

**DR. YOUSAF HAYAT: Professor in Statistics**

Department of Mathematics, Statistics & Computer Science,
The University of Agriculture, Peshawar, Khyber Pakhtunkhwa,
Pakistan.

Email: yhayat@aup.edu.pk and yousafhayat@gmail.com

Phone: +92-3129510424;

Nationality: Pakistani

District Domicile: Lakki Marwat

Chairman: 07-05-2012 to 18-6-2015 and July-2018-Nov.-2021

Director IT: August 2013- August 2021

Distinction: MSc Statistics Gold Medalist

Biography

Yousaf Hayat was born in District Lakki Marwat, Khyber Pakhtunkhwa, Pakistan. He received his Bachelor degree in 1996, major in Statistics from Gomal University, Dera Ismail Khan, and Master of Science (M.Sc.) in Statistics with distinction in 1998 and Master of Philosophy (MPhil) Statistics in 2005 from University of Peshawar, Pakistan. He earned his doctorate (Ph.D) in 2008 from Zhejiang University, Hangzhou, P.R. China and completed his postdoctoral research at Center for Applied Research in Mathematics (CARM), the University of Queensland, Australia in 2014. He worked as Research Associate (2005-2008) and has successfully carried out funded research project on detection of influential observations in Genetic Data in the framework of Mixed Linear Models at the institute of Bioinformatics, Zhejiang University, Hangzhou, China. He has presented his research work at various reputed national and international conferences and won Best Oral Presenter Award. He is an author of more than 60 research publications published in reputed journals. He has taught various courses of statistics to undergraduate and postgraduate classes, and has supervised (as major supervisor) about 27 MS/MPhil students in Statistics and Management Sciences, and remained co-supervisor with various number of Master and PhD research scholars.

He started his professional career (Regular) in September 2000 by joining the Department of Mathematics, Statistics and Computer Science, the University of Agriculture, Peshawar, and currently he is working as Professor in Statistics in the same department since 2017. He has vast experience of teaching and research, and has taught dozens of courses to the students from different disciplines (Agriculture, Sociology, Management Science, Medical Sciences, Social Sciences and Humanities etc). He also remained visiting faculty of the Institute of Management Sciences, Hayatabad, Peshawar. He has also received best achievement award, in recognition of outstanding performance, from BRAINS postgraduate college of computer science and information technology (2000). Furthermore, he has more than 8 years of administration experience, and remained Chairman of the department for more than 6 years and performed the additional duties as Director of Information Technology (IT)-CNEP. His research interest includes Applied Statistics, Biostatistics, Epidemiology and Public Health, Statistics and HRM & Business administration, Application of Statistics in Humanities and Social Sciences, Climate Change, Experimental Designs and Analysis, Regression Analysis & Econometrics, Time Series Analysis, Linear and Mixed Linear Models, and Multivariate Statistics, in addition to Data Science.

EDUCATION

Doctor of Philosophy (Statistics): (2005-2008)
Institute of Bioinformatics (IBM), Zhejiang University,
Hangzhou, China

Master of Philosophy (M.Phil) Statistics (2002-2005)
Department of Statistics, University of Peshawar-Pakistan

Master of Science (MSc) Statistics (1996-1998)
Department of Statistics, University of Peshawar-Pakistan

Bachelor of Science (BSc) Major in Statistics (1994-1996)
Gomal University, Dera Ismail Khan (D.I. Khan), Pakistan

TEACHING EXPERIENCE (25+ Years)

1. Professor in Statistics, Department of Mathematics, Statistics & Computer Science, The University of Agriculture, Peshawar **(18-09-2017- Current)**.
2. Associate Professor, Department of Mathematics, Statistics & Computer Science, The University of Agriculture, Peshawar **(29-12- 2009 to 17-09-2017)**.
3. Assistant Professor, Department of Mathematics, Statistics & Computer Science, The University of Agriculture, Peshawar **(05-09-2009 to 28-12-2009)**.
4. Lecturer, Department of Mathematics, Statistics & Computer Science, The University of Agriculture, Peshawar **(1st Sept. 2000- 28th December 2009)**.
5. Lecturer, BRAINS Post Graduate College of IT, Peshawar **(16th Sept. 1999- 31st August 2000)**.
6. Lecturer, National Institute of Business Management (NIBM), Peshawar **(1st June 1999- 30th Sept. 1999)**.

