

DR ABDUL MATEEN KHATTAK

Professor

Department of Horticulture
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EDUCATION

- The University of Reading, England (UK)
Ph.D. Horticulture and Landscape 1994-1999
- Gomal University, D.I. Khan, Pakistan
M.Sc. (Hons.) Horticulture (First Position) 1989-1991
B.Sc. (Hons.) Agriculture (First Position) 1985-1989
- University of Baluchistan, Quetta, Pakistan
M.A. Mass Communication (part time) 1987-1990
- Digital School Edmonton, Alberta, Canada
Diploma in Engineering CAD Technology 2009-2010

EMPLOYMENT RECORD

- Apr 2011 - Present **Professor**, Department of Horticulture, The University of Agriculture Peshawar Pakistan.
- Responsibilities include teaching, research and administration and extension
 - Teaching different courses related to horticulture and plant production
 - Conducting research on horticultural crops and publishing research papers
 - Supervising research students
 - Running a USAID funded research project on Aquaponics
 - Reviewing and evaluating research projects submitted for funding to different national and international organizations
- Jan 2009 - Mar 2011 **Associate Professor**, Department of Horticulture, The University of Agriculture Peshawar Pakistan.
- Responsibilities included 40% teaching, 40% research and 20% administration and extension
 - Taught various undergrad and postgraduate level courses including Introduction to Horticulture, Floriculture, Ornamental Horticulture, Landscape Design, Landscape Plants, Environmental Horticulture, Farm Forestry, Commercial Flower Production, Turf Production and

Maintenance, Fruit Breeding, Mineral Nutrition of Crops, Research Methodology, Statistics and Experimental Designs

- Supervised B.Sc., M.Sc. and Ph.D. research students

Jun 2008 - Dec 2008 **Research and Extension Coordinator** (Alberta province), Organic Agriculture Centre of Canada (OACC), Crop Diversification Centre North, 17507 Fort Road, Edmonton Canada.

- Supported the development of organic research in Alberta by identification of priority projects and proposal writing, coordinating meetings of researchers, dissemination of research results by writing papers and extension materials
- Supported extension in Alberta by coordinating extension events, preparing bulletins, writing newspaper articles for the organic and general agriculture sectors
- Worked on Canadian Organic Standards and submitted research proposals for organic, aquaponics and soilless greenhouse vegetable production in Alberta

Mar 2007 - May 2008 **Research Associate**, Alberta Agriculture and Forestry, 7000-113 Street Edmonton Canada.

- Worked on 3 projects including, 1. Use of supplemental lighting to grow vegetables in Alberta greenhouses, 2. Energy saving technologies for Alberta greenhouse industry and 3. Identification of value added growth opportunities for Alberta greenhouse industry.
- Wrote proposals for 3 other projects; 1. Feasibility of a biogas based heating system for reducing energy costs in Alberta greenhouse industry, 2. Evaluation of Alberta Greenhouse industry inputs and outputs from a carbon credit viewpoint, and 3. Studying the prospects of Saffron (*Crocus sativus*) cultivation in Alberta
- Studied close loop aquaponic systems under the supervision of Dr Nick Savidov.
- Visited many Alberta greenhouses to study their production technology, and provide solutions concerning their crops and energy issues

Jan 2005 - Feb 2007 **Associate Professor**, Department of Horticulture, University of Agriculture Peshawar Pakistan.

- Taught various undergrad and postgraduate level courses including Introduction to Horticulture, Floriculture, Ornamental Horticulture, Landscape Design, Farm Forestry, Commercial Flower Production, Fruit Breeding and Mineral Nutrition of Crops etc.
- Supervised of B.Sc., M.Sc. and Ph.D. research students
- Run the university ornamental nursery and managed the Grounds & Gardens on the university campus (acted as In-charge Grounds and Gardens section)
- Acted as Principal Investigator (PI) of Coordinated Research Programme on Floriculture, sponsored/financed by Pakistan Agricultural Research Council Islamabad
- Also acted as a Senior Warden of three student residential halls

