

List of publications of Dr. Quahir Sohail

Research papers published in ISI Journals

- Traore F. F., **Q. Sohail**, A. El Allali, Y. S. A. Gorafi, K. Hejjaoui, A. Hamwiah, T. Istanbuli, S. Boughribil and M. Amri. Multi-Model Genome-Wide Association Study Reveals Molecular Markers Associated with Agronomic Traits in a Kabuli chickpea (*Cicer arietinum* L.) MAGIC-Subset Population Under Different Mediterranean Environments. *Frontiers in Plant Science*. 17:1860578. DOI: 10.3389/fpls.2026.1860578
- Hafsa Naheed, Hidayat Ur Rahman, Nadia Khan, Aziz Ur Rahman, Moez Amri, **Q. Sohail**. (2026) Additive main effect and multiplicative interaction analysis for agronomic performances in bread wheat (*Triticum aestivum* L.) Advanced lines across multiple environments. *Euphytica* 222:93. DO: 10.1007/s10681-026-03744-3
- Rouichi, S., O. Idrissi, **Q. Sohail** H. Marrou, T. R. Sinclair, K. Hejjaoui, M. Amri, M. E. Ghanem (2023) Limited-transpiration trait in response to high VPD from wild to cultivated species: Study of the Lens genus. *Journal of Experimental Botany*. 74 (16). DOI: 10.1093/jxb/erad070
- Cudjoe, D.K., F.G. Okyere, N. Virlet, M. Castle, P. Buchner, P. Parmar, A. Riche, **Q., Sohail**, M. Mhada, M.E. Ghanem, T.W. Waite, F. Mohareb, and M.J. Hawkesford, (2023). Using proximal sensing parameters linked to the photosynthetic capacity to assess the nutritional status and yield potential in quinoa. *Acta Horticulturae*. 1360, 373-379. DOI: 10.17660/ActaHortic.2023.1360.45
- **Sohail Q.**, G. Erginbaş-Orakçı, F. Ozdemir, A. Jighly, S. Dreisigacker, Hakan Ozkan, A.A. Dababat. (2022) Genome wide association study of root lesion nematodes *Pratylenchus* species and crown rot *Fusarium culmorum* in bread wheat. *International Journal of Molecular Sciences*. ISSN 2075-1729. DOI: 10.3390/life12030372
- Traoré F.F, A. El-Bouchi, Y. En-nahli K. Hejjaoui, M.L. Metougui, A. Hamwiah, **Q. Sohail**, T. Istanbuli, S. Boughribil, M. Amri (2022). Exploring the genetic variability and potential correlations between nutritional quality and agro-physiological traits in Kabuli chickpea germplasm collection (*Cicer arietinum* L.). *Frontiers in Plant Science*. 13:905320. DOI: 10.3389/fpls.2022.905320.
- SafiUllah, M.N Khan, S. Salahuddin, M. Tayyab, T. Mehmood, Israr U, M. Khan, **Q. Sohail**, M. Akram (2022) Targeted metabolomics reveals fatty acids abundance adjustments as crucial role in drought stress response and post-drought recovery in wheat. *Front. Genet. – Plant Genomics*. DOI:10.3389/fgene.2022.972696.
- Erginbas-Orakci G., D. Sehgal, **Q. Sohail**, F. Ogbonnaya, S. Dreisigacker, S. R. Pariyar and A. A. Dababat. (2018) Identification of novel quantitative trait loci linked to crown rot resistance in spring wheat. *International Journal of Molecular Sciences*. 19:266. DOI: 10.3390/ijms19092666