TEACHING STATEMENT

As a teacher of statistics, since 25 years, I believe that teaching is a dynamic and reciprocal process that empowers students to become critical thinkers, problem-solvers, and informed decision-makers in the field of statistics and other disciplines. Keeping in view the professional capabilities and experiences, my approach to teaching & research is embedded in the following core beliefs and values:

In the first instance, I prioritize the students' needs, their interests, experiences, and creating a comprehensive and supportive environment that fosters active participation and engagement for their better understanding of the subject and its development. I always emphasize on the development of deep conceptual knowledge in statistics and biostatistics, enabling students to apply theoretical frameworks to real-world problems and make appropriate decisions in the light of findings after analyzing the data and information. I am always trying to link theoretical concepts to practical problems in various fields, such as medicine, public health, agriculture, management sciences and social sciences (where appropriate) etc, for illustrating the relevance and impact of statistical methods.

Keeping in view the importance of statistics and its use in almost all the research based projects/problems, I always encourage the students to work together, share their view points, and learn from one another which is beneficial for mirroring the collaborative nature of scientific inquiry and professional practice. Personally, my interest is to promote a growth mindset, recognizing that teaching and learning are lifelong processes that require ongoing curiosity, creativity, and adaptation. In order to assess and monitor the performance and interest of the students, I am using a variety of assessment methods and strategies for obtaining their feedback and consistent guidance for achieving their own academic and research objectives.

I strive to create a welcoming and inclusive environment, acknowledging and valuing the diverse backgrounds, experiences, and perspectives of all the students. Motivation and encouragement of students are playing vital role in providing necessary energy to the students for achieving their goal-oriented activities related to their academics and field related research. By having these principles, method and way of teaching & research, my aim is to inspire and empower the students to become confident, critically thinking professionals who can effectively apply statistical knowledge to address complex & market-based problems and to improve human well-being.

AWARDS AND SCHOLARSHIP/FELLOWSHIP

- First class first position in M.Sc Statistics in order of merit, Gold medalist (1998).
- Best Achievement Award for Meritorious Services at BRAINS Post Graduate College of Information Technology, Peshawar (2000).
- International Certificate of Excellence awarded by the journal of "Scientific Research Monthly", Hong Kong in recognition of Best Research Paper (2007).
- Higher Education Commission (HEC) Scholarship for PhD studies (P.R. China, May 2005-September 2008).
- HEC approved supervisor (2011-2017)
- Endeavour Award Fellowship for postdoctoral research at the University of Queensland, Australia (2014).
- Remained foreign faculty/Postdoc fellow at Centre for Applied Research in Mathematics (CARM), the University of Queensland, Australia (March 16, 2014 to Sep. 17, 2014).

COURSES TAUGHT

COURSES TAUGHT TO BSc /BSc(Hons)

- Statistics-I and Statistics-II: B. Sc (Hons) Agriculture
- Biostatistics: B.Sc (Hons) Biotechnology/DVM
- Business Statistics: BBA(Hons)
- Inferential Statistics, : BBA(Hons), BS(IT) and BS(CS)
- Introduction to Probability: BS(CS)/IT, BBA (Hons)
- Statistical Methods for Social Sciences: B.Sc (Hons) Economics/Agriculture and Applied Economics

COURSES TAUGHT TO MSc/MSc(Hons)/MS/MPhil

- Logical Reasoning and Social Research Methods: MPhil Statistics
- Regression Analysis and Econometrics: MPhil Statistics
- Theory of Linear Models: MPhil Statistics
- Theory of Mixed Linear Models: MPhil Statistics
- Probability Distributions: MPhil Statistics
- Statistics for Social Sciences: M.Sc (Hons)/MPhil
- Parametric and Non-parametric Statistics: M.Sc Statistics/BS
- Experimental Designs & Analysis: M.Sc (Hons) Agriculture
- Advanced Research Methods: MS Management Sciences course