- Mar 2004 - Dec 2004 **Lecturer**, Department of Horticulture, Agricultural University Peshawar Pakistan.
- Apart from teaching and supervision of research students, I also assisted the In-charge Grounds and Gardens in managing the university landscape and ornamental nursery
- Mar 2002 - Feb 2004 **Natural Resource Management (NRM) Coordinator**, Barani Area Development Project Peshawar Pakistan.
As a *Provincial Head* of the NRM sector, I;
- Facilitated the planning and monitoring of project supported activities
 - Coordinated with provincial line departments (i.e. Forest, Livestock & Dairy Development, Agriculture Extension, Agriculture Research, and Soil & Water Conservation), and NGOs for supporting NRM activities and rural development.
 - Responsible for various project management activities
 - Managed the preparation and consolidation of Project Annual Work Plan (physical and financial) on NRM components
 - Monitored the implementation of NRM packages
 - Monitored the trainings of village extension workers
 - Supervised different community schemes of NRM component
 - Coordinated with the project donors i.e. Asian Development Bank (ADB) and International Fund for Agricultural Development (IFAD) and foreign consultants
- Nov 1991 - Feb 2002 **Research Officer**, KPK Agriculture Research System, Peshawar Pakistan.
Worked at the following research stations of the province;
- Aug 1999 - Feb 2002 **Barani Agriculture Research Station**, Kohat, Pakistan.
Responsibilities included supporting and monitoring all research and administrative activities;
- Research activities were on station (fruits, vegetables, cereal and oilseed crops), off station (applied research of the mentioned crops on farmer field) and compilation of research data and writing out monthly, quarterly and annual progress reports
 - Administrative activities include the overall management of the station, i.e. supervision of staff, maintenance of the building and landscape, training, and communication
 - Provided advisory services on fruits, vegetables and other crops to the farmers in the project area, especially to those for whom orchards were laid out during the Barani Area Development Project Phase I
 - Acted as Advisor (Horticulture) for Farm Services Centre (FSC) Kohat
 - Delivered talks to village communities in Lachi and Shakardara areas to create awareness about natural resources and pollution, in collaboration with Lachi Poverty Reduction Project (LPRP; sponsored by UNDP) and Silverline (a local NGO)
- Sep 1994 - Jul 1999 **The University of Reading, England UK. Studied for my Ph.D.** Conducted research on the development of spectral filters for the regulation of plant growth (environmental physiology).

- Jul 1993 - Sep 1994 **Agricultural Research Station**, Ahmad Wala, Karak Pakistan.
My job was primarily applied and adaptive research including;
- Laying out research plots of various agronomic and vegetable crops on farmers' fields to educate and develop the farmers of the arid area towards a sustainable agricultural production
 - Establishing experimental fruit orchards (including ber, citrus, date palm, guava, fig, phalsa and pomegranate) to see their adaption in saline and drought affected areas
 - Arranging trainings, field days and exposure visits for the farmers and their communication with the concerned experts
 - Collecting and analysing data, and writing out research papers and technical reports on monthly quarterly and annual basis
- Nov 1991 - Jun 1993 **Agriculture Research Institute**, D.I. Khan Pakistan.
My responsibilities included;
- Management and maintenance of apple, ber, citrus, date palm and mango experimental orchards
 - Conducting experiments on various aspects of fruit, vegetable and ornamental crops
 - Laying out adaptive research plots of different crops and off-season vegetable production under polythene tunnels for farming community
 - Collecting and statistically analysing research data, and writing monthly, quarterly and annual reports, as well as publishing research papers
 - Nursery production (fruit and ornamental plants)
 - Supervisions of M.Sc. research students
 - I have been a B.Sc. and M.Sc. external examiner for Gomal University, D.I. Khan, Pakistan
- May 1991 - Oct 1991 **Administrator**, Basic Education for Afghan Refugees (BEFARE) Project Bannu, Pakistan. (*sponsored by German Agency for Technical Cooperation; GTZ*).
- My responsibilities (as In-charge of Sub Centre Bannu) included;
- Arranging and carrying out training activities for the staff involved in Afghan refugees' education throughout the southern part of the KP province.
 - Apart from that all kinds of administrative matters including finance, salaries, building/maintenance, transport/vehicles, keeping appropriate records and communication with the Head Office at Peshawar.

