

Personal Information

Name: - DR. Abdul Munim Farooq

FATHER'S NAME:- Muhammad Farooq
DESIGNATION: - Assistant Professor (Adhoc)
DATE OF BIRTH:- September 09, 1982
IDENTITY CARD NO:- 38403-2187434-9
MAILING ADDRESS: - Center of Excellence in Molecular Biology, university of the Punjab, 87-West Canal Road, Thokar Niaz Baig, Lahore, Pakistan.
PHONE NO. (Mobile): - +92-321-6021147
E-MAIL: - munimfarooq@gmail.com, a.munim@cemb.edu.pk
MARITAL STATUS: - Married

Educational Experience

EXAMINATION	UNIVERSITY	YEAR
PhD (Molecular Biology)	CEMB, University of the Punjab, Lahore.	2018
MPhil (Molecular Biology)	CEMB, University of the Punjab, Lahore.	2006
B. Sc. (Hons) PBG Agriculture 4-years degree course	University of Agriculture Faisalabad.	2003
F. Sc Pre - Medical	Sargodha Board	1999
SSC/Matric Science	Federal Board Islamabad	1997

M.Phil THESIS:

PRODUCTION AND MOLECULAR CHARACTERIZATION OF TOMATO HAPLOID.

PhD TITLE:

TRANSFORMATION AND EXPRESSION STUDIES OF MAIZE INBRED LINES.

Job Experience

- January 2006 to April 2006, Research Officer (Fixed Pay), National Centre of Excellence in Molecular Biology, University of the Punjab, Lahore.
- April 2006 to August 2018, Research Officer/Lecturer, National Centre of Excellence in Molecular Biology, University of the Punjab, Lahore.
- August 2018 to date, Assistant Professor (Adhoc), National Centre of Excellence in Molecular Biology, University of the Punjab, Lahore.

Achievements

1. I have developed 12 inbred lines of Tomato that were used to in development of 4 F1 hybrids.
2. I have developed 08 inbred lines of Chillies that were used to develop 02 high yielding F1 Hybrids.
3. I have also developed Bt maize inbred lines that were used in development of Bt F1 maize hybrids in collaboration with local seed industry. It is worth to mention that Non transgenic version of CEMB-hybrid corn was evaluated by Maize and Millet Research Station, Sahiwal, Pakistan and rated among the top five hybrids out of 1050 hybrids tested.
4. I have also developed first local transgenic sugarcane
5. Established protocols for the mass production of pre-basic virus free seed potato. Our virus free Potato seed has been marketed by a private seed company, M/s AGB Seeds Pvt Limited for the last 10 years.
6. Developed synthetic seed production protocol of carrot, cucumber and potato.
7. Insect pest bioassays and field evaluation of our own formulated Bt and Mycorrhiza based Biopesticides were completed on Maize, Tomato, Cauliflower, Okra, Rice etc.
8. Nominated by CEMB to work on Desert Locust and its Management. Develop protocols to effectively control Desert Locust .
9. Published 14 research articles and discovered 07 novel genes, won 05 research projects and claimed 01 patents.

Honors and Awards

1. HEC Indigenous Scholarship for PhD from 2010 to 2014.
2. Products developed by our Lab won 1st prize in the Invention to Innovation Summit, University of Peshawar, Nov-2016.
3. Products developed by our Lab won 1st prize in the 4th Invention to Innovation Summit, University of the Punjab Lahore.
4. Products developed by our Lab won 2nd prize in the 5th Invention to Innovation Summit, University of the Punjab Lahore.
5. Products developed by our Lab won 1st prize in the Invention to Innovation Summit, University of the Haripure.

6. Incentive Award on Research Publications-2017 granted by the Vice Chancellor, University of the Punjab, Lahore, Pakistan.

Worked as Project Director/Project Manager/Focal Person

1. Development & commercialization of indigenous Bt and herbicide tolerant Maize hybrids. Funded by **The Punjab Agriculture Research Board, Lahore, Pakistan** at a cost of Rs. 22.829 million
2. Genetic Improvement of Sugarcane for Herbicide and Borer Resistance. Funded by **The Punjab Agriculture Research Board, Lahore, Pakistan** at a cost of Rs. 22.148 Millions .
3. Development and Commercialization of Cotton Leaf Curl Virus resistant/tolerant indigenous transgenic Bt and glyphosate resistant Cotton hybrids. **Funded by The Punjab Agriculture Research Board, Lahore, Pakistan** at a total cost of Rs. 35.766 Millions.
4. Transforming CEMB-PARB-Biotech maize prototype into viable commercial product for sustainable maize production awarded by Higher Education Commission under establishment of **technology development fund (TDF)** 2nd call 2017-2018 at Rs.14 million, for 2018-2020. (TDF02-169).
5. Genetic improvement of maize lines for insect and gluphosinate herbicide tolerance'. Awarded by PARB at a total cost of Rs. 10.00 Million for a period of 40 months (year 2019-2022). (Project # 1075).

