

Dr. Sajid Ali

Assistant Professor
Institute of Biotechnology & Genetic Engineering
The University of Agriculture Peshawar, Pakistan

<i>Post-Doc Population Genomics & Co-evolution, France</i> <i>Post-Doc Population Genetics, Denmark</i> <i>PhD Genetics, Evolution and Population Biology, France</i> <i>MS: Plant Health, France</i> <i>M. Sc. (Hons): Plant Breeding and Genetics, Pakistan</i> <i>B. Sc. (Hons): Plant Breeding and Genetics, Pakistan</i>	Cell: +92-3459106929 +92-3355950429 bioscientist122@yahoo.com Research Productive Award, 2017 President of Pakistan award, 2007 3 Gold medals and 1 Silver medal https://sites.google.com/site/bioscientist122/
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Personal information	Academic Qualifications
Last Name Ali First Name Sajid Nationality Pakistani Gender Male Marital status Married Date of Birth July 31st 1984 CNIC 17301-4718740-3 Permanent Address : H. no. 37 Ghalib Street Sethi Town Haji Camp, Peshawar, Pakistan Languages: English, French, Urdu, Pashto and Punjabi, Hindko and Arabic & Persian (limited extent). Hobbies: Jogging, Hiking and trekking, Sports (football) and Reading poetry & history.	2009-12: PhD in Genetics, Evolution and Population Biology. University Paris-Sud, France. (Highest ranking “Tres Honorable”). 2008-09: M2 Santé des Plantes (Master Plant Health), Agro-campus Rennes, France. (First position). 2007-08: M. Sc. (Hons.) in “Plant Breeding and Genetics” at The University of Agriculture, Peshawar, Pakistan. (Grade A+, CGPA 3.97/4). 2003-06: B. Sc. (Hons.) in “Plant Breeding and Genetics” at The University of Agriculture, Peshawar, Pakistan. (Grade A+, CGPA 3.98/4). 2002: F. Sc. in Biological sciences (Pre-Medical) from BISE- Peshawar Pakistan. (Grade A, 70%). 2000: SSC in Science from BISE-Peshawar, Pakistan (Grade A, 70%).

Additional Courses	Distinctions & Awards
July-August 2008 French Language Course, at Institute Catholique de Paris. France January-June, 2008 French Language Course, at Alliance Francaise de l’Islamabad, Pakistan	Research Productive Award, 2017 for being Productive Scientists of Pakistan – Ministry of Science & technology, Pakistan. President of Pakistan Award 2007 for having the highest score at university level 2 Gold Medals in B.Sc. (Hons.) and 1 Gold Medal and 1 Silver Medal in M.Sc. (Hons.) through attaining the best score at Faculty and University level. 1st Position in French Master “M2-Santé des plantes” HEC scholarship for Master leading to PhD for France Agreenskills+ Fellowship for post-doctoral research, France

PROFESSIONAL CAREER

Professional experience:

Assistant Professor: Institute of Biotechnology and Genetic Engineering, the University of Agriculture, Peshawar, Pakistan.
(14th July 2014 till present).

Post-Doctoral Fellow: INRA-CIRAD-SupAgro, Montpellier, France (1st November 2016 to 31st October 2017).

Visiting Researcher: GRRC, Aarhus University Forsogsvaj 1, Flakkbjerg, 4200 Slagelse, Denmark. (1st June 2016-31th August
2016).

Visiting Researcher: GRRC, Aarhus University Forsogsvaj 1, Flakkbjerg, 4200 Slagelse, Denmark. (1st June 2015-31th August
2015).

Post-Doctoral Fellow: Aarhus University Forsogsvaj 1, Flakkbjerg, 4200 Slagelse, Denmark. (1st November 2013-31th
October 2014).

Assistant Professor: Institute of Biotechnology and Genetic Engineering, the University of Agriculture, Peshawar, Pakistan. (25th September 2012 to 24th September 2013).

Invited Researcher-CDD: French National Institute of Agriculture (INRA), France. (1st September 2011 to 31st October 2011).