SELECTED PUBLICATIONS

Ali, M., Lamin-Samu, A.T., Muhammad, I., Farghal, M., **Khattak, A.M.**, Jan, I., Haq, S., Khan, A., Gong, Z.H. and Lu, G. 2021. Melatonin Mitigates the Infection of *Colletotrichum gloeosporioides* via Modulation of the Chitinase Gene and Antioxidant Activity in *Capsicum annuum* L. *Antioxidants* 10(7). doi:10.3390/antiox10010007

- Ali, S., Basit, A. **Khattak, A.M.** Shah, S.T. Ullah, I. Khan, N.A. Ahmad, I. Rauf, K. Khan, S. Ullah, I. and Ahmad, I. 2021. Managing the growth and flower production of zinnia (*Zinnia elegans*) through Benzyle Amino Purine (BAP) application and pinching. *Pakistan Journal of Agricultural Research*, 34(1): 29-40. Doi: 10.17582/journal.pjar/2021/34.1.29.40
- Tuan, V.N., **Khattak, A.M.**, Zhu, H., Gao, W. and Wang, M. 2020. Combination of Multivariate Standard Addition Technique and Deep Kernel Learning Model for Determining Multi-Ion in Hydroponic Nutrient Solution. *Sensors* 20: 5314. doi:10.3390/s20185314
- Tuan, V.N., Dinh, T.D. **Khattak, A.M.**, Zheng, L., CHU, X., Gao, W. and Wang, M. 2020. Multivariate standard addition cobalt electrochemistry data fusion for determining phosphate concentration in hydroponic solution. *IEEE Access* 8: 28289-28300. doi: 10.1109/ACCESS.2020.2971143
- Hao, X., Jia, J., Mi, J., Yang, S., **Khattak, A.M.**, Zhang, L., Gao, W. and Wang, M. 2020. An optimization model of light intensity and nitrogen concentration coupled with yield and quality. *Plant Growth Regulation* doi:10.1007/s10725-020-00641-0
- Hao, X., Jia, J. **Khattak, A.M.**, Zhang, L., Guo, X., Gao, W. and Wang, M. 2020. Growing period classification of *Gynura bicolor* DC using GL-CNN. *Computers and Electronics in Agriculture* 174: 105497. Doi: 10.1016/j.compag.2020.105497
- Ali, M., Muhammad, I., Haq, S., Alam, M., **Khattak, A.M.**, Akhtar, K., Ullah, H., Khan, A., Lu, G. and Gong, Z. 2020. The CaChiVI2 gene of *Capsicum annuum* L. confers resistance against heat stress and infection of *Phytophthora capsici*. *Frontiers in Plant Sciences*. 11: 219. doi: 10.3389/fpls.2020.00219
- Zhang, H. Feng, X., Ali, M., Jin, J., Wei, A., **Khattak, A.M.** and Gong, Z. 2020. Identification of pepper CaSBP08 gene in defense response against *Phytophthora capsici* infection. *Frontiers in Plant Sciences*. 11: 183. doi: 10.3389/fpls.2020.00183
- Ahmad, N., Ahmad, M., Ullah, I., Basit, A., **Khattak, A.M.**, Rab, A., Sajid, M., Nasir, S. and Hussain, Z. 2020. Effect of irrigation intervals on growth and production of Roselle (*Hibiscus Sabdariffa*). *Bioscience Research* 17(2): 759-767.
- Haq, S., Khan, A., Ali, M., **Khattak, A.M.**, Gai, W., Zhang, H., Wei, A. and Gong, Z 2019. Heat shock proteins: Dynamic biomolecules to counter plant biotic and abiotic stresses. *Int. J. Mol. Sci.* 20, 5321; doi:10.3390/ijms20215321
- Sun, X., Zhao, R., **Khattak, A.M.**, Shi, K., Ren, Y., Gao, W., Wang, M. 2019. Intelligent interactive robot system for agricultural knowledge popularity and achievements display. *IEEE 4th Advanced Information Technology, Electronic and Automation Control Conference (IAEAC)*, Chengdu, China, pp. 511-518, doi: 10.1109/IAEAC47372.2019.8997911.
- Zamin, M., Fahad, S., **Khattak, A.M.**, Adnan, M., Wahid, F., Raza, A., Wang, D., Saud, S., Noor, M., Bakhat, H.F., Mubeen, M., Hammad, H.M., Soliman, M.H., Elkelish, A.A., Riaz, M., and Nasim, W. 2019. Developing the first halophytic turfgrasses for the urban landscape from native Arabian desert grass. *Environ. Sci. Pollut. Res.* doi:10.1007/s11356-019-06218-3