Patents

1. Development of CEMB transgenic Maize Inbred Lines. (IPO # 242/2017)

Workshops/Conferences/Symposiums/Certificates

- Active participation and product presentation at stall in 1st Bio-forum (2006) at CEMB Punjab University Lahore Pakistan.
- Training on Breeding Techniques in Vegetables at Vegetable Research Institute. Ayub Agriculture Research Institute Faisalabad as part of Internship from 02 June to 25 July 2003.
- 37th Postgraduate training Course on “Nuclear and other Advance Techniques in Agriculture and Biological Research” (2009) at NIAB Faisalabad.
- Course organized by New World Concepts at University of the Punjab, Lahore on Communicating Effectively on 21 August 2015 At IAS, University of the Punjab Lahore.
- International Symposium on Advances in Molecular Biology of Plants and Health from 29-31 Dec 2015 at CEMB Lahore.
- Hands on training Biochemical and Molecular Techniques in Plant Breeding. From 7-18 2017 at NIAB Faisalabad.
- Symposium on Advances in Molecular Biology of Plants and Health Sciences on 19-21 dec 2018 at CEMB Lahore.

- Participated in Web of Science Conference on 11 March 2019, CEMB University of the Punjab Lahore.
- Training on How to improve QS world Ranking on 28 August 2019 at University of the Punjab.

Membership of Various Administrative bodies

1. Member, Admission Committee for M.Phil/Ph.D CEMB, University of the Punjab, Lahore, Pakistan.

Genes Discovered

1. Ramzan,M., Nasir,I.A., Tariq,M., Khan,A., Shahid,S.A., Tabassum,B., Qamar,Z., **Farooq,A.M.** and Husnain,T. Bacillus sp. cemb02 16S ribosomal RNA gene, partial sequence. Accession no. KC928325
2. Shahid,H., Tariq,M., Shahid,S.A., **Munim,A., Nasir,I.A.** and Husnain,T. Enterobacter sp. cemb05 16S ribosomal RNA gene, partial sequence. Accession no. KF487556
3. Ramzan,M., Nasir,I.A., Tariq,M., Khan,A., Shahid,S.A., Tabassum,B., Qamar,Z., **Farooq,A.M.** and Husnain,T. Bacterium cemb06 16S ribosomal RNA gene, partial sequence. Accession no. KC928326
4. Ramzan,M., Nasir,I.A., Tariq,M., Khan,A., Shahid,S.A., Tabassum,B., Qamar,Z., **Farooq,A.M.** and Husnain,T. Burkholderia sp. cemb08 16S ribosomal RNA gene, partial sequence. Accession no. KC928327
5. Ramzan,M., Nasir,I.A., Tariq,M., Khan,A., Shahid,S.A., Tabassum,B., Qamar,Z., **Farooq,A.M.** and Husnain,T. Bacterium cemb32 16S ribosomal RNA gene, partial sequence. Accession no. KC928323
6. Ramzan,M., Nasir,I.A. Tariq,M., Khan,A., Shahid,S.A., Tabassum,B., Qamar,Z., **Farooq,A.M.** and Husnain,T. Bacterium cemb35 16S ribosomal RNA gene, partial sequence. Accession no. KC928324
7. Khan,A., Tabassum,B., **Farooq,M.**, Ali,A., Ali,S., Tariq,M. and Nasir,I.A. Potato virus X isolate Pk coat protein (CP) gene, complete cds. Accession no. KC757709.