Teaching Assistant (NIP=BS-17): Department of Plant Breeding & Genetics, the University of Agriculture, Peshawar, Pakistan. (1st August, 2007 to 31st July 2008).

Patent/Variety: Co-breeder of wheat variety “**Ghanimat-e-IBGE**”

Services to Govt.: Member “**Committee on Biotechnology Foresight in Pakistan** - Pakistan Council for Science and Technology, Government of Pakistan”. Contributed to two chapters and edited the report.

Associate Editor: Sarhad Journal of Agriculture

Reviewer: Served as reviewer for international/national journals:

Molecular Ecology, Heredity, Nature-Scientific Reports, Fungal Genetics & Biology, PLoS One, Fungal Biology, Phytopathology, Plant Pathology, European Journal of Plant Pathology, Phytopathologia Mediterranea, Australian Journal of Crop Science, South African Journal of Plant and Soil, Journal of Plant Protection Research, International Journal of Biodiversity and Conservation, Sarhad Journal of Agriculture.

Membership of Scientific Societies:

Board member of the *European and Mediterranean Cereal Rust Foundation (EMCRF)*.

Invited honorary member of the *Canadian Phytopathological Society (CPS)*.

Remained member of *French Phytopathological Society, Mediterranean Phytopathological Society, Pakistan Phytopathological Society and Soil Science Society of Pakistan*.

Students supervised:

PhD: 1 (Aarhus University, Denmark; Co-supervised).

M.Phil: 3 (The University of Agriculture, Peshawar; 2 major supervised; 1 co-supervised).

Students under co-supervision:

PhD: 3 (2 at the Department of Plant Breeding and Genetics, the University of Agriculture, Peshawar, Pakistan and 1 at the Department of Agriculture, University of Haripur, Pakistan).

M.Sc. (Hons): 3 (1 at IBGE, 1 at the Department of Plant Breeding and Genetics, the University of Agriculture, Peshawar, Pakistan)

Teaching Experience:

Several courses of Genetics and Biotechnology have been taught:

Introductory Virology (PPL-703), Principles of Plant Breeding (PBG-704), Genetic Engineering Lab-II (IBGE-711), Ecosystem and Environment (IBGE-414), Food Biotechnology (IBGE-512), Cytogenetics (PBG-511), Germplasm Resources of Crop Plants (PBG-514), Principles of Genetics-I (IBGE-312), Biometrical Genetics (IBGE-403) and Germplasm Resources and Conservation (IBGE-501), Environmental Sciences (CSS-prep).

Projects submitted as PI/Co-PI:

TITLE AND PLACE OF RESEARCH	DONOR AGENCY	AMOUNT	STATUS	ROLE
Surveillance and sampling of wheat yellow rust from the North of Pakistan	As a collaborative part of the EMERFUNDIS, ANR 07-BDIV-003, France	€ 3,000	Completed	Collaborator
Molecular characterization of Pakistani <i>Puccinia striiformis</i> f.sp. <i>tritici</i> through development of rapid genotyping platform	Higher Education Commission, Pakistan	Rs. 5,00,000	In progress	Principle Investigator
Field transcriptomics of wheat yellow rust within the centre of diversity in Pakistan	A collaborative project with “The Genome Analysis Centre, Norwich Research Park, Norwich, UK”	£ 3,076	Completed	Co- Principle Investigator
Surveillance and Molecular Genotyping of Wheat Rust across Pakistan to Comprehend Rust Epidemic status and Population Structure	Agriculture Innovation Programme in Pakistan- USAID-CIMMYT	\$ 20,000	In progress	Principle Investigator

Conferences, Meetings and Workshops Attended:

1. 13-16 February, 2017. 4th Annual Agreeskills Meeting. College des Bernardins. Paris, **France**.
2. 21-22 November, 2016 - Journee REID-Champignon & Annual meeting of GANDALF project, at AgroParisTech, Paris, **France**.
3. 27th October 2016 – Annual meeting of “Wheat Productivity Enhancement Program. Islamabad, **Pakistan**.
4. 12-13 September 2016 – **Invited Speaker** – BSPP Annual Presidential Meeting 2016, Oxford University, Oxford, **United Kingdom**.
5. 2nd October 2015 – **Invited Speaker** - Status of Wheat Improvement through Biotechnology in Pakistan – Freeman Christian College University, Lahore, **Pakistan**.
6. 05-08 July 2015 – **Keynote Speaker** - 14th International Cereal Rusts and Powdery Mildew, Conference, Helsingør, **Denmark**.
7. 15-25 March 2015 - SAARC Wheat Rust Surveillance and Monitoring Training Workshop – Kathmandu, **Nepal**.
8. 17-18 December 2014 - International Conference on Environment and Sustainable Development. GC University, Lahore, **Pakistan**.
9. 22-28 March 2014 - Borlaug Global Rust Initiative (BGRI) Technical Workshop, 2014 & Borlaug Food Summit. Obregon, **Mexico**.
10. 5th March 2014 – United Kingdom Cereal Pathogens Virulence Survey stakeholders meeting. Cambridge, **United Kingdom**.
11. 28th January 2014 – Annual meeting of Rust-Fight project, Aarhus University, Slagelse, **Denmark**.
12. 28th August 2013 – Annual meeting of “Wheat Productivity Enhancement Program. Islamabad, **Pakistan**.
13. 19-22 August 2013 - Borlaug Global Rust Initiative (BGRI) Technical Workshop, 2013. New Delhi, **India**.
14. 25-29 March 2013 – 1st Khyber Pakhtunkhwa Traveling Wheat Seminar. Khyber Pakhtunkhwa, **Pakistan**.
15. 05-08 June 2012- 8^{ème} colloque de la Société Française de Phytopathologie. Paris, **France**.
16. 16-20 January, 2010 - 9^{èmes} Rencontres de Phytopathologie – Mycologie, JJC 2012, Aussois, **France**.
17. 19-23 Septembre 2011- XVI Congress of European Mycologists, Halkidiki, **Greece**.
18. 25-29 June, 2011 - Jacques Monod Conference, Roscoff, **France**.
19. 15-17 February, 2011 – Conference of BIOEXPLOIT final meeting, Wageningen, **The Netherlands**.
20. 25-26 November, 2010 - Annual meeting of EMERFUNDIS at Lauret, **France**.
21. 2-4 June, 2010 – Colloquium of “2eme Journee doctorant SPE-2010”, Sophia-Antipolis, **France**.
22. 9-10 February, 2010 - Technology Workshop on “Marker Assisted Selection: from discovery to application”. Wageningen, **The Netherlands**.
23. 25-29 January, 2010 - 8^{èmes} Rencontres de Phytopathologie – Mycologie, JJC 2010, **Aussois, France**.
24. 8-9 December, 2009 - 9th International Conference on Plant Diseases (CIMA-2009), **Tours, France**.
25. 25-27 November, 2009 - Journee REID-Champignon & Annual meeting of EMERFUNDIS, at AgroParisTech, Paris, **France**.
26. 12 November, 2009 - Colloquium on “*Evolution de l'evolution*” at AgroParisTech, Paris, **France**.
27. 3-4 November, 2009 – Workshop on Durable disease resistance management. INRA-Paris, **France**.
28. 21-23 October, 2008 - *International Agricultural Pests Conference (CIRA)*. Organized by AFPP. Montpellier, **France**.
29. 19-21 November, 2007 - 3rd *International Conference on Plant Pathology*, Pakistan. Organized by Pakistan Phytopathological Society. Lahore, **Pakistan**.