- Statistical Methods: M.Sc Statistics
- Experimental Design-I: M.Sc Statistics
- Experimental Design-II: M.Sc Statistics
- Applied Multivariate Statistical Analysis: M.Sc Statistics
- Survey and Sampling Techniques: M.Sc Statistics
- Biostatistics and Epidemiology: Master of Public Health
- Statistics for Social Sciences: M.Sc(Hons)/MPhil in Agricultural Sciences
- Qualitative and Quantitative Techniques: MPhil/PhD Business & Management Sciences

COURSES TAUGHT TO PhD

- Applied Statistics: PhD Agriculture Sciences
- Applied Statistics for Social Sciences: PhD course
- Applied Statistics, PhD Computer Science and Information Technology
- Qualitative and Quantitative Techniques: PhD Management Sciences

COURSES STUDIED DURING ACADEMIC CAREER

Statistical Methods, Probability and Distribution Theory, Linear Algebra and Numerical Methods, Sampling Techniques, Population Studies (Demography), Design and Analysis of Experiments, Inference Theory, Multivariate Analysis, Regression Analysis and Econometrics, Logical Reasoning and Social Research Methods, Data Processing and Computer Programming, Survival Data Analysis, Applied Stochastic Models, Measure Theory, Categorical Data Analysis, Advanced Regression Analysis, Advanced Experimental Designs, Statistical Genetics, Statistical Software and Data Analysis, Time Series Analysis, Linear Models and Statistical Analysis, Experimental Designs and SAS Analysis,

RESEARCH INTEREST

Applied Statistics, Biostatistics, Data Science and Analytics, Population Analysis and Surveys, Regression Analysis, Experimental Designs, Linear and Mixed Linear Models, Econometrics, Agricultural Statistics & Climate Change, Time Series & Panel Data Analysis, Statistics in Business and Management/HRM

COURSES DESIGNED & DEVELOPED

1. Theory of Mixed Linear Models: M.Phil/PhD Statistics

2. Advanced Research Methods for MBA (1.5/3.5) and MS Management Sciences
3. Applied Statistics for Social Sciences, PhD course, Faculty of Rural Social Sciences (FRSS)

BOOKS/CHAPTER PUBLISHED

1. Published a Chapter "Experimental Designs" in a book "Statistical and Economic Analysis of Experimental Data". Published by NARC Pakistan Agricultural Research Council, Islamabad, 2014.
2. Experimental Designs: With Application to Agricultural Experiments (Book in progress).

MPhil STATISTICS/MS(MS) SUPERVISION (AS MAJOR SUPERVISOR)

S.No.	Name	Thesis Title	Status/year
1.	Qaisar Khan	Ownership structure and Dividend Payout Policy	Completed/2011
2.	M. Abdullah Shah	Comparative Financial Performance Analysis of Lucky Cement and Kohat Cement Company Limited	Completed/2011
3.	Wajid Ali	Studying Behaviour Attributes and Student's Academic Performance: A Case Study of Agricultural University Peshawar	Completed/2012
4.	Tanveer Alam	Human Resource Management Policies and Organizational Performance in the Industrial Sector, Hayatabad	Completed/2012
5.	M. Faizan Ali	Effect of Distributive and Procedural Justices on Job Satisfaction in the Industrial Sector	Completed/2012
6.	Fazlullah	Financial Performance of MCB Bank Before and After Privatization	Completed/2013
7.	Waqas Rahman	Comparative Financial Analysis of Bank Alfalah and National Bank of Pakistan	Completed/2013
8.	Wasif ur Rehman	Determinants of Inflation in Pakistan	Completed, 2014
9.	Al Hamra Shuaib	Effect of work centrality on work behavior of employees: moderating role of psychological capital	Completed, March 2014
10.	M. Irfan Ullah	All Possible and Stepwise Regression Analysis of Macro Economic Variables	Completed/2015
11.	Asim Zia	Effect of change in organization and employee empowerment on employee performance: moderating role of culture	Completed 2013
12.	Fazal-e-Subhan	Effect of insurgency on the financial performance of hotelling industry in District Swat	Completed 2013
13.	Muhammad Zubair	Multi Level Models Under Change Distributional Assumptions	Completed-Jan 2016
14.	Muhammad Ishaq Khan Khattak	Impact of macroeconomic variables on stock index: Evidence from four Asian countries	Completed Jan-2016
15.	Bashir Muhammad	Effect of Shareholder's on Corporate Governance	Completed-2016
16.	Faheem Ullah	Risk factors of depression: A logistic regression approach	Completed Jan-2016
17.	Syed Umar Ali Shah	Effect of Ethical Leadership on Employee Well-being: The Moderating Role of Organizational Culture	Completed June-2017
18.	Tariq Zaman	Co-integration and Causality Analysis of Economic Force and Equity	Completed Oct.-2017
19.	M. Shah Nawaz	Statistical Study of the Risk Factors of Chronic Kidney Disease: A Logistic Regression Approach	Completed 2018
20.	Fahim Ullah Khan	Impact of Risk Management Practices on Customers Trust in	Completed 2018