- Naheed H., Raziuddin, Farhatullah, **Q. Sohail**, N. Khan (2017) Genetic analysis for yield and yield components in rapeseed. Turkish Journal of Agricultural and Natural Sciences 4 (4): 376-384.
- Beyhan A., **Q. Sohail**, R. Ünsal, N. Dincer L. Dimer, H. Geren, I. Sevim, Ş. Orhan, S. Yaktubay, A. Morgounov (2017) Genetic gains in grain yield in spring wheat in Turkey. Turk. J. Agric. For. 41: 103-112. DOI: 10.3906/tar-1611-50
- Naheed H., Raziuddin, S. Abid, **Q. Sohail**, G. Hassan, M. Arif (2017) Heritability and combining ability of vegetative growth and phenological development of diallel crosses of rapeseed GENETIKA, 49:1:117-126. DOI: 10.2298/GENSR1701117N
- Naheed H., F. Mohammad, **Q. Sohail**, S. Abid, and N. Khan (2016) Genetic diversity of bread wheat lines based on agro-morphological traits International Journal of Agriculture and Biology. 18: 1049–1055. DOI: 10.17957/IJAB/15.0225
- Tadesse W., F. C. Ogonnaya, A. Jighly, M. Sanchez-Garcia, **Q. Sohail**, S. Rajaram, and M. Baum (2015). Genome-wide Association Mapping of Yield and Grain Quality Traits in Elite Winter Wheat Genotypes Targeted to the CWANA region. PLoS ONE. 10: e0141339. DOI: 10.1371/journal.pone.0141339
- **Sohail Q.**, A. Manickavelu and T. Ban (2015) Genetic diversity analysis of Afghan landraces using DArT markers. Genetic Resources and Crop Evolution. 62(8): 1147-1157. DOI: 10.1007/s10722-015-0230-9.
- Tsujimoto H., **Q. Sohail**, Y. Matsuoka. Broadening the genetic diversity of common and durum wheat for abiotic stress tolerance breeding (2015) In. Ogihara Y., T. Shigeo, H. Hirokazu (eds.) Advances in Wheat Genetics: From Genome to Field. Springer publishing pp 233-238. DOI: 10.1007/s10722-015-0230-9
- **Sohail Q.**, T. Shehzad, A. Kilian, A.E. Eltayeb H. Tanaka and H. Tsujimoto (2012) Population structure and diversity in *Aegilops tauschii* assessed by diversity array technology (DArT) markers. Breeding Science, 62: 38-45. DOI: 10.1270/jsbbs.62.38
- **Sohail Q.**, T. Inoue, H. Tanaka, A.E. Eltayeb, Y. Matsuoka and H. Tsujimoto. (2011) Applicability of *Aegilops tauschii* drought tolerance traits to breeding of hexaploid wheat. Breeding Science, 61: 347-357. DOI: 10.1270/jsbbs.61.347
- Ahmad A., Z. Ahmad, W. Ali, **Q. Sohail** and I. Khan (2007) Assessment genetic diversity of local and exotic *Brassica napus* germplasm. Pakistan Journal of Biological. Sciences. 10: 2490-2494. DOI:10.3923/pjbs.2007.2490.2494
- Amanullah A., A. Khan, K. Nawab and **Q. Sohail** (2006) Performance of Promising Common Bean (*Phaseolus vulgaris* L.) Germplasm at Kalam-Swat. Pakistan Journal of Biological Sciences, 9: 2642-2646. DOI: 10.3923/pjbs.2006.2642.2646

List of edited/authored books and book chapters

- Sohail Q. H. Naheed and R. Muhammadi. Book chapter (Breeding and Genetic Enhancement

of Dryland Crops in M. Farooq and K.H.M. Siddique (eds.) (2016) Dryland Agriculture Springer-Verlag Berlin Heidelberg publishing. DOI: 10.1007/978-3-319-47928-6_10.

- Tadesse W., A. Amri, F.C. Ogonnaya, M. Sanchez-Garcia, Q. Sohail, M. Baum. (2015) Chapter 2: Wheat. Pages 81-124. In M. Singh and H. D. Upadhyaya. Genetic and Genomic Resources for Grain Cereals Improvement. Academic Press doi:10.1016/B978-0-12-802000-5.00002-2.
- Tadesse, W., S. Rajaram, F. C. Ogonnaya, M. Sanchez-Garcia, Q. Sohail and M. Baum (2014). Wheat: Challenges and Prospects in the 21st Century. M. Singh, S. Kumar (eds.), Broadening the Genetic Base of Grain Cereals. Springer- India. DOI: 10.1007/978-81-322-3613-9_2
- Jan, M.T., P. Shah, P. A. Hollington, M. J. Khan and Q. Sohail (2009) Agriculture Research: Design and Analysis – A monograph. Published by NWFP Agricultural University, Peshawar.