PUBLICATIONS

Impact factor: 49.96

Total publications: 40
Current H index: 15

Total citations: 647
Current i10: 22

International Publications:

1. Walker A-S, Rieux A, Ravigne V, **Ali S**, Carpentier F, Fournier E (2017) Fungal adaptation to contemporary fungicide applications: the case of *Botrytis cinerea* populations from Champagne vineyards (France). *Molecular Ecology* Accepted. 26: 1919-1935. **IF: 5.947**
2. **Ali, S**, Soubeyrand S, Gladieux P, Giraud T, Leconte M, Gautier A, Mboup M, de Vallavieille-Pope C, Enjalbert J. 2016. CloNcaSe: Estimation of sex frequency and effective population size by clonemate re-sampling in partially clonal organisms. **Molecular Ecology Resources**. 16: 845-861. **IF: 5.298**
3. Walter S, **Ali S**, Kemen E, et al. 2016. Molecular markers for tracking the origin and worldwide distribution of invasive strains of *Puccinia striiformis*. **Ecology and Evolution**. 6: 790-2804. **IF: 2.537**
4. Thach T, **Ali S**, de Vallavieille-Pope C, Justesen AF, Hovmøller MS. 2016. Worldwide population structure of the wheat rust fungus *Puccinia striiformis* in the past. **Fungal Genetics and Biology**. 87: 1-8. **IF: 2.933**
5. Hovmøller MS, Walter S, Bayles R, Hubbard A, Flath K, Sommerfeldt N, Leconte M, Rodriguez-Algaba J, Hansen JG, Lassen P, Justesen AF, **Ali S**, de Vallavieille-Pope C. 2016. Replacement of the European wheat yellow rust population by new races from the centre of diversity in the near-Himalayan region. **Plant Pathology**. 65: 402-411. **IF: 2.383**
6. Thach, T. **S. Ali**, A.F. Justesen, J. Rodriguez-Algaba and M.S. Hovmølle. 2015. Recovery and virulence phenotyping of the historic ‘Stubbs collection’ of the yellow rust fungus *Puccinia striiformis* from wheat. **Annals of Applied Biology**. 167: 314-326. **IF: 2.103**
7. **Ali S**, Gladieux P, Leconte M, Gautier A, Justesen AF, Hovmøller MS, Enjalbert J, De Vallavieille-Pope C. 2014. Origin, migration routes and genetic structure of worldwide populations of the wheat yellow rust pathogen, *Puccinia striiformis* f.sp. *tritici*. **PLOS Pathogens**. 10: e1003903. DOI: 10.1371/journal.ppat.1003903. **IF: 7.003**
8. **Ali S**, Gladieux P, Rahman H, Saqib MS, Fiaz M, Ahmed H, Leconte M, Gautier A, Justesen AF, Hovmøller MS, Enjalbert J, de Vallavieille-Pope C. 2014. Inferring the contribution of sexual reproduction, migration and off-season survival to the temporal maintenance of microbial populations: a case study on the wheat fungal pathogen *Puccinia striiformis* f.sp. *tritici*. **Molecular Ecology**. 23: 603–617. **IF: 5.947**
9. **Ali, S.**, M. Leconte, H. Rahman, M.S. Saqib, P. Gladieux J. Enjalbert and C de Vallavieille-Pope. 2014. A high virulence and pathotype diversity of *Puccinia striiformis* f.sp. *tritici* at its centre of diversity, the Himalayan region of Pakistan. **European Journal of Plant Pathology**. 140: 275-290. **IF: 1.494**
10. de Vallavieille-Pope, C., **Ali, S.**, Leconte, M., Enjalbert, J., Delos, M., Rouzet, J., 2012. Virulence dynamics and regional structuring of *Puccinia striiformis* f. sp. *tritici* in France between 1984 and 2009. **Plant Disease** 96, 131-140. **IF: 3.192**
11. **Ali, S.**, A. Gautier, M. Leconte, J. Enjalbert, and C. De Vallavieille-Pope. 2011. A rapid genotyping method for an obligate fungal pathogen, *Puccinia striiformis* f.sp. *tritici*, based on DNA extraction from infected leaf and Multiplex PCR genotyping. **BMC Research Notes**. 4: 240.
12. **Ali, S.**, M. Leconte, A.-S. Walker, J. Enjalbert, and C. De Vallavieille-Pope. 2010. Reduction in the sex ability of worldwide clonal populations of *Puccinia striiformis* f.sp. *tritici*. **Fungal Genetics and Biology**. 47: 828-838. **IF: 2.933**
13. **Ali, S.**, S.J.A. Shah and H. Rahman. 2009. Multi-Locations Variability for Partial Resistance in Wheat to *Puccinia striiformis* West. *tritici*. **Phytopathologia Mediterranea**. 48: 269-279. **IF: 1.042**
14. **Ali, S.**, S.J.A. Shah, H. Rahman. M.S. Saqib, M. Ibrahim and M. Sajjad. 2009. Variability in Wheat Yield Under Yellow Rust Pressure in Pakistan. **Turkish Journal Agriculture and Forestry**. 33: 537-546. **IF: 1.311**
15. **Ali, S.**, S.J.A. Shah, I.H. Khalil, H. Raman, K. Maqbool and W. Ullah. 2009. Partial resistance to yellow rust in introduced winter wheat germplasm at the north of Pakistan. **Australian Journal of Crop Science**. 3: 37-43. **IF: 1.63**
16. **Ali, S.** H. Rahman, S.J.A. Shah, S.M.A. Shah, Farhatullah. 2009. Assessment of field resistance using host-pathogen interaction phenotype for wheat yellow rust. **African Crop Science Journal**. 17: 213-221.
17. **Ali, S.**, A. R. Khan, G. Mairaj, M. Arif, M. Fida and S. Bibi. 2008. Assessment of different crop nutrients management practices for improvement of crop yield. **Australian Journal of Crop Science**. 2(3):150-157. **IF: 1.63**
18. **Ali, S.**, SJA Shah, K Maqbool. 2008. Field-Based Assessment of Partial Resistance to Yellow Rust in Wheat Germplasm. **Journal of Agriculture & Rural Development** 6 (1), 99-106.