		Commercial Banks of Pakistan	
21.	Mr. Zahid Khan	Risk Factors of Stroke: A Statistical Study	Completed 2019
22.	Ms. Afshan Naz	Statistical Study of Problems Faced by the Students Residing in Different Hostels	Completed 2019
23.	Mr. Abdur Rehamn	Fitting Parametric Models to Survival Data: A Comparative Study of Maximum Likelihood and Bayesian Estimations	Completed 2019
24.	Mr. Zahir Shah	Analysis of Climate Change Data: A Statistical Study	Completed 2019
25.	Ms. Sarwa Jabeen	Risk Factors of Tuberculosis Disease: A Statistical Study	Completed 2019
26.	Shahzada M. Saleem	Statistical Analysis of the Risk Factors of Low Back Pain : A Logistic Regression Approach	Completed January, 2021
27.	Muhammad Khan	Comparison of Different Methods for Estimating the Parameters of Weibull Distribution	Completed March, 2021

PHD SUPERVISION (AS MINOR/Co-SUPERVISOR)

S.No.	Name	Department	Thesis Title	Completion year
1.	Shazma Anwar	Agronomy	Physiological and Biochemical Mechanism of Salinity Tolerance in Barley	2011
2.	Robina Karim	Agri. & Applied Economics	Implementation of WTO's Agreements in Pakistan: Present Status, Future Prospects and Implications for Pakistan's Economy	2016
3.	Neelam Andaleeb	Agri. & Applied Economics	Determinants of Household Welfare, With a Special Reference to Women Participation in Livestock Management in District Mardan, Khyber Pakhtunkhwa, Pakistan	2017
4	Imtiaz Ali	Plant Breeding & Genetics	Genetic Diversity and Genotype by Environment Studies in Upland Cotton	2017
5.	Irfan Ullah	Agri. & Applied Economics	Food Consumption in Pakistan: Application of Linear Approximate Almost Ideal Demand System (LA/AIDS)	2018
6.	Adalat Khan	Agri. & Applied Economics	Value Chain Analysis of Peach Fruit in Khyber Pakhtunkhwa	2018
7.	Noor Jehan	Economics	Economic Analysis of Moonlighting and Wage rate Determination in Higher Education Institutions of Khyber Pakhtunkhwa	2018
8	Sana Naeem	Agri. & Applied Economics	An Investigation of Children Involvement in Agricultural Activities: Evidence from Rural Households	2019

ACADEMIC ACTIVITIES/ADMINISTRATION/COMMITTEE MEMBERSHIP

1. Chairman UFM Committee, the University of Agriculture, Peshawar (May 6, 2024-- Current)
2. Convener, Curriculum and Syllabi Review Committee, Government of Khyber Pakhtunkhwa, Higher Education, Archives & Libraries Department (Since 27-03-2024 — Current)
3. Remained Chairman, Department of Maths/Stat/Computer Science, the University of Agriculture, Peshawar, July 2018-November 2021.

