dicoccoides*) from turkey by iPBS-retrotransposon markers. Sakarya University, Institute of Natural and Applied Sciences. 2019 (Graduated).

Supervised PhD students (Completed)

1. **Muhammad Azhar NADEEM**: Thesis: Genome wide association mapping (GWAS) for agronomic traits in common bean using genotyping by sequencing (GBS) approach. Abant izzet Baysal University, Institute of Natural and Applied Sciences. (Graduated)

PhD students – under research fellowship

1. Supervised **Fawad Ali** under research fellowship program of Tubitak program 2216

Supervised Post Doc

1. **Muhammad Sameeullah**: Post doctoral fellow under TÜBİTAK project "Identification, molecular expression and functional characterization of metal tolerant proteins (MTPs) to assess zinc (Zn) accumulation in developing pods and seeds of common bean (*Phaseolus vulgaris*)" 2019-2020

Graduate and post graduate lectures:

Post graduated:

1. DNA molecular markers in Plant breeding
2. Genetic mapping in plants
3. Principles of Molecular breeding
4. Mutation breeding
5. Plant Biotechnology
6. Resistance breeding
7. Principals of hybrid plant production

Graduate

8. Plant breeding
9. Plant Genetic Resources
10. Genetics and Cytogenetics
11. Agricultural Biotechnology
12. Genetically modified organisms

Administrative duties

1. Chairman department of plant production, Faculty of Agricultural sciences and technologies, Sivas University of science and technology, Sivas, Turkey
2. Erasmus coordinator of Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university
3. Erasmus coordinator of Department of field crops, Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university
4. Mevlana coordinator of Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university
5. Mevlana coordinator of Department of field crops, Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university
6. Farabi coordinator of Department of field crops, Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university
7. Head of Cereals and Legume crops section, Department of field crops, Faculty of agriculture and natural sciences, Bolu abant izzet Baysal university

Fellowships/Awards:

1. Awarded 'Gold Medal' for obtaining first position in M.Sc (Hons). Agronomy from Department of Agronomy, College of Agriculture, Bahauddin Zakariya University, Multan, Pakistan in 2006
2. Obtained Cultural Exchange Scholarship, for Ph.D studies awarded by Turkish Govt, advertised by Ministry of Education, Govt of Pakistan, in 2006.
3. Awarded "Doctoral fellowship" by 'The Scientific and Technological Research Council of Turkey' (TÜBİTAK) in 2007 for period of 5 years
4. Awarded publication prizes by the scientific and Technological Research council (TÜBİTAK) in 2008, 2009, 2010, 2011, 2019, 2020 for publishing different research articles in various international peer reviewed journals
5. Travel Grant to attend the short training course 'Marker-Assisted Plant Breeding, Minnesota, USA in 2014

Erasmus Exchange:

1. Given lectures and seminar at University of Leon, Spain 11-16 May, 2014, through Erasmus teaching Exchange program
2. Give Lectures on use of molecular markers and Genomic Selection in plants at University of Szent Istvan, Godollo, Hungary through Erasmus teaching Exchange program
3. Get training on "Molecular phylogeny and association mapping in plants" at Bologna Agricultural Research Institute, 19-23 March, Bologna, Italy through Erasmus learning program

Courses/trainings:

1. Certificate of Turkish language course from Ankara University (TÖMER), Ankara, Turkey in 2006
2. Attended "training course: Map construction and QTL analysis in plants" during 14-18 November 2012 at University of Copenhagen, Denmark.
3. Get Training on the field of "Construction of Genetic Linkage map and QTL analysis in Bread Wheat". 6-23 February 2012 at ICARDA, Aleppo, Syria
4. Participated in the training program "Marker-Assisted Plant Breeding", which takes place at the University of Minnesota, USA 10-13 June 2014
5. Participated in the "Genomic Selection and Prediction in the plant breeding" 18-22, January, 2016, CIHEAM, Zaragoza, Spain