National Journals

19. Facho Z, Farhatullah, Khalil Ih, Khan N and **Ali S.**, 2016. Morphological characterization and estimation of genotype × environment interaction of indigenous buckwheat germplasm collected from Gilgit Baltistan Pakistan. **Pakistan Journal of Botany**. 48, 2391-2398. **IF: 0.66**
20. Naveed, N. M.A. Khan, M.S. Baloch, M. Arif, S.A. Naqvi, J. Khan and **S. Ali**. 2015. Early planting date can compensate the reduction in wheat yield due to fodder cutting in dual purpose wheat. **Pakistan Journal of Agricultural Sciences**. 52, 469-477. **IF: 1.05**
21. Fayyaz L, Farhatullah, Shah S, Iqbal S, Kanwal M and **Ali S**, 2014. Genetic variability studies in brassica F2 populations developed through inter and intra-specific hybridization. **Pakistan Journal of Botany**, 46, 265-269. **IF: 0.66**
22. Rahman H, Durreshahwar, **Ali S.**, Iftikhar F, Khalil IH, and Shah SMA. 2010. Stability analysis of maize hybrids across North West Pakistan. **Pakistan Journal of Botany**. 42, 1089-1093. **IF: 0.66**
23. **Ali, S.**, Shah, A., Arif, M., Mairaj, G., Ali, I., Sajjad, M., Farhatullah, Khan, M.Y., Khan, N.M., 2009. Enhancement of wheat grain yield and yield components through foliar application of zinc and boron. **Sarhad Journal of Agriculture** 25, 15-19.
24. Saqib, M.S. S.J.A. Shah, F. Muhammad, W. Khan, M. Ibrahim and **S. Ali**. 2008. Genotypic variability for *alternaria alternata* (fr.) keissler infection in bread wheat. **Plant Pathology Journal**. 7, 34-39.
25. Gul, R., Khan, H., Mairaj, G., **Ali, S.**, Farhatullah, Ikramullah, 2008. Correlation study on morphological and yield parameters of mungbean (*Vigna radiata*). **Sarhad Journal of Agriculture** 24, 37-42.
26. Rahman, H., **Ali, S.**, Shah, S.M.A., Shah, S.S., Rahman, N., Khalil, I.A., Hussain, I., Afzal, F., 2008. Diversity for morphological and maturity traits in maize populations from upper Dir. **Sarhad Journal of Agriculture** 24, 439-433.
27. Mairaj, G., Akhtar, M.A., Khan, A.R., Ullah, Z., Bibi, S., **Ali, S.**, 2008. Quality evaluation of different honey samples produced in Peshawar valley. **Pakistan Journal of Biological Sciences** 11, 797-800.
28. **Ali, S.**, S.J.A. Shah and M. Ibrahim. 2007. Assessment of wheat breeding lines for slow yellow rusting (*Puccinia striiformis* west. *tritici*). **Pakistan Journal of Biological Science** 10, 3440-3444.
29. **Ali, S.**, S. Shah, H. Rahman, I. A. Khalil, I.H. Khalil. 2007. Evaluation of outcross progenies of maize for grain yield traits. **Sarhad Journal Agriculture**. 23 (3): 629-632.
30. Jan, T., Jan, M.T., Arif, M., Akbar, H., **Ali, S.**, 2007. Response of wheat to source, type and time of nitrogen application. **Sarhad Journal of Agriculture** 23, 871-879.
