

Bushra Rashid (PhD), Assistant Professor

PUBLICATIONS

Book Chapters

1. Hussain SS, Ahsan MA, **Rashid B**, Shi B-J (2016). Plant aquaporin biotechnology: Challenges and prospects for abiotic stress tolerance under a changing global environment. In: Water Stress and Crop Plants: A Sustainable Approach, 1st Edn. Edited by Ahmad P. John Wiley & Sons, Ltd.
2. Rao, A. Q., Din, S.U., Akhtar, S., Sarwar, M. B., Ahmad, M., **Rashid, B.**, Shahid, A. A., Nasir, I. A., Husnain, T., (2015): "Genomics of salinity tolerance in plants", In Plant Genomics, edited by Abdurakhmonov, I. Y., InTech Publisher, <http://www.intechopen.com/articles/show/title/genomics-of-salinity-tolerance-in-plants>
3. Jan, S., **Rashid, B.**, Azooz, M.M., Hossain, MA., Ahmad P. (2016). Genetic Strategies for Advancing Phytoremediation Potential in Plants: A Recent Update, Chapter 17 pp 431-454 In: Plant Metal Interaction Emerging Remediation Techniques, Edited by Parvaiz Ahmad, 1st Edition; Elsevier, ISBN: 978-0-12-803158-2; [doi:10.1016/B978-0-12-803158-2.00017-5](https://doi.org/10.1016/B978-0-12-803158-2.00017-5)
4. Latef, AAHA. Jan, S., Abd-Allah, AF., Rashid, B., John, R., Ahmad P. (2016). Soybean under abiotic stress: Proteomic approach In: Plant-Environment Interaction: Responses and Approaches to Mitigate Stress, 1st Edn. by Azooz MM. and Ahmad P. John Wiley & Sons, Ltd. Chichester, UK; Print ISBN: 9781119080992; DOI: 10.1002/9781119081005.ch2
5. Rashid B, Husnain T, Riazuddin S (2014). Genomic Approaches and Abiotic Stress Tolerance in Plants. In: Emerging Technologies and Management of Crop Stress Tolerance, Vol1, P. Ahmad (Ed): pp1-26. Elsevier, ISBN: 978-0-12-800876-8 DOI: <http://dx.doi.org/10.1016/B978-0-12-800876-8.00001-1>
6. Rashid, B, Husnain, T, Riazuddin S (2012). Plant Genetic Engineering: Problems and Applications. In Crop Production for Agricultural Improvement. Ashraf, M.; Öztürk, M.; Ahmad, M.S.A.; Aksoy, A. (Eds.2012). ISBN 978-94-007-4115-7. <http://www.springer.com/life+sciences/agriculture/book/978-94-007-4115-7>
7. **Rashid, B.**, Husnain, T., Riazuddin, S. (2010). Plant Adaptation and Phytoremediation, Chapter 19 Herbicides and pesticides as potential pollutants – A global problem. Ashraf, M.; Ozturk, M.; Ahmad, M. S. A. (Eds.) 1st Ed., 482 p.,

[Springer Netherlands - Dordrecht](#), Hardcover ISBN: 978-90-481-9369-1.
<http://dx.doi.org/10.1007/978-90-481-9370-7>

Book

1. **Rashid, B.**, Husnain, T., Riazuddin, S. (2010). Gene Pyramiding: An Approach Towards Sustainable Insect Resistance. (Book) by Publishers VDM Verlag Dr. Müller Aktiengesellschaft & Co. Kg Dudweiler Landstr. 99,66123 Saarbrücken, Germany. ISBN 978-3-639-25629-1.