4. Remained Chairman, Department of Maths/Stat/Computer Science, The University of Agriculture, Peshawar, May 7, 2012 to June 18, 2015.
5. Director IT-CNEP (Additional Charge), The University of Agriculture, Peshawar-Pakistan (August, 2013- August 2021).
6. Member Board of Studies, Institute of Business and Management Sciences (IBMS), The University of Agriculture, Peshawar, Pakistan. Feb. 2009-2018.
7. Member Graduate Studies Committee, Department of Statistics, University of Peshawar, 2009-2017.
8. Member Board of Studies M.Sc (Hons.), Department of Agriculture & Applied Economics, The University of Agricultural, Peshawar. February 18, 2009-2017.
9. Remained member Board of Studies, Department of Extension Education & Communication, The University of Agriculture, Peshawar. Jan 31, 2009-2012.
10. Member Board of Studies, Department of Human Nutrition, The University of Agriculture, Peshawar. April 1, 2009 to March 2011.
11. Member Board of Studies, Department of Plant Pathology, The University of Agriculture, Peshawar. April 7, 2009-August 2012.
12. Member Board of Studies, Department of Rural Sociology, The University of Agriculture, Pakistan. Since 2010-2013.
13. Member Scrutiny and Quantification Committee approved by the Syndicate, May 2012-2019 (Faculty, The University of Agriculture, Peshawar).
14. Member Scrutiny and Quantification Committee approved by the Syndicate, 2016-Current (Administration Cadre, The University of Agriculture, Peshawar).
15. Member Scrutiny and Quantification Committee, AUPSC (Boys and Girls), 2018-Current, The University of Agriculture, Peshawar).
16. Convener Board of Studies, Department of Mathematics, Statistics and Computer Science, The University of Agriculture, Peshawar. May, 2012-June 2015.
17. Convener Board of Studies, Department of Mathematics, Statistics and Computer Science, The University of Agriculture, Peshawar. July, 2018-November 2021.
18. Member Board of Faculty, Faculty of Rural Social Sciences, The University of Agriculture, Peshawar. May 2012-Current.
19. Member (Co-opted) BOS, Department of Entomology, The University of Agriculture, Peshawar. June 2021-Current.
20. Member (Co-opted) BOS, Department of Plant Protection, The University of Agriculture, Peshawar. May 2021-Current.

ELECTED MEMBERSHIP

1. Vice President of Agriculture University Teachers Association (AUTA) for the session 2008-09.
2. Vice President of Agriculture University Teachers Association (AUTA) for the session 2009-10.
3. Elected member of Agriculture University Teacher's Foundation (AUTF) from the constituency of Associate Professor (2011-12).
4. Elected member of Syndicate from the constituency of Associate Professor, since October, 2015 to September 18, 2017.
5. Elected Member of Executive Council AUTA, Session 2018-2019.
6. Elected Member of Executive Council AUTA, Session 2020-21.
7. Elected Member of Executive Council AUTA, Session 2023-2024.

CONFERENCE/SEMINAR ARRANGED/ORGANIZED

- Organizer, member organizing committee of the workshop "Awareness Building Workshop on 7th Agricultural Census-2024; Integrated Digital Counts, held on 30th May, 2024, jointly organized by Pakistan Bureau of Statistics, Ministry of Planning Development & Special Initiatives and the Department of Maths, Stats & Computer Science, the University of Agriculture Peshawar, Pakistan.
- Organizer, member organizing committee of "1st International Conference on Emerging Trends in Sustainable Business, 7th – 9th November, 2023.
- Organizer, Member Organizing Committee of "International Conference on Food Security through Sustainable Agriculture Strategies in the Current Climate Change Scenario, March 8-10, 2023.
- Organizer, Member Organizing Committee of "International Conference on Food Security through Sustainable Plant Protection Strategies, January 16-20, 2022.
- Organized a "One day seminar on official statistics and the role of academia" May 8, 2015 at the University of Agriculture, Peshawar.

WORKSHOP/SEMINAR/CONFERENCES ATTENDED

1. Attended 13th International Conference on Statistical Sciences: Statistics: Future Risks, Challenges and Developments, Match 16-18, 2015, Islamia College University Peshawar.