Papers in Proceedings of Conferences, Meetings and Symposia

- Atta Ul Wahab and **Q. Sohail**. Identification of markers associated with agronomic traits in Synthetic Hexaploid wheat. International Conference on; Recent advances in green biotechnology and climate resilience. Shaheed Benazir Bhutto University, Sheringal, Dir Upper, Pakistan. September 8-9, 2025.
- Basit A., H. Ahmad and **Q. Sohail**. Marker Assisted Screening of Wheat (*Triticum Aestivum*) for strip rust resistance. International Conference on; Recent advances in green biotechnology and climate resilience. Shaheed Benazir Bhutto University, Sheringal, Dir Upper, Pakistan. September 8-9, 2025.
- Traore F. F., A. Allali, K. Hejjoui, A. Hamwih, T. Instanbuli, S. Boughribil, M. Amri. Genome-Wide Association Studies (GWAS) revealed markers associated with agronomic traits in the MAGIC-Subset Chickpeas (*Cicer arietinum* L.) population. The African Plant Breeding Association Conference. Mohammed VI Polytechnic University. Benguerir, Morocco. October 23-26, 2023
- Rouichi, S., Omar Idrissi, **Q. Sohail**, H. Marrou, T. R. Sinclair, K. Hejjoui, M. Amri, and Michel E. Ghanem. Water-conservation trait from wild to cultivated species: Study of Lens genus The African Plant Breeding Association Conference. Mohammed VI Polytechnic University. Benguerir, Morocco. October 23-26, 2023
- Traore F. F., **Q. Sohail**, A. Allali, K. Hejjoui, A. El-Baouchi, A. Hamwih, T. Instanbuli, S. Boughribil, M. Amri. Effect of Genetic variation on the nutritional value of a MAGIC-Subset chickpea (*Cicer arietinum* L.) Population under Mediterranean Environments. The African Plant Breeding Association Conference. Mohammed VI Polytechnic University. Benguerir, Morocco. October 23-26, 2023
- **Q. Sohail**, High throughput phenotyping and plant breeding. International Conference on Sustainable Agriculture and Food Security, August 27-31, 2023.
- **Sohail. Q.**, Moez Amri. Michel E. Ghanem, Manal Mhada, Manal El Akrouchi, Adil Elbaouchi, Kamal Hejjoui, Bruno Gerard, Moez Amri. Drought research in the dry areas of Africa: the case of PHENOMA the high throughput phenotyping platform in Morocco. IPPS

2022 7th International Plant Phenotyping Symposium 'Plant Phenotyping for a Sustainable Future' Wageningen, the Netherlands September 26-30, 2022

- **Sohail. Q.**, Moez Amri. Plant phenotyping: the turbo charging of plant breeding programs, UM6P Phenotyping Day, Mohammed VI Polytechnic University, Ben Guerir, Morocco 22 May 2022.
- Cudjoem D. K., F.G. Okyere, P. Sadeghi- Tehran, A. Riche, **Q. Sohail**, M. Mhada, M. Ghanem, T.W. Waine, F. Mohareb and M.J. Hawkesford Using proximal sensing parameters linked to the photosynthetic capacity to assess the nutritional status and yield potential in quinoa. 31st International Horticultural Congress at the Congress center in Angers, France from 14-20 August 2022.
- Cudjoem D. K., F.G. Okyere, N. Virlet, M. Castle, S. Parmar, Latifa Greche, A. Riche, **Q. Sohail**, M. Mhada, T.W. Waine, F. Mohareb and M.J. Hawkesford. Phenotyping the nutritional status and crop performance in wheat using proximal and UAV-based remote sensing. D The 75th Anniversary Conference of the International Fertilizer Society on plant nutrition and fertilizer production from 6-9 December 2022.
- Cudjoem D. K., G. Okyerem N. Virlet, M. Castle, P. Sadeghi-Tehran, P. Buchner, A. Riche, **Q. Sohail**, M. Akrouchi, M. Mhada, M. Ghanem, T.W. Waine, F. Mohareb and M. J. Hawkesford, Phenotyping the nutritional status of crops using remote sensing technologies SAFA 2022 Annual SAFA Researcher Workshop Mohammed VI Polytechnic University Morocco 9 -13 May 2022.
- **Sohail Q.**, Genomic tools for crop improvement in the changing climate. International conference on strategies for ensuring food security in the changing climate” The University of Agriculture Peshawar Pakistan. October 23-24, 2019.
- Balouch F. S., **Q. Sohail**, M. A. Nadeem, G. Cömertpay, R. Hatipoglu. Future breeding strategies for dealing with climate change. International Conference on Climate Smart Agriculture; the Way of Farming for 21st Century, MNS University of Agriculture Multan, Pakistan, October, 8-9, 2018.
- **Sohail Q.**, Breeding wheat for climate change. Conference on 'Climate Change Threats to Food Security' 2017, Department of Agronomy, The University of Agriculture, Peshawar Pakistan, November 22 – 24, 2017.
- **Sohail Q.**, Wheat breeding: priorities and methodology, International Conference on "Innovations in Agriculture" at Institute of Biotechnology and Genetic Engineering, The University of Agriculture Peshawar, Pakistan March 28-29, 2017.
- **Sohail Q.**, Pre-breeding in wheat and its impact on wheat breeding, IWWIP Annual Meeting. Kastamonu Ilgaz, Turkey January 12-15, 2015.
- **Sohail Q.**, K. Mesut, Cooperative Research Activities of ICARDA for Traditional Germplasm Conservation and Utilization in Turkey. Strategic Workshop of Germplasm Conservation and Utilization for Re-establishing the National Plant Genetic Resource Department in MAIL, Afghanistan and Follow-up meeting of SATREPS Joint Coordination Committee (JCC) and International Donor Coordination Establishment. Ankara, Turkey. August 27 - 28 2015.