- Mansoor, M., Usman, K., Khalil, S.H.K. **Khattak, A.M.**, Elahi, M.E., Malik, M.W.I. and Hamza, A. 2019, Economic returns from postharvest cured date palm cultivars under glasshouse conditions. *Sarhad J. Agri.* 35(4): 1039-1044.
doi.org/10.17582/journal.sja/2019/35.4.1039.1044
- He, D., Wang, M., **Khattak, A.M.**, Zhang, L., Gao, W. 2019. Automatic labeling of topic models using graph-based ranking. *IEEE Access* 7: 131593-131608.
- Li, Y., Jia, J., Zhang, L., **Khattak, A.M.**, Gao, W., Sun, S. and Wang, M. 2019. Soybean seed counting based on pod image using two-column convolution neural network. *IEEE Access* 7: 64177-64185.
- Ali, M., Gai1, W., **Khattak, A.M.**, Khan, A., Haq, S.U., Ma, X., Wei, A., Muhammad, I., Jan, I. and Gong, Z. 2019. Knockdown of the chitin-binding protein family gene CaChiIV1 increased sensitivity to *Phytophthora capsici* and drought stress in pepper plants. *Molecular Genetics and Genomics* 294(5): 1311-1326. doi: 10.1007/s00438-019-01583-7.
- Zhang, L., Gui, G., **Khattak, A.M.**, Wang, M., Gao, W. and Jia, J. 2019. Multi-task cascaded convolutional networks based intelligent fruit detection for designing automated robot. *IEEE Access* 7: 56028-56038.
- Zamin, M., **Khattak, A.M.**, Salim, A.M., Marcum, K.B., Shakur, M., Shah, S., Jan, I. and Fahad, S. 2019. Performance of *Aeluropus lagopoides* (mangrove grass) ecotypes, a potential turfgrass, under high saline conditions. *Environ. Sci. Pollut. Res.* 26(13): 13410-13421.
- Imtiaz, M., **Khattak, A.M.**, Khan, M.A., Jalal, F., Hussain, S., Said, F. and Bo, H. 2019. Rapid in-vitro propagation of *Chrysanthemum morifolium* through shoot bud explants. *Pak. J. Bot.* 51(3): 1093-1098.
- Chen, Z., Zhang, L., **Khattak, A.M.**, Gao, W. and Wang, M. 2019. Deep feature fusion by competitive attention for pedestrian detection. *IEEE Access* 7: 21981-21989.
- Lin, Z., Mu, S., Huang, F., **Khattak, A.M.**, Wang, M., Gao, W. and Jia, J. 2019. A unified matrix-based convolutional neural network for fine-grained image classification of wheat leaf diseases. *IEEE Access* 7:11570-11590.
- Alam, M., Khan, M., Khan, A., Zeb, S., Khan, M.A., Amin. N., Sajid, M., and **Khattak, A.M.** 2018. Concentrations, dietary exposure, and human health risk assessment of heavy metals in market vegetables of Peshawar, Pakistan. *Environ. Monit. Assess.* 190:505.
- Zamin, M. and **Khattak, A.M.** 2018. Evaluating *Sporobolus spicatus* ecotypes under different mowing heights for turf use. *Sarhad J. Agri.* 34(1): 114-122.
- Zamin, M., **Khattak, A.M.**, Alyafei, M.A.S., Sajid, M., Shakur, M., Shah, S., Khan, I., Rashid, H.U. and Shafiullah. 2018. *Sporobolus spicatus*, a potential turf grass under the climatic conditions of United Arab Emirates. *J. Scientific Agri.* 2: 1-8
- Gul, G., **Khattak, A.M.**, Shah, M., Iqbal, J., Shah, S. and Ahmad, N. 2017. Effect of different boron concentrations and application times on the production of olive (*Olea europea* l.). *Sci. Int.* 29(5): 1155-1159.
- Rawan, S., Bibi, F., Khan, N., **Khattak, A.M.**, Shah, Z., Iqbal, A., Alamzeb, M., Haq, S.U., Kamal, A., Shah, F.A., Naeem, A. and Ali, W. 2017. Postharvest life of

guava (*Psidium guajava* L.) varieties as affected by storage intervals at room temperature. *Pakistan J. Agri. Res.*, 30(2): 155-161.