Research Articles

1. **Rashid B**, Kousar S, Yousaf M, Ali Q, Fatima F, Parveen S, Arshad A, Rimsha, Ahmad N, Husnain T. (2016). Biotechnology: future tools for stable insect pest and weed control in cotton, *Cotton Genomics and Genetics*, 7(3): 1-14 (doi: 10.5376/cgg.2016.07.0003)
2. **Rashid B**, Yousaf I, Haider T, Rasheed Z, Ali Q, Javed F, Husnain T (2016) Roadmap to sustainable cotton production. *Life Science Journal*, 13(11): 41-48
3. Majid MU, Awan MF, Fatima K, Tahir MS, Ali Q, **Rashid B**, Rao AQ, Nasir IA, Husnain T (2016). *Phytophthora capsici* on chilli pepper (*Capsicum annuum L.*) and its management through genetic and bio-control: a review. *Zemdirbyste-Agriculture*. 103(4):419– 430. DOI 10.13080/z-a.2016.103.054
4. Riaz S., Aftab B., Sarwar MB., Batool F., Iqbal F., Ahmad Z., **Rashid B.**, Husnain T (2016). Adaptations of plant responses in *Agave sisalana* under drought stress conditions. *Journal of Biodiversity and Environmental Sciences*. 9(4)114-123.
5. Hameed A., Nasir IA., Tabassum B., Qamar Z., Zameer M., Younus M., Rao AQ., **Rashid, B.**, Tariq, M., Khan GA., Ali, M., Anjum MS., Ahmed, S., Bhatti, JA., Samiullah, TR., Husnain T (2016). Biosafety assessment of locally developed transgenic sugarcane. *The J. Anim. Plant Sci.* 26(4):1124-1132
6. Iqbal MS, Hafeez MN, Wattoo JI, Ali A, Sharif MN, **Rashid B**, Tabassum B, Nasir IA (2016). Prediction of host-derived miRNAs with the potential to target PVY in potato plants. *Frontiers in Genetics*. doi: 10.3389/fgene.2016.00159
7. Majid MU, Tahir MS, Ali Q, Rao AQ, **Rashid B**, Ali A, Nasir IA, Husnain T (2016). Nature and History of Ebola Virus: An Overview. *Arch Neurosci*. 3(3):e35027. doi: 10.5812/archneurosci.35027.
8. Awan, MF., Ali, A., Muzaffar, A., Abbas, MA., Rao, AQ., Qamar, Z., Butt, SJ., Khan, GA., **Rashid, B.**, Nasir, IA., Husnain, T. (2016). Transgenic cotton: Harboring broad term resistance against insect and weeds through incorporation of CEMB double Bt and cp4EPSPS Genes. *Pak J Agri Sci* 53(3): 501-505. DOI: 10.21162/PAKJAS/16.2007.
9. Shahid MN., Jamal A., Aftab B., Mohamed BB., Wattoo JI., Kiani MS., **Rashid B.**, Husnain T. (2016). Identification, characterization, and expression profiling of salt-stress tolerant proton gradient regulator 5 (PGR5) in *Gossypium arboreum*. *Turk J Biol*. 40: 889-898. doi:10.3906/biy-1504-30

10. Gul A., Ahad A., Akhtar S., Ahmad Z., **Rashid B.**, Husnain T (2016). Microarray: gateway to unravel the mystery of abiotic stresses in plants. *Biotechnology Letters* 38(4) 527-547. DOI 10.1007/s10529-015-2010-2
11. Puspito AN, Rao AQ, Hafeez MN, Iqbal MS, Bajwa KS, Ali Q, **Rashid B**, Abbas MA, Latif A, Shahid AA, Nasir IA, and Husnain T (2015). Transformation and Evaluation of Cry1Ac+Cry2A and GTGene in *Gossypium hirsutum* L. *Frontiers in Plant Science* 6:943. doi: 10.3389/fpls.2015.00943.
12. Hassan S., Sadique S., Sarwar MB., **Rashid B.**, Husnain T. (2015). Morphophysiological, biochemical and developmental responses of diploid cotton (*Gossypium arboreum* L.) cultivars under varying NaCl stress. *International Journal of Biosciences* 6(12): 9-20. <http://dx.doi.org/10.12692/ijb/6.12.9-20>
13. Jamal, A., Shahid, MN., Aftab, B., **Rashid, B.**, Kiani, S., Mohammed, BB., Sarwar, MB., Hassan, S, Husnain, T. (2015). Alterations in photosynthetic, water relations and biochemical components in cotton subjected to drought stress. *Journal of Global Biosciences* 4(2): 1517-1529.
14. Hafeez MN, Sadique S, Hassan S, Sarwar MB, **Rashid B**, Ali Q, Husnain T (2015). Physiological, morphological, biochemical and molecular basis of drought tolerance in Cotton. *International Journal of Biology Pharmacy and Allied Sciences* 4(3): 1091-1112.
15. Mohamed BB, Sarwar MB, Hassan S, **Rashid B**, Aftab B, Husnain T(2015) Tolerance of Roselle (*Hibiscus Sabdariffa* L.) genotypes to drought stress at vegetative stage. *Advancements in Life Sciences* 2(2): 74-82
16. Mohamed BB, Shahid MN, **Rashid B**, Jamal A, Aftab B, Dahab AA, Kiani S, Ashraf MA, Sarwar MB, Hassan S, Husnain T (2014). Identifying salt stress-responsive transcripts from Roselle (*Hibiscus sabdariffa* L.) roots by differential display. *African Journal of Biotechnology* 13(53), 4775-4781.
17. Sarwar, MB., Batool, F., **Rashid, B.**, Aftab, B., Hassan, S., Husnain, T., 2014. Integration and expression of heat shock protein gene in segregating population of transgenic cotton for drought tolerance. *Pak J Agri Sci* 51(4), 935-941.
18. Tariq M., Ali Q., Khan A., Khan GA., **Rashid B.**, Rahi MS., Ali A, Nasir IA., Husnain T. (2014). Yield potential study of *Capsicum annuum* L. under the application of PGPR. *Adv life sci* 1(4): 202-207
19. Jamal A., Shahid MN., Aftab B., **Rashid B.**, Sarwar MB., Mohamed BB., Hassan S., Husnain T. (2014). Water stress mediated changes in morphology and physiology of *Gossypium arboreum* (Var FDH-786). *J Plant Sci.* 2(5):179-186. Doi 10.11648/j.jps.20140205.15
20. Dar AI., Saleem F., Ahmad M., Tariq M., Khan A., Ali A., Tabassum B., Ali Q., Khan GA., **Rashid B.**, Nasir IA., Husnain T. (2014). Characterization and efficiency assessment of PGPR for enhancement of rice (*Oryza sativa* L.) yield. *Adv life sci* 2(1):38-45
21. Hassan S., Sarwar MB., Sadique S., **Rashid B.**, Aftab B., Mohamed BB., Husnain T. (2014). Growth, physiological and molecular responses of cotton (*Gossypium arboreum* L.) under NaCl stress. *American J Plant Sci* 5(5):605-614
22. Hussain T., Bakhsh A., Munir B., Hassan H., Rao AQ., Shahid AA., **Rashid B.**, Husnain T. (2014). Mendelian segregation pattern and expression studies of insecticidal gene

