Curriculum Vitae

INFORMAZIONI PERSONALI

Abid Ali

OCCUPAZIONE DESIDERATA

Domanda selezione Incarico di lavoro autonomo non occasionale della durata di 4 mesi a supporto dei Progetti in attività commerciale: WAM23BARBANTI e PPRondelli2020", per le esigenze del Dipartimento di Scienze e Tecnologie Agro-Alimentari avente ad oggetto: "Gestione dei dati di riflettanza fogliare e di produzione georiferiti in cereali soggetti a differenti programmi di fertilizzazione"

ESPERIENZA PROFESSIONALE

Gen 2020 - Sett 2023 — Research Fellow

Field of research: Aerial and satellite remote sensing, delineating field management zones, precision agriculture technology, precise and sustainable agriculture, Since 2020, I am giving five lectures (12.5h/semester), over each academic year, to master students on a course "Precision Field Cropping-93662, collaborating with Prof. Barbanti, at DISTAL, University of Bologna. During this time, I have contributed in Project SANSahrawi (World Hunger Intervention) over one year period: Activities: i) Analysis of a large sample of local spontaneous plants and acquisition of information regarding their possibility of cultivation; ii) Development of a sustainable agricultural system for the cultivation of the most interesting species; iii) Sharing and dissemination of results for the beneficiary of population. At the University of Bologna, Italy.

Mar 2018 - Giu 2018 — PhD Visiting Scholar

I acquired the knowledge and training on field-scale salinity assessment and delineation of field management zones for precision farming. At the Soil Salinity Lab USDA Riverside, United States of America.

Ott 2014 - Giu 2016 — Post-graduate Fellow

Conducting and managing agronomic field experiments, soil sampling, data collection, writing papers. At the Arid Agriculture University Rawalpindi, Pakistan

Mar 2013 - Gen 2014 — Research Assistant

Project Activities I: Title "Rapid Identification of Olive Cultivars using DNA Markers", Activities: i) Collection of olive sample from different location of Pakistan; ii) DNA extraction; iii) Gene sequencing and PCR analysis, At the National Agriculture Research Centre (NARC), Islamabad, Pakistan.

Project Activities II: Title "IHSPT-Indigenous Hybrid Seed Production Technology". Activities: Collaborating in hybrid seed production technology of Maize, Sorghum and Millet, where specific tasks were: i) Layout of field experiments; ii) Fertilizers/organic manures application; iii) Irrigation planning; iv) Collection of agro-morphological data of crops; v) Soil analysis at lab; vi) Statistical data analysis; vii) Writing technical reports. At the National Agriculture Research Centre (NARC), Islamabad, Pakistan.

Mar 2011 - Giu 2011 — National Internship

Irrigation science, At Wheat Program, National Agriculture Centre Islamabad, Pakistan.

ISTRUZIONE E FORMAZIONE

Nov 2016 - Ott 2019 SCIENZE E TECNOLOGIE AGRARIE, AMBIENTALI E ALIMENTARI — Livello QEQ 8

Alma Mater Studiorum - Università di Bologna

Dottorato di ricerca

Dissertation title: remote sensing and site specific crop management in precision agriculture.

PhD Activities

-Retrieving/collecting satellite remotely sensed data, crop, soil and weather data
-Remote imagery processing/developing vegetation indices
-Handling of big georeferenced dataset
-Delineation of management zones by integrating the multi-year crop yields, soil, weather and remotely sensed data
-Geostatictical analysis
-Fuzzy c-means clustering technique
- Performing ECa survey using EMI sensor
-ECa directed to soil sampling technique (ESAP software)
-Production technology of field crops
-Using GPS, EMI Sensor, Chlorophyll Meter-SPAD, Green-seeker, Canopeo app., Soil Auger, Soil Moisture Probe
-Spatio-temporal variability of crop yields and soil data
-Writing research papers

Livello QEQ 7

2012 - 2014 **M. Sc. Hons. Agriculture in Agronomy**

PMAS-Arid Agriculture University Rawalpindi - Faculty of Crop and Food Sciences
Titolo equiparabile al secondo livello - Master

2007 - 2011 **B. Sc. Hons. Agriculture in Agronomy** Livello QEQ 6

PMAS-Arid Agriculture University Rawalpindi - Faculty of Crop and Food Sciences
Titolo equiparabile al primo livello - Degree/Bachelor

COMPETENZE PERSONALI

Lingua madre Urdu

Lingue straniere

	COMPRENSIONE				PARLATO				SCRITTO	
	Ascolto		Lettura		Interazione orale		Produzione orale			
Inglese	C1	Avanzato	C1	Avanzato	C1	Avanzato	C1	Avanzato	C1	Avanzato
Italiano	A1	Base	A1	Base	B1	Autonomo	B1	Autonomo	A2	Base