- Zamin, M., **Khattak, A.M.** 2017. Performance of *Sporobolus spicatus* ecotypes, UAE native grass, under various salinity levels. *Pure Appl. Biol.*, 6(2): 595-604.
- Khan, M.A., Amin, N., Ahmad, I., Sajid, M., Jan, I., **Khattak, A.M.**, Khan, J., Alam, M., Wasila, H. and Hayat, S. 2016. Therapeutic horticulture: influencing psychological responses of surgical patients and their environmental assessment scale. *Pak. J. Agri. Sci.* 3(2), 355-363.
- Khan, M.A., Afridi, R.A., Hashim, S., **Khattak, A.M.**, Ahmad, Z., Wahid, F., Chauhan, B.S. 2016. Integrated effect of allelochemicals and herbicides on weed suppression and soil microbial activity in wheat (*Triticum aestivum* L.). *Crop Protection*, 90: 34-39.
- Khattak, A.M.**, Sajid, M., Sarwar, H.Z., Rab, A., Ahmad. M., Khan, M.A. 2016. Effect of sowing time and plant density on the growth and production of Roselle (*Hibiscus sabdariffa*). *Int. J. Agric. Biol.*, 18: 1219-1224.
- Hussain, M.A., Amin, N., **Khattak, A.M.**, Ilyas, M., Gulzarullah, Hussain, I., Khan, I.H., Naeem, N. and Rashid, A. 2016. Response of Tuberose (*Polianthes tuberosa*) to potassium and planting depth. *Pure Appl. Biol.* 5(4): 1101-1106.
- Hussain, I., Ahmad, I., Amin, N., Alam, M., **Khattak, A.M.**, Sajid, M., Ahmad, N., Wasila, H., Rauf, A., Ali, M., Naeem, M., Khan, R., Shah, S.M., Ullah, A., Shah, S.A., Rahman, M., Ahmad, S., Khan, I.H. and Ullah, I. 2016. Effect of organic fertilizers on growth and yield of *Brassica Rapa* Variety Chinensis. *Advances in Environmental Biology.* 10(10): 40-46.
- Hussain, I., Zeb, N., Sajid, M., Amin, N., **Khattak, A.M.**, Shah, A.H., Hussain, S. and Abbas, A. 2016. The rooting response of silvery (*Leucophyllum frutescens*) cuttings to different growing conditions and planting dates. *Int. J. Biosci.* 8(2): 9-15.
- Hussain, I., Sajid, M., Amin, N., Khattak, A.M., Shah, A.H., Hussain, S.M., Hussain, S. and Zeb, N. 2016. Growing conditions and planting dates affect the vegetative growth of silvery (*Leucophyllum frutescens*). *Sarhad J. Agri.* 32(2): 104-111.
- Sharif, M., Khan, M., Khan, M.A., Wahid, F., Marwat, K.B., **Khattak, A.M.** and Naseer, M. 2015. Effect of rock phosphate and farmyard manure applied with effective microorganisms on the yield and nutrients uptake of wheat and sunflower crops. *Pak. J. Bot.* 47(SI): 219-226.
- Khan, M.A., Wahid, F., Kulsoom, U., Marwat, K.B., Gul, B., Inayatullah, M., **Khattak, A.M.** and Khan, S.A. 2015. Evaluating the threshold levels of *Neslia apiculata* in wheat and its effects on crop yield losses in swat valley of Khyber Pakhtunkhwa. *Pak. J. Bot.* 47(SI): 87-91.
- Wahid, F., Sharif, M., Khan, M.A., Ali, A., **Khattak, A.M.** and Saljoqi, A.R. 2015. Addition of Rock Phosphate to different organic fertilizers influences Phosphorus uptake and wheat yield. *Ciencia e Tecnica Vitivinicola J.* 30(3): 90-100.
- Zeb, N., Sajid, M., **Khattak A.M.** and Hussain, I. 2015. Effect of potassium and maleic hydrazide on growth and flower quality of chrysanthemum (*Dendranthema grandiflorum*). *Sarhad J. Agri.* 31(4): 210-216.