2. First Research Workshop for M.Phil and PhD Students. 2010. Department of Statistics University of Peshawar, Pakistan, at Bara Gali August 05-09, 2010. Paper Presented: Influence of Outliers on QTL Mapping for Complex Traits.
3. Joint Higher Education Links Programme, National Workshop on “Advanced Research Techniques and Research Management in Life Science”. Department of Agronomy, NWFP Agric. University, Peshawar, Pakistan. Presented: Problems in Linear Mixed for Analysis of Complex Quantitative Traits (As a Speaker). 11-12th March, 2009.
4. Statistical and Economic Analysis of Experimental Design Data Using Statistical Softwares, Training arranged by TARNAB Research Station, May 21-26, 2012.
5. Burning Issues in Advanced Research Methods in the Context of 21st Century, By IQRA National University, Hayatabad, Peshawar (Invited Speaker), September 11, 2012.
6. Attended International Workshop “three days workshop on Statistical Modeling using R”, arranged by The University of Queensland, Australia, 21-23 July, 2014.

LIST OF PUBLICATIONS

1. Khan Kifayatullah, **Hayat Y.**, Ahmad S. M., & Khan W. 2023. A Study of Agriculture Students’ Attitudes towards English Language: A Case Study. *Journal of Language and Education*, 9(2), 89-103. **HEC Y-category**
2. Muhammad Abu Sufyan Ali, Zhihe Zhang, Sufyan Ullah Khan, Arshad Ahmad Khan, Mohammad Musa, Preethu Rahman and **Yousaf Hayat**. 2023. Accounting of public preferences and valuation of terrestrial and aquatic ecosystem services restoration: Evidence from Northwestern China. *Economic Research-Ekonomska Istraživanja*, 36(1): 1-18. **IF = 3.54.**
3. Muhammad Abu Sufyan Ali, Zhihe Zhang, Sufyan Ullah Khan, Arshad Ahmad Khan, Mohammad Musa, Preethu Rahman and **Yousaf Hayat**. 2022. Does location of the households’ matters? Identifying the households’ willingness to pay and preference heterogeneity in advancement of vulnerable ecosystem services: An approach of choice experiment. *Environmental Science and Pollution Research*, 30: 29859–29873. **IF = 3.056.**
4. Arshad Ahmad Khan, Sufyan Ullah Khan, Muhammad Abu Sufyan Ali, Aftab Khan, **Yousaf Hayat** and Jianchao Luo. 2022. Drivers of climate variability and increasing water salinity impacts on the farmer’s income risk with future outlook mitigation. *IJCCSM Climate Change Variability*, 14(5): 462-485. **IF = 3.551.**