Livelli: A1/2 Livello base - B1/2 Livello intermedio - C1/2 Livello avanzato
Quadro comune europeo di riferimento per le lingue

Competenze comunicative

- Planning and organization of projects and events
- Critical and innovative thinking
- Complex problem solving
- Reflective skills
- Team-working
- Influencing and negotiating
- Communication of research results among scientific communities
- Developing personal research network
- Knowledge sharing and continuous improvement
- Leadership
- Self-motivation
- Self-believe
- Professionalism
- Adaptability and flexibility
- Empathy
- Inclusivity

Competenze organizzative e gestionali

Excellent skills on report writing, review paper, research papers, fluent in English speaking, equipped with inter and intra-personal communication skills.
Ability to work independently and collaboratively, Conducting meetings, etc.

Scholarship and Other Professional Activities/Experiences

- February 2025 – Received *Seal of Excellence* from the European Union. My project proposal '101201961 – Precision Farming' for MSCA fellowship (2 years) was evaluated by European Commission as excellent (total score 93.80%).
- 2024 - Acquired training in writing Horizon Europe projects (scientific and non-scientific parts) from BOKU University, Austria.
- January 2021 - As a main leader, I wrote a project on 'durum and bread wheat yield estimation modeling' for Arete – The Agri-food Intelligence Company in Bologna, Italy.
- Competitive PhD scholarship (3 years duration) from the University of Bologna, Italy.
- Master degree scholarship (2 years duration) from Higher Education Commission (HEC), Pakistan.
- Topic editor of Remote Sensing MDPI journal
- Reviewer board member of Land MDPI journal
- National and international research collaborations:
  CREA – Council for Agricultural Research and Economics, Italy; University of Natural Resources and Life Sciences, Vienna (BOKU), Austria; USDA-Soil Salinity Laboratory, California, USA; Various Agricultural Universities of Pakistan and China, as confirmed by my publication records.
- As a main corresponding editor, I raised a Special Issue entitled "Remote Sensing Technologies, Crop Yield, Soil and Weather Data Integration in Digital Agriculture" for Remote Sensing MDPI journal. Online link: https://www.mdpi.com/si/remotesensing/cropyield_soil_weather

Competenze digitali

AUTOVALUTAZIONE

ELABORAZIONE DELLEINFORMAZIONI	COMUNICAZIONE	CREAZIONEDI CONTENUTI	SICUREZZA	RISOLUZIONEDEI PROBLEMI
Utente autonomo	Utente autonomo	Utente autonomo	Utente autonomo	Utente autonomo

Competenze digitali - Scheda per l'autovalutazione

Computer Course Certificate: 20/07/2012

Competenze informatiche di base:

OFFICE AUTOMATION

Elaborazione testi: (Altamente specializzato) , Microsoft Word | Fogli elettronici: (Altamente specializzato) | Suite da ufficio: (Altamente specializzato) | Web Browser: (Altamente specializzato)

GESTIONE DATI

Sistemi di gestione di database (DBMS): (Avanzato)

GRAFICAEMULTIMEDIA

(Intermedio)

Altre competenze

Hobby: Gardening
Sport: Football, Cricket
Voluntary in scientific conference attending, seminars, training bodies, etc.

PUBBLICAZIONI

Articolo su rivista — Samraiz Ali., Abid Ali*. (2025). Integrated Single Superphosphate with Cattle Manure Increased Growth, Yield, and Phosphorus Availability of Maize (Zea mays L.) under Rainfed Conditions. Nitrogen, 6(1), 9. https://doi.org/10.3390/nitrogen6010009

Recensione — Abid Ali*., Hans-Peter Kaul. (2025). Monitoring Yield and Quality of Forages and Grassland in the View of Precision Agriculture Applications–A Review. Remote Sensing, 17(2), 279. https://doi.org/10.3390/rs17020279

Recensione — Martelli, R., Ali, A*., Rondelli, V., & Barbanti, L*. (2025). Are we up to the best practises in forage and grassland precision harvest? A review. Grass and Forage Science, 80(1). https://doi.org/10.1111/gfs.12701

Recensione — Ali, A*., Hassan, M. U., & Kaul, H. P*. (2024). Broad scope of site-specific crop management and specific role of remote sensing technologies within it–A Review. Journal of Agronomy and Crop Science, 210(4), e12732. https://doi.org/10.1111/jac.12732

Recension — Zhan-Wu Gao, Jianjun Ding, Basharat Ali*, Muhammad Nawaz, Muhammad Umair Hassan, Abid Ali, Adnan Rasheed, Muhammad Nauman Khan, Fethi Ahmet Ozdemir*, Rashid Iqbal, Arzu Çiğ, Sezai Ercisli, and Ayman El Sabagh. (2024). Putting biochar in action: a black gold for efficient mitigation of salinity stress in plants. Review and future directions. ACS Omega. Published: 29 April, 2024.10.1021/acsomega.3c07921