- Ali, I., **Khattak, A.M.**, Ali, M. and Ullah, K. 2015. Performance of different tomato cultivars under organic and inorganic regimes. *Pakistan J. Agric. Res.* 28(3): 245-254.
- Ali, M., **Khattak, A.M.**, Ullah, K., Ibrahim, M. 2015. Performance of exotic tulip cultivars under agro climatic conditions of Peshawar. *J. Bioresource Manage.* 2(3): 1-8.
- Imtiaz, M., **Khattak, A.M.**, Ara, N., Iqbal, A and Rahman, H. 2014. Micropropagation of *Jartorpha curcas* L. through shoot tip explants using different concentrations of phytohormones. *J. Ani. & Plant Sc.* 24(1): 229-233.
- Amin, N., **Khattak, A.M.**, Ahmad, I., Ara, N., Alam, A., Ali, M. and Ali, I. 2013. Corm and cormel size of gladiolus greatly influenced growth and development of subsequent corm production. *Pak. J. Bot.* 45(4): 1407-1409.
- Shah, S.T., Sajid, M., Alam, R., Rab, A., **Khattak, A.M.**, Jan, I., Ali, A. and Wahid, F. 2012. Comparative study of onion cultivars at Mardan, Khyber Pakhtunkhwa-Pakistan. *Sarhad J. Agri.* 28(3): 399-402.
- Hussain, I., **Khattak, A.M.**, Amin, N., Aman, F. and Sajid, M. 2012. Response of different pomegranate cuttings types to different environmental conditions. *Sarhad J. Agri.* 28(1): 15-18.
- Khan, A., Sajid, M., Hussain, Z. and **Khattak, A.M.** 2012. Effect of different weed control methods on weeds and yield of chillies (*Capsicum Annuum* L.). *Pak. J. Weed Sci. Res.* 18(1): 71-78.
- Rahman, H., **Khattak, A.M.**, Sadiq M., Ullah, K., Javaria, S. and Ullah, I. 2012. Influence of different weed management practices on yield of Garlic (*Allium sativum* L.) crop. *Sarhad J. Agri.* 28(2): 213-218.
- Nawab, K., Amanullah, Shah, P., Rab, A., Arif, M., Khan, M.A., **Khattak, A.M.** and Munsif, F. 2011. Impact of integrated nutrient management on growth and grain yield of wheat under irrigated cropping system. *Pak. J. Bot.* 43(4): 1943-1947.
- Khattak, A.M.**, Pearson, S., Nawab, K., Khan, M.A. and Marwat, K.B. 2011. The effects of light quality and temperature on the growth and development of geraniums. *Pak. J. Bot.* 43(1): 679-688.
- Marwat, K.B., Khan M.A., Hashim, S., Nawab, K. and **Khattak, A.M.** 2011. Integrated weed management in wheat. *Pak. J. Bot.* 43(1): 625-633.
- Ahmad, I., **Khattak, A.M.**, Ara, N. and Amin, N. 2011. Effect of planting dates on the growth of gladiolus corms in Peshawar. *Sarhad J. Agri.* 27(2): 195-199.
- Khattak, A.M.**, Ahmad, I., Amin, N., Wahid, F. and Rahman, H. 2011. Effects of different amended organic media on the growth and development of Vinca Rosea 'Victory'. *Sarhad J. Agri.* 27(2): 201-205.
- Khattak, A.M.**, Dawar, S.H., Khan, M.A. and Razaq, A. 2011. Effect of summer pruning on the quality and performance of rose (*Rosa hybrida*) cultivars. *Sarhad J. Agri.* 27(1): 27-31.
- Ali, T., **Khattak, A.M.** and Khan, M.A. 2011. Effect of growing media on the cormelization of freesia under the agro-climatic conditions of Peshawar. *Sarhad J. Agri.* 27(1): 33-38.
- Ali, T., **Khattak, A.M.**, Amin, N. and Khan, M.A. 2011. Response of freesia cultivars to different growing media under Peshawar conditions. *Sarhad J. Agri.* 27(1): 43-49.