- Sanchez-Garcia M., **Q. Sohail**, F.C. Ogbonnaya, W. Tadesse. Genetic variation and association mapping of grain quality traits in elite winter wheat genotypes. EUCARPIA Cereals Section – I T M I Joint Conference, Wernigerode, Germany June 29 - July 4, 2014.
- Tadesse W., O. Abdalla, S. Rajaram, F. C. Ogbonnaya, A. Hargras, M. Keser, R. Sharma, K. Nazari, M. Sanchez-Garcia, **Q. Sohail**, A. Al-Abdallat, and M. Baum. Bread wheat breeding for yellow rust resistance at ICARDA: Current status and prospects. Second International Yellow Rust Conference, Izmir, Turkey. April 28–May, 2014.
- Manickavelu A, **Q. Sohail**, M. Matsui, Y. Kondo, H. Tsujimoto and T. Ban. Ph(G)enomics characterization and enhancement of Afghan wheat landraces. 3rd International Symposium on Genomics of Plant Genetic Resources “A Gateway to the New Era of Global Food Security”. GPGR3 Organizing Committee, Jeju, Korea, April 19, 2013.
- **Sohail Q.**, A. Manickavelu and T. Ban. Molecular Evaluation of Afghan wheat land races. The Seventh *Triticeae* Meeting of Japan, 2012, November 28- 29, 2012 Tsukuba, Japan.
- Manickavelu A., M. Arifi, **Q. Sohail**, Y. Naruoka, K. Komatsu, Y. Kondo and T. Ban. Reconstruction of Wheat Breeding in Afghanistan: I. Strategy and pilot study. 122nd meeting of the Japanese Society of Breeding Kyoto, Japan September 14-15, 2012.
- **Sohail Q.**, A.E. Eltayeb, and H. Tsujimoto. Use of the Germplasm of wild species, *Aegilops tauschii*, for breeding drought tolerant wheat. 121st meeting of the Japanese Society of Breeding Tochigi, Japan March 29-30, 2012.
- **Sohail Q.**, T. Inoue, H. Tanaka, A.E. Eltayeb, and H. Tsujimoto. Population structure of *Aegilops tauschii* and its importance for drought tolerant wheat breeding. Plant and Animal genome XX, San Diego, CA, USA, January 14-18, 2012.
- **Sohail Q.**, T. Inoue, H. Tanaka, A.E. Eltayeb, and H. Tsujimoto. Exploiting the diversity of *Aegilops tauschii* for drought tolerant wheat production. The Sixth *Triticeae* Meeting of Japan, Yokohama, Japan, November 25-26, 2011.
- **Sohail Q.**, T. Inoue, H. Tanaka and H. Tsujimoto. Expression of drought-related traits of *Aegilops tauschii* accessions and their corresponding Synthetic Hexaploid wheat. In: El-Beltagy, A.S. and M. Saxina (Eds.). Meeting the Challenge of Sustainable Development in Drylands under Changing Climate. Proceedings of the 10th International Conference on Development of Drylands, International Dryland Development Commission (IDDC), Cairo, December 12-15, 2010.

Submitted papers

- Basit Ali, Atta Ul Wahab, Muhammad Shaban Afridi, Hilal Ahmad and Q. Sohail. Marker assisted screening of wheat (*Triticum aestivum* L.) genotypes for stripe rust resistance. (submitted to Annals of Agricultural Science and Technology)
- Shakir Afridi, Samavia Zia, and Q. Sohail. Molecular and phenotypic characterization of barley genotypes under drought stress condition (submitted to Genetic Resources and Crop

Evolution)

- Ihsanullah Daur, Q. Sohail and Esha Raheem. Nutraceutical Potential of Caralluma across Ecological Gradients (submitted to Saudi Journal of Biological Sciences)
- Atta ul Wahab, Q. Sohail and Hafsa Naheed. Genome Wide Association Studies of Physiological traits in wheat. (Submitted to Sarhad Journal of Agriculture)

Conferences/ meeting attended in addition to the above

- II. International Plant Breeding Congress and EUCARPIA-Oil and Protein Crops Section Conference. Antalya, Turkey. November 1-5, 2015.
- The 12th Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD) (Cop 12), Ankara, Turkey. October 12-23, 2015.
- The 5th International Cereal Nematode Initiative (ICNI) Workshop held in Ankara, Turkey, on 12-16 September 2015.
- 2014 BGRI workshop and Borlaug summit on wheat for food security Cd. Obregon, Sonora, Mexico. March 22-28, 2014.