Articolo su rivista — Martelli, R., Civitarese, V., Barbanti, L., Ali, A., Sperandio, G., Acampora, A., ... & Assirelli, A. (2023). Multi- parametric approach to management zone delineation in a hazelnut grove in Italy. Sustainability, 15(13), 10106. https://doi.org/10.3390/su151310106

Articolo su rivista — Aouz, A., Khan, I., Chattha, M. B., Ahmad, S., Ali, M., Ali, I., Ali, A., Alqahtani, F.M., ... & Hassan, M. U. (2023). Silicon induces heat and salinity tolerance in wheat by increasing antioxidant activities, photosynthetic activity, nutrient homeostasis, and osmo-protectant synthesis. Plants, 12(14), 2606. https://doi.org/10.3390/plants12142606

Articolo su rivista — Ali, A., Martelli, R., Scudiero, E., Lupia, F., Falsone, G., Rondelli, V., & Barbanti, L. (2023). Soil and climate factors drive spatio-temporal variability of arable crop yields under uniform management in Northern Italy. Archives of Agronomy and Soil Science, 69(1), 75-89. https://doi.org/10.1080/03650340.2021.1958320

Articolo su rivista — Ali, A., Rondelli, V., Martelli, R., Falsone, G., Lupia, F., & Barbanti, L. (2022). Management zones delineation through clustering techniques based on soils traits, NDVI data, and multiple year crop yields. Agriculture, 12(2), 231. https://doi.org/10.3390/agriculture12020231

Conferenza — Allgro, G., Martelli, R., Valentini, G., Pastore, C., Mazzoleni, R., Ali, A., Pezzi, F., and Filippetti, I. (2022). Variable rate fertilization in a highly productive vineyard of cv. Trebbiano romagnolo may reduce nitrogen application and vigour variability without yield loss. Proceedings of the 15th

International Conference on Precision Agriculture (unpaginated, online). Monticello, IL: International Society of Precision Agriculture

Recensione

"Heat stress in cultivated plants: nature, impact, mechanisms, and mitigation strategies-A review" ; Hassan et al. ; Plant Biosystems ; Taylor and Francis Online (2020) www.tandfonline.com/doi/abs/10.1080/11263504.2020.1727987

Articolo su rivista

"Assessing Multiple Years' Spatial Variability of Crop Yields Using Satellite Vegetation Indices" ; Ali, A., Martelli, R., Lupia, F., & Barbanti, ; Remote sensing MDPI Journal ; Mr. Hobart Mu (2019). https://doi.org/10.3390/rs11202384

"Composted Sugarcane By-product Press Mud Cake Supports Wheat Growth and Improves Soil Properties" ; Muhammad Umer Chattha et al. ; International Journal of Plant Production (2019) link.springer.com/article/10.1007/s42106-019-00051-x

Recensione

"Nickel toxicity in plants: reasons, toxic effects, tolerance mechanisms, and remediation possibilities-a review" ; Muhammad Umair Hassan et al. ; Environmental Science and Pollution Research (2019) link.springer.com/article/10.1007/s11356-019-04892-x

Articolo su rivista

"Evaluation of dominant allelopathic weed through examining the allelopathic effects of four weeds on germination..... " ; Mustafa, G., Ali, A*., Ali, S., Barbanti, L., & Ahmad, M ; Pakistan Journal of Botany ; Pakistan Botanical Society (2019). 10.30848/PJB2019-1(22)

"Foliar application of glycinebetaine (GB) alleviates the cadmium (Cd) toxicity in spinach through reducing Cd uptake...." ; Muhammad Aamer et al. ; Applied Ecology and Environmental Research (2018). http://dx.doi.org/10.15666/aeer/1606_75757583

"Foliar applied potassium and zinc enhances growth and yield performance of maize under rainfed conditions" ; Muhammad Abbas Anees et al. ; INTERNATIONAL JOURNAL OF AGRICULTURE & BIOLOGY; FS publishers (2016). 10.17957/IJAB/15.0204

"To evaluate the better response of foliar spray over soil application of potassium on maize yield under rainfed ....." ; Abid Ali et al. ; Turkish Journal of Agricultural and Natural Sciences ; TTDS (2015). https://dergipark.org.tr/tr/download/issue-file/3010

"Foliar spray surpasses soil application of potassium for maize production under rainfed conditions" ; Abid Ali et al. ; Turkish Journal of Field Crops (2015). 10.17557/tjfc.66054

"Socioeconomic determinants of rural household food expenditures in Rawalpindi" ; Hafiz Saqib Habib et al. ; Pakistan Journal of Agricultural Research (2015). https://researcherslinks.com/current issues/SOCIOECONOMIC/24/5/1335

Data: 23-05-2025

Firma