Conference participations

1. 2009: Participated and presented in Turkey's National 8th Field Crops Conference. 19-24 October, Hatay, Turkey.
2. 2010: Participated and presented in 1st National Molecular Biology and Biotechnology Conference. 26-29 October. Antalya, Turkey.
3. 2010: Participated and presented in 2nd International Symposium on Genomics of Plant Genetic Resources, 24-27 April, Bologna, Italy.
4. 2011: Participated and presented in Turkey's National 9th Field Crops Conference. 12-16 September, Bursa, Turkey.
5. 2011: Participated and presented in European Biotechnology conference, 28 September-1 October, Istanbul, Turkey
6. 2012: Participated and presented in 2nd National Molecular Biology and Biotechnology Conference. 15-18 November. Antalya, Turkey.
7. 2013: Participated and presented in International Durum wheat Symposium. 27-31 May. Rome, Italy
8. 2013: Participated and presented in Turkey's National 9th Field Crops Conference. September, Konya, Turkey
9. 2013: Participated and presented in İç Anadolu Bölgesi, Tarım ve Gıda Kongresi, 2-4 October, Niğde, Turkey
10. 2014: Participated and presented in Ecology and Evolutionary Biology Symposium, 11-13 July, 2014, Istanbul, Turkey

11. 2014: Participated and presented in KOP Regional Development Symposium on DNA markers in Crop improvement, Nigde University, 23-23 October, Nigde Turkey
12. 2014: Participated and presented in Niğde için Proje var, 18-19 November, Ömer Halis Demir Turkey
13. 2015: Participated in presented in the NEMATODES OF SMALL GRAIN CEREALS workshop, 9-12, 2015, Ankara, Turkey
14. 2015: Participated and presented in Turkey's National 11th Field Crops Conference. 7-10 September, 2015, Çanakale, Turkey
15. 2016: Participated and presented in The International Conference on Engineering and Natural Sciences, 24-28 May, 2016, Sarajevu, Bosnia and Herzegovina
16. 2017: Participated and presented in The International Symposium on biodiversity wild edible species, 3-5 April, 2017, Antalya, Turkey
17. 2017: Participated and presented in Turkey's National 11th Field Crops Conference. September, Kahramanmaraş, Turkey
18. 2018: Participated and presented in International food legume research conference 6-8 May, 2018, Marrakech, Morocco
19. 2018: Participated and presented in International agricultural science conference 9-12 May, 2018, Van, Turkey
20. 2018: Participated and presented in International Symposium Ecology 2018 19-23 June, 2018, Kastamonu, Turkey
21. 2018: Participated and presented in Turkish Wheat landraces 2018 20-22 December, 2018, Bolu, Turkey

Countries Visited

Italy (Conference. 2013; Erasmus, 2018; Stakeholder meeting, 2019), France, Austria, Dubai, Sweden (Touristic visit), Syria (ICARDA-training-2012), Istanbul-Turkey (Conference-2011), Spain (Erasmus academic Exchange-2014), Minnesota-USA (Scientific training-2014), Denmark (Training-2011), Spain (Training-2016), Hungary (Erasmus Academic Exchange-2016), Bosnia and Herzegovina (Conference-2016), Morocco (Conference-2018), Pakistan (Conference invited speaker, 2018; 2019), South Korea (Laboratory visit-2019), Russia (Delegate-2019)

Journal Editorship

SCI-Indexed journals

- Turkish Journal of agriculture and forestry
- Manuscript editor Turkish Journal of Biology

Guest editor in special issue

- Guest editor for special issue in Turkish Journal of Agriculture and forestry "**Remote and proximal sensing for mapping in-field leaf chlorophyll content and monitoring crop growth, development, health, and yields**"

Non-Index journals

- Turkish journal agriculture food science and technology
- Turkish Journal of Agriculture and Natural Science
- Journal of Environmental and Agricultural Sciences
- Biotech studies
- International Journal of Agricultural and Environmental Research

References

--- REFERENCES COULD BE PROVIDED IF REQUIRED.