Publications

1. Bushra, T., Nasir, I. A. **Farooq, A. M.**, Rahman, Z. and Husnain, T. (2010). Viability assessment of in-vitro produced synthetic seeds of cucumber. *African Journal of Biotechnology*. 9 (28):7026-7032.
2. Jamal, A., Nasir, I. A., Tabassum, B., Tariq, M., **Farooq, A. M.**, Qamar, Z., Khan, M. A., Ahmad, N., Shafiq, M., Haider, M. S., Javed, M.A., and Husnain, T. (2012). Molecular characterization of capsid protein gene of potato virus X from Pakistan. *African Journal of Biotechnology*. 11(74): 13854-13857.
3. **Farooq, A. M.**, Nasir, I. A., Tabassum, B., Tariq, M., Qamar, Z., Khan, M. A., Ahmad, N., Haider, M. S., Anwar, W., Javed, M.A., and Husnain, T. (2012). Development and comparative studies of double cross tomato hybrids. *African Journal of Agricultural Research*. 7 (37):5259-5264.
4. **Farooq, A. M.**, Nasir, I. A., Bushra, T., Javed, M. A and Husnain, T. (2010). Androgenesis induction, Callusogenesis, Regeneration and Cytogenetic studies of tomato haploid. *Journal of Agri. Research*. 48 (4):457-470.
5. Nasir, I. A., Tabassum, B., Qamar, Z., Javed, M. A., Tariq, M., **Farooq, A. M.**, Butt, S. J., Qayyum, A., Husnain, T., (2014). Herbicide-tolerant sugarcane (*Saccharum officinarum* L.) plants: an unconventional method of weed removal. *Turk J Biol* 38: 439-449. **(1.343)**
6. Sajed Ali, Idrees Ahmad Nasir, Arfan Ali, Usman Aslam, **Abdul Munim Farooq**, Muhammad Tariq, Bushra Tabassum, Zahida Qamar, Abdul Qayyum Rao and Tayyab Hussnain (2014) Genetic variability in coat protein gene of sugarcane mosaic virus in Pakistan and its relationship to other strains. *African Journal of Biotechnology*.13 (39): 3950-3965.
7. Qamar, Z., Aaliya, k., Nasir, I. A., **Farooq, A. M.**, Tabassum, B., Ali, Q., Ali, A., Awan, M. F., Tariq, M., and Husnain, T. (2015). An overview of genetic transformation of glyphosate resistant gene in Zea mays. *Nature and Science* 2015;13(3)
8. Aaliya, k., Qamar, Z., Nasir, I. A., ALI, Q., **Farooq, A. M.** and Husnain, T. (2016). Transformation, Evaluation of GTGene and Multivariate Genetic Analysis for Morpho-Physiological and Yield Attributing Traits in Zea mays. *GENETIKA*, 48(1):423-443.
9. **Farooq AM**, Nasir IA, Ali Q, Tabassum B AND Husnain T. (2017). Identification And Interrelationship Of Yield Related Traits Through DNA Fingerprinting In Zea Mays. *IJBPAS*, 6(6): 1276-1303.
10. Saleem M, Farooq AM, Nasir IA, Ali Q AND Husnain T. (2017). Cold Tolerance of Plant Antifreeze Proteins: A Review. *IJBPAS*, 6(6): 1262-1275.
11. Khalid, S., M. Zia-ur-Rehman, S.A. Ali, U. Hameed, F. Khan, N. Ahmed, **A.M. Farooq** and M.S. Haider, 2017. Construction of an infectious chimeric geminivirus by molecular cloning based on coinfection and recombination. *Int. J. Agric. Biol.*, 19: 629–634.

12. **Zahida** Qamar, Z., Tariq, M., Rehman, T., Iqbal, M. S., Sarwar, M. B., Sharif, M. N., Hassan, Z., Ahmad, A., Zahra, A., Latif, A., Rashid, B., Zaidi, M. A., Tabassum, B., Hassan, S., Baksh, A., Javaid, M., Akram, S., Azam, S., Naz, F., Ahmed, S., Bajwa, K. S., Awan, M. F., Shahid, N., Ali, A., Riaz, S., Bashir, B., Sadiq, K., Kokab, Q., Yousaf, I., **Farooq, A. M.**, Javed, M. A., Rahman, Z., Saleem, M. Z., Yasmin, A., Bhatti, M. U., Arif, U., Bashir, K., Jamal, A., Butt, S. J., Arif, A., Ahmad, I., Rao, A. Q., Haider, M. S., Malik, T. H., Nasir, I. A. (2019). Trackable CEMB-Klean Cotton Transgenic Technology: Affordable Climate Neutral Agri-biotech Industrialization for Developing Countries. *Adv. life sci.*, vol. 6, no. 3, pp. 131-138.
13. M Bilal, B Tabassum, **AM Farooq**, M Tariq, IA Nasir, T Hussnain. 2019. In-vitro Analysis of *Chenopodium murale* extract for resistance against potato virus Y. *Pure and Applied Biology (PAB)* 8 (2), 1172-1181.
14. Yaqub, Shazia, Murtaza, Mian, Ali, Shinawar & **Farooq, Abdul Munim**. (2019). Comparison of methods of inoculation for antibacterial potential assay. [10.12692/ijb/15.3.328-333](https://doi.org/10.12692/ijb/15.3.328-333).
15. Khadija Aaliya, Idrees Ahmad Nasir, Anwar Khan, Nida Toufiq, Iqra Yousaf, Olawale Samuel Adeyinka, Sehrish Iftikhar, **Abdul Munim Farooq**, Bushra Tabassum, (2021). Expression of ice recrystallization inhibition protein in transgenic potato lines associated with reduced electrolyte leakage and efficient recovery post freezing injury, *Journal of Biotechnology*, Volume 327,97-105,ISSN 0168-1656,<https://doi.org/10.1016/j.jbiotec.2021.01.003>.