31. Khan, A., Arif, M., Shah, A., **Ali, S.**, Hussain, Z., Khan, S., 2007. Evaluation of planting methods for grain yield and yield components of wheat. **Sarhad Journal of Agriculture** 23, 561-563.
32. Khan, A.R., Alam, S., **Ali, S.**, Bibi, S., Khalil, I.A., 2007. Dietary fiber profile of food legumes. **Sarhad Journal of Agriculture** 23, 763-766.
33. Shah, S.J.A., T. Mohmmad, S. Hussain, M. Ibrahim, W. Khan and **S. Ali**. 2007. Resistance against African Stem Rust (*Puccinia graminis tritici*) Race Ug99 in advanced wheat lines and varieties developed by public breeding programs in NWFP, Pakistan. **Pakistan Journal of Scientific and Industrial Research**. 50, 210-212.
34. Turi, N.A., Shah, S.S., **Ali, S.**, Rahman, H., Ali, T., Sajjad, M., 2007. Genetic variability for yield parameters in maize (*Zea mays* L.) genotypes. **Journal of Agricultural and Biological Science** 2, 1-3.
35. Khan, D., Khan, A.R., Bibi, S., **Ali, S.**, Khalil, I.A., 2007. Storage stability of persimmon fruits (*Diospyros Kaki*) stored in different packaging materials. **Journal of Agricultural and Biological Science** 2, 20-23.
36. Arif, M., **Ali, S.**, Khan, A., Jan, T., Akbar, H., 2006. Influence of farm yard manure application on various wheat cultivars. **Sarhad Journal of Agriculture** 27-29.
37. Arif M, Khan MA, Akbar H, Sajjad M, **S. Ali**. 2006. Prospects of wheat as a dual-purpose crop and its impact on weeds. **Pakistan Journal of Weed Science Research**. 12, 13-18.
38. **Ali, S.**, Arif, M., Gul, R., Ali, I., 2006. Improving seed emergence and early growth through water soaking. **Scientific Khyber** 19, 173-177.
39. Arif, M., Chohan, M.A., **Ali, S.**, Gul, R., Sajjad, K., 2006. Response of wheat to foliar application of nutrients. **Journal of Agricultural and Biological Science** 1, 30-34.
40. Arif, M., **Ali, S.**, Shah, A., Javed, N., Rashid, A., 2005. Seed priming maize for improving emergence and seedling growth. **Sarhad Journal of Agriculture** 21, 17-20.

Book Chapters Published

1. **Ali, S.**, M.R. Khan, A. Gautier, Z.A. Swati, and S. Walter. 2017. Microsatellite genotyping of the wheat yellow rust pathogen *Puccinia striiformis*. Published in *Methods in Molecular Biology* by Elsevier Ltd.
2. **Ali, S.** and D. Hodson. 2017. Wheat rust surveillance; field disease scoring and sample collection for phenotyping and molecular genotyping. Published in *Methods in Molecular Biology* by Elsevier Ltd.

3. Book Edited and contributed to chapters: **“Biotechnology Foresight: Technology Foresight Exercise”** - Ed. Swati, Z.A. and **Ali, S.** - Published by Pakistan Council for Science and Technology.

References:

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