- (*cry1Ac*) in insect resistant cotton progeny. Emir. J. Food Agric. 26 (8): 706-715
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- 23. Rehman SU., Atif A. Mirza, Masood K., **Rashid B.**, Husnain T. (2014). Microarray gene expression MIAME-PLANT supportive tab delimited data format: MAGE-TAB-PLANT. The Journal of Animal & Plant Sciences, 24(1):179-189.
 - 24. Aftab B., Shahid MN., Riaz S., Jamal A., Mohamed BB., Zahur M., Aftab M., **Rashid B.**, Husnain T. (2014). Identification and expression profiling of CLCuV-responsive transcripts in upland cotton (*Gossypium hirsutum* L). Turk J Biol 38: 226-237
doi:10.3906/biy-1307-55
 - 25. Azam S, Samiullah TR, Yasmeen A, Din S, Iqbal A, Rao AQ, Nasir IA, **Rashid B.**, Ahmad Ali Shahid, Munir Ahmad, Tayyab Husnain. (2013). Dissemination of Bt cotton in cotton growing belt of Pakistan. Advancements in Life Sciences. 1(1): 24-31.
 - 26. BB Mohamed, MB Sarwar, **B Rashid**, AA Dahab, A Jamal, MN Shahid, B Aftab, S Hassan, T Husnain (2013). Physiological and biochemical responses of Roselle (*Hibiscus sabdariffa*L.) to NaCl stress. Agrochimica, LVII(3): 250-266
 - 27. Shamim Z, **Rashid, B**, Rahman S, Husnain T. (2013). Expression of drought tolerance in transgenic cotton. Sci. Asia. 39;1-11
 - 28. Shahid MN, Jamal, **Rashid B**, Aftab B, Husnain T. (2012). Identification and isolation of salt stress responsive transcripts from *Gossypium arboreum* L. Turkish J Biol. 36 (6): 746-756; DOI: 10.3906/biy-1207-54
 - 29. Bakhsh A, Rao AQ, Khan GA, **Rashid B**, Shahid AA, Husnain T. (2012). Insect resistance studies of transgenic cotton cultivar harboring cry1Ac and cry2A. Res J. Agric Sci (TABAD) Tarım Bilimleri Araştırma Dergisi 5 (2): 167-171.
 - 30. Qaisar U, Irfan M, Maqbool A, Zahoor M, Khan MYK, **Rashid B**, Husnain T, Riazuddin S. (2010). Identification, sequencing and characterization of a stress induced homologue of fructose bisphosphate aldolase from cotton. Can. J. Plant Sci. 90(1):41-48.
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 - 35. **Rashid B**, Saleem Z, Husnain T, Riazuddin S. (2008). Transformation and Inheritance of Bt Genes in *Gossypium hirsutum*. J. Plant Bio. 51(4): 248-254.
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39. Maqbool A, Zahur M, Irfan, M, Qaiser U, **Rashid B**, Husnain T, Riazuddin S. (2007) Identification, characterization and expression of drought related alpha-Crystalline heat shock protein gene (*GHSP26*) from desi cotton (*Gossypium arboreum L.*). Crop Science.47:2437-2444.
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