

Prof. Dr. Abdul Mateen Khattak

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.org/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., Gai, 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.