5. Din, I. and Y. Hayat. 2021. ANOVA or MANOVA for correlated traits in agricultural experiments. *Sarhad Journal of Agriculture*, 37 (4): 1250-1259.
6. Khan, Kifayatullah, W. Khan, **Y. Hayat**, S. M. Ahmad and K.K. Raza. 2020. A comparative study of students' and teachers' perceptions about english textbooks at intermediate level and their role in promoting students' proficiency in English. *International Journal of English Linguistics*, 10(2): 40-50
7. Ullah, R., K. Nawab, K. Ullah, M. . Z. Khan, **Y. Hayat**, I. Ullah, R. Ullah, A. Nawaz, and S. Malik. 2020. Are personal protective equipment of pesticides use a priority of farmers at the cost of health? *International Journal of Biosciences*, 16(3): 66-82. **IF = 3.873**.
8. Ijaz, M., Q. U. Zaman, **Y. Hayat** and Z. Zaheer. 2020. Bayesian estimation of the parameter of Exponential distribution under Jeffery prior. *Advances and Applications in Statistics*, 60 (2): 189-199. **GIF = 1.045**
9. Ijaz, M., A. U. Khan, S. M. Asim, **Y. Hayat**, S. H. Shah, M. Farooq, K. Ali, Neelam and S. Zubair. 2020. A new ratio type estimator to estimate the population mean using auxiliary information. 20202. *Advances and Applications in Statistics*, 63 (1): 97-108. **GIF = 1.045**
10. Anam Sarwar, Sumera Afsheen, Syed Shakeel Shah, Sabila Afzal, Ahmed Zia, Inamullah Khan and **Yousaf Hayat**. 2019. Potential of plant oils against *Callosobruchus maculatus* (Coleoptera; Bruchidae) on stored mung bean (*Vigna radiata*). *Asian Journal of Agriculture and Biology*, 7(2): 204-209. **IS = 0.37**.
11. Khan, N. U., A. Zalan, A. Petruzzello, I. U. Din, F. Haq and **Y. Hayat**. 2018. Determining the Actual Prevalence of Hepatitis B in Khyber Pakhtunkhwa-Pakistan: A Meta-Analysis. *The Open Virology Journal*, 12, (Suppl-1, M4) 33-41.
12. Abbas Ullah Jan, Muhammad Fayaz, Yousaf Hayat, Dawood Jan, Ghaffar Ali. 2017. Demand for Fruit Quantity and Quality in Pakistan: A Comparison of Urban and Rural Households. *Sarhad Journal of Agriculture*, 33 (4): 647-652.
13. Mehreen Imran, Muhammad Raza, Muhammad Sartaj Khan, Yousaf Hayat. 2017. Effect of cobalt-chromium alloy re-use in denistry on its castability value. *Journal of Ayub Medical College Abbottabad*, 29 (2): 270-274.
14. Shah, M.K., U. Saddique, S. Ahmad, **Y. Hayat**, S.U. Rahman, M.F. Hassan and T. Ali. 2017. Isolation rate and antimicrobial susceptibility profiles of *Mycoplasma mycoides* subspecies capri field isolates from sheep and goats in Pakistan. *ELSEVIER, Small Ruminant Research*, 153: 118-122. **IS = 1.69**

15. Asma Tariq, Sumera Afsheen, Mobushir Hussain, Ahmed Zia, Syed Shakeel Shah, Sabila Afzal, Inamullah Khan, **Yousaf Hayat**. 2017. Bioefficacy of plant powders against *Callosobruchus chinensis* L. (Coleoptera: Bruchidae) in infested chickpea grains. *Asian J Agri & Biol.*; 5(3):119-125
16. Fayaz, M., A. Jan, D. Jan, G. Ali and **Y. Hayat**. 2016. Does the quantity and quality of cereal respond to changes in income? Evidence from Pakistan. *Sarhad Journal of Agriculture*, 32(3): 177-183.
17. Anwar Ali Shad, Jehan Bakht, Hamid Ullah Shah, and **Yousaf Hayat**. 2016. Antioxidant activity and nutritional assessment of under-utilized medicinal plants. *Pak. J. Pharm. Sci.*, 29(6): 2039-2045. **IF = 1.103**
18. Shafi, M., R. Zaman, J. Bakht, Hamayoon, **Y. Hayat** and S. Shah. 2015. Dry Matter Partitioning and grain yield of wheat as affected by phosphorus and its application methods. *Pakistan Journal of Botany*, 47(SI): 281-287. **IF = 0.854**
19. Khan, S. A., J.C. Reese, C. Predeesh, M. Murugan and Y. Hayat. 2015. Categories of resistance in wheat to green bug *Schizaphis, Graminum* (RONDANI) through a novel technique direct current electrical penetration graph (DC-EPG). *Pakistan Journal of Botany*, 47(SI): 307-312. **IF = 0.854**
20. Shaheen, N., M. Hassan, Q. Mahmood and Y. Hayat. (2015). Maternal and fetal blood lead concentrations under non-occupational lead exposure and associated factors in Pakistan. *Toxicological & Environmental Chemistry*, 1-9: <http://dx.doi.org/10.1080/02772248.2015.1060726>. **IF = 0.825.**
21. **Hayat, Y.**, Yang, J., and Zhu, J. (2015). Mixed model approaches for detecting influential observations in genetic data analysis. *Pakistan Journal of Statistics*, 31(3): 121-134. **IF = 0.140.**
22. Shahzada, G., U. A. Khan, S. R. Ghazi and **Y. Hayat**. 2015. Gender differences in self-estimated multiple intelligence among secondary school students. *Pakistan Journal of Psychological Research*, 30(1): 81-94. **IS = 0.43**
23. Shahzad, S., S. Hayat, S. Nazir, H. Javed, **Y. Hayat**, M. Amir and A. M. Serat. (2014). Analyzing Data for Grounding a Problem Theory in Software Engineering. *Life Science Journal*, 11(10s): 61-69. **IF = 0.165.**
24. Jan, A., D. Jan, **Y. Hayat**, A. Sadiqa, G. Ali and M. Fayaz. 2014. Logarithmic transformation: A tool for normalizing residuals in ANOVA models. *Sarhad Journal of Agriculture*, 30(3): 375-378.
25. Sabeen, M., Q. Mahmood, M. Irshad, I. Fareed, A. Khan, F. Ullah, J. Hussain, **Y. Hayat** and S. Tabassum. 2013. Cadmium phytoremediation by *Arundo donax* L. from contaminated soil and