- Hussain, I. **Khattak, A.M.**, Amin, N., Rahman, H. and Munsif, F. 2011. Response of cormels of different freesia cultivar to various phosphorus levels. *Sarhad J. Agri.* 27(1): 39-42.
- Rahman, H., Ullah, K., Sadiq, M., Khan, H., Khan, M.A. and **Khattak, A.M.** 2011. Impact of time of weed removal on garlic (*Allium sativum* L.) yield. *Pak. J. Weed Sci. Res.* 17(2): 151-159.
- Bakht, T., Khan, I.A., Khan, M.I., Khan, I and **Khattak, A.M.** 2009. Weed control in pea (*Pisum sativum* L.) through mulching. *Pak. J. Weed Sci. Res.* 15(1): 83-89.
- Khattak, A.M.** and Salam, A. 2007. Response of exotic tomato lines to different light intensities. *Sarhad J. Agri.* 23(4): 927-932.
- Shah, M., **Khattak, A.M.** and Amin, N. 2007. Effect of various amended organic media on the tuberization of Caladium (*Caladium × hortulanum*) cultivars. *Sarhad J. Agri.* 23(4): 899-904.
- Khattak, A.M.** and Pearson, S. 2006. Spectral filters and temperature effects on the growth and development of chrysanthemums under low light integral. *J. Plant Growth Regulation* 49(1): 61-68.
- Khattak, A.M.** and Pearson, S. 2005. Light quality and temperature effects on Antirrhinum growth and development. *J. Zhejiang Univ. Sci.* 6B(2): 119-124.
- Amin, N., Ahmad, I., Ahmad, Z., **Khattak, A.M.** and Ahmad, M. 2005. Strategies for regeneration of public parks in Peshawar. *Sarhad J. Agri.* 21(4): 583-586.
- Khattak, A.M.**, Pearson, S. and Johnson, C.B. 2004. The effects of far red filters and plant density on the growth and development of chrysanthemums. *Sci. Hort.* 102(3): 335-341.
- Khattak, A.M.** and Khattak, M.A. 2001. Performance of ten exotic rose cultivars under the climatic conditions of Kohat. *Pak. J. Biological Sc.* 1: 7-9.
- Khattak, A.M.**, Pearson, S. and Johnson, C.B. 1999. The effects of spectral filters and nitrogen dose on the growth of chrysanthemum (*Chrysanthemum morifolium* Ramat. Cv. Snowdon). *J. Hort. Sci. and Biotech.* 74(2): 206-212.
- Khattak, A.M.** and Pearson, S. 1997. The effects of light quality and temperature on the growth and development of chrysanthemums cvs. Bright golden Ann and Snowdon. *Acta Horticulturae*, 435: 113-122.
- Khattak, A.M.**, Munir, M. and Baloch, J. 1995. Environmental response of some exotic rose cultivars to D.I. Khan conditions. *Pak. J. Bot.* 15(1): 69-73.

AWARDS AND HONOURS

- Joint winner of ‘**The 1998 Science into Practice Award**’ for work on the development of spectral filters for greenhouse cladding and plant growth regulation. This prestigious scientific award was given by the Ministry of Agriculture, Fisheries and Food, UK for an innovation, which has the potential to create wealth, whilst minimising the environmental impact of agricultural production
- Distinction in B.Sc. (Hons.) and M.Sc. (Hons.)

- Scholarship for postgraduate studies from World Bank under Agriculture Research Project II
- Participated and presented in many national and international seminars, conferences, trainings and workshops
- Conducted various small scale projects for different organisations such as, Marks and Spencer, U.K, Horticultural Development Council, U.K. and British Visqueen Ltd. U.K. etc.

RESEARCH ACHIEVEMENTS

- More than 70 research papers published in scientific journals of international repute
- Supervised and co-supervised over one hundred B.Sc., M.Sc., and Ph.D. research students
- Introduced integrated crop management (ICM) techniques in Guava production areas of Kohat and Bannu, Pakistan, which led to a 90% reduction in fruit fly infestations, without the use of environmentally hazardous chemical pesticides
- Conducted experiments to introduce and grow Saffron in Opium Poppy growing areas of Pakistan and Afghanistan. Achieved success in those experiments and Saffron is twice as lucrative as Opium Poppy and can easily replace it
- Introduced high yielding exotic cultivars of Date Palm to the southern arid and desert areas of KP province. Established successful orchards on private lands
- Converted the Wild Olive plants in the mountainous areas of Karak, Hangu and Kohat districts of Pakistan, to high yielding cultivars of Olive through top-working technique
- Top-working was also successfully done to convert Wild Ber (*Zizyphus jojoba*) to high yielding Ber (*Zizyphus mauritiana*) in Ber growing arid areas
- Conducted successful experiments to cultivate and domesticate *Caralluma tuberculata*, a high valued medicinal and vegetable plant, which wildly grows in mountains but is diminishing due to overuse
- Introduced Roselle (*Hibiscus Sabdariffa*), a high quality spice and beverage plant having medicinal and anti-oxidant properties

COMPUTER SKILLS

- Proficient in the use of computer in a day-to-day work environment. Softwares include Microsoft Office (Word, Excel, Outlook, Power Point), MSTATC, Statistix (statistical softwares), AutoCAD and Real-time Landscape