<http://dx.doi.org/10.1155/2013/324830>. **IF = 1.579.**

26. **Hayat, Y.**, W. Ali, S. Hayat, A. U. Rahman, S. Shahzad and Z. Hussain. 2013. Studying behavior attributes and student's academic performance. *Sarhad Journal of Agriculture*, 29(3): 461-467.
27. Ali, L., M. Shah, A. Ullah, I. Alam, A. Jan, **Y. Hayat**, M. Ibrar, G. Ali. 2013. An assessment of livelihood attainment through local handicraft in district Swat, Pakistan. *Journal of Society and Communication*, Vol. 2013: 200-219:
28. Iqbal, M., Zaman, Q. and **Hayat, Y.** 2012. Determinants of Smoking Behavior among the University Students. *PUTAJ, University of Peshawar*, 20: 117-125.
29. Rafiq, A., F.A. Jan, **Y. Hayat**, and M. Fayyaz. 2012. An analysis of technical, vocational and commercial education contribution towards faculty satisfaction in terms of academic and professional development. *Sarhad Journal of Agriculture*, 28(2): 365-371.
30. Rahman, A. U., **Y. Hayat**, S. Hayat, Q. Zaman, M. Iqbal and A. Rahman. 2012. Impact of outliers on the socio-economic factors affecting education. *Sarhad Journal of Agriculture*, 28(1): 109-114.
31. Anwar, S., M. Shafi1, J. Bakht, M. T. Jan and **Y. Hayat**. (2011). Response of barley genotypes to salinity stress as alleviated by seed priming. *Pak. J. Botany*, 43(6): 2687-2691. **IF = 0.947.**
32. Anwar, S., M. Shafi1, J. Bakht, M. T. Jan and **Y. Hayat**. 2011. Effect of salinity and seed priming on growth and biochemical parameters of different barely genotypes. *African Journal of Biotechnology*, 10(68): 15278-15286. **IF = 0.573.**
33. Shafi, M., J. Bakht, Raziuddin, **Y. Hayat** and G.P. Zhang. (2011). Genotypic difference in the inhibition of photosynthesis and chlorophyll fluorescence by salinity and cadmium stresses in wheat. *Journal of Plant Nutrition*, 34(3): 315-323. **IF = 0.868.**
34. Islam, E., Liu, D., Li, T., Yang, X., Jin, X., Khan, M. A., Mahmood, Q., **Hayat, Y.** and Imtiaz, M. (2011). Effect of Pb toxicity on the growth and physiology of two ecotypes of *Elsholtzia argyi* and its alleviation by Zn. *Journal of Environmental Toxicology*, 26(4): 403-416. **IF = 1.831.**
35. Zeb, Q., I. Khan, M. Inayatullah, **Y. Hayat**, A.U.R. Saljoqi and M. A. Khan. 2011. Population dynamics of citrus whiteflies, aphids, citrus psylla leaf miner and their biocontrol agents in Khyber Pakhtunkhwa. *Sarhad Journal of Agriculture*, 27(3): 451-457.
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