

Dr. Rana Binyamin

Assistant Professor, University of Agriculture, Sub-Campus, Burewala-Vehari

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WORK EXPERIENCE

Designation	Department	Institute	Duration
Assistant Professor	Plant Pathology	University of Agriculture, Sub-campus, Burewala, Vehari	February 2016 to-date
Lecturer	Plant Pathology	University of Agriculture, Sub-campus, Burewala, Vehari	September, 2013 to February 2016
Agricultural officer	Pest warning and Quality Control	Government of Punjab, Pakistan	April, 2011 to March, 2012
Internship	Agricultural Biotechnology	Ayub Agricultural research institute, Faisalabad, Pakistan.	February, 2008 to June, 2008

FIELD OF SPECIALIZATION

- Plant Virology and Epidemiology

SCHOLARSHIPS ACHIEVEMENTS/DISTINCTIONS

- Silver medal in M.Sc (Hons) (2008-10)
- Bronze medal in B.Sc (Hons) (2004-08)
- Ph.D. fellowship scholarship funded by UAF, Pakistan (2011-13)
- Merit scholarship in the whole period of Graduation (2004-08)
- Merit scholarship in the whole period of Masters (2008-10)

PROJECTS

- Assessment of diversity and distribution of geminiviruses on crop plants in district Vehari. (HEC-SRGP, Completed)

PUBLICATIONS

Master's Dissertation

- Binyamin R., M. A. Khan and A. I. Khan.2010. ULCV a potential threat to urdbean production. LAP LAMBERT Academic Publishing GmbH & Co. KG. Dudweiler Landstr. 99. 66123 Saarbrucken, Germany.

Ph.D. Dissertation

- Characterization of Molecular and Epidemiological Factors in Relation to Resistance against Mungbean Yellow Mosaic Virus Disease and its Management

RESEARCH ARTICLES

Impact Factor

1. Rana, M.S., Sun, X., Imran, M., Ali, S., Shaaban, M., Moussa, M.G., Khan, Z., Afzal, J., **Binyamin, R.**, Bhandana, P. and Alam, M., 2020. Molybdenum-induced effects on leaf ultra-structure and rhizosphere phosphorus transformation in *Triticum aestivum* L. *Plant Physiology and Biochemistry*. (**Impact Factor 3.72**)

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2. Moosa, A., Farzand, A., Sahi, S.T., Khan, S.A., Abbas, M.F., Abbas, A., **Binyamin, R.** 2020. First report of post-harvest Fusarium caused by *Fusarium oxysporum* on Citrus reticulata Blanco cv. 'Kinnow' in Pakistan. J Plant Pathol. <https://doi.org/10.1007/s42161-020-00521-6> (**Impact Factor 1.041**)
 3. Moosa, A., Farzand, A., Sahi, S.T., Khan, S.A., Malik, A.U., Gleason, M.L., **Binyamin, R.,** Ali, M.A. 2020. First report of post-harvest rot of Citrus reticulata cv. 'Kinnow' caused by *Rhizopus arrhizus* in Pakistan. J Plant Pathol. <https://doi.org/10.1007/s42161-019-00414-3>. (**Impact Factor 1.041**)
 4. Akhtar, S., Tahir, M.N., Amin, I., **Binyamin, R.,** Mansoor, S. 2019. Characterization of circular DNA molecules of chloroplast, nuclear and unknown origin from cotton plants with leaf curl disease. Pak. J. Bot., 51(1): 319-325. (**Impact Factor 0.75**)
 5. Khan, N.A., Amjad, A., **Binyamin, R.,** Rehman, A., Hafeez, O.B.A. 2017. Role of various supplementary materials with cotton waste substrate for production of *Pleurotus ostreatus* An Oyster Mushroom. Pak. J. Bot., 49(5): 1911-1915. (**Impact Factor 0.75**)
 6. Khan, N.A., **Binyamin, R.,** Awan, F.S., Khan, A.I., Waseem, M. 2017. Genetic diversity of edible mushroom *Pleurotus* sp. Revealed by randomly amplified polymorphic DNA fingerprinting. Pak. J. Bot., 49(4): 1517-1521. (**Impact Factor 0.75**)
 7. **Binyamin R.,** M.A. Khan, A.I. Awan, F.S., Khan, N.A. Akhtar, S. 2016. Genetic diversity of mungbean genotypes in relation to resistance against mungbean yellow mosaic virus. Pak. J. Bot., 48(3): 1273-1277. (**Impact Factor 0.75**)
 8. **Binyamin R.,** M.A. Khan, N.A. Khan, A.I. Khan. 2015. Application of SCAR markers linked with mungbean yellow mosaic virus disease resistance gene in Pakistan mungbean germplasm. Genet. Mol. Res.14 (1): 2825-2830. (**Impact Factor 0.80**)
 9. Khan, N.A., Ajmal, M., Haq, M.I., Javed, N., Ali, M.A., **Binyamin, R.,** Khan, S. A., 2012. Impact of sawdust using various woods for effective cultivation of oyster mushroom. Pak. J. Bot., 44(1): 399-402. (**Impact Factor 0.75**)
 10. **Binyamin, R.,** Khan, M.A., Ahmad, N., Ali, S. 2011. Relationship of epidemiological factors with urdbean leaf crinkle virus disease and its management using plant. Int. J. Agric. Biol., 13 (3): 411–414. (**Impact Factor 0.80**)
 11. **Binyamin, R.,** Khan, M.A., Khan, A. I., Khan, M.A., Awan, F.S., Khan, N.A. 2011. Molecular characterization of urdbean (*Vigna mungo*) germplasm related to resistance against urdbean leaf crinkle virus. Genet. Mol. Res. 10 (3): 1681-1688. (**Impact Factor 0.80**)
 12. Ahmad, N., Khan, M.A., Khan, N.A., **Binyamin, R.,** Khan, M.A. 2011. Identification of resistance source in potato germplasm against PVX and PVY. Pak. J. Bot., 43(6): 2745-2749. (**Impact Factor 0.75**)
 13. Haq, M.I., Khan, N.A., Khan M.A., Khan, M.A., Javed, N., **Binyamin, R.,** Irshad, G. 2010. Use of medicinal plants in different composts for yield improvement of various strains of oyster mushroom. Pak. J. Bot., 42 (5): 3275-3283. (**Impact Factor 0.75**)
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HEC Recognized

1. **Binyamin, R.**, Nadeem, S.M., Akhtar, S., Khan, M.Y., Anjum, R. 2019. Beneficial and pathogenic plant-microbe interactions: A review. *Soil Environ.* 38(2): xx-xx, 2019 DOI:10.25252/SE/19/71659
2. **Binyamin, R.**, Khan, M.A., Haider, M., Ahmed, N., Zeshan, M.A., Hafeez, O.B.A. 2019. Management of *Bemisia tabaci* vector of bipartite *Begomovirus* with botanicals and insecticides. *Pak. Entomol.*, 41(2):111-120.
3. Zeshan, M.A., Ali, S., Ahmed, N., Yousaf, M., **Binyamin, R.** 2019. Description of Growth and Yield Parameters of Mungbean Cultivars under Mungbean Yellow Mosaic Virus (MYMV) Stress Conditions. *Pakistan Journal of Agriculture, Agricultural Engineering and Veterinary Sciences*, 35(2), 93-97.
4. Shafiq, M., Khan, M.A., **Binyamin, R.**, et al., 2017. Relationship of Meteorological Variables and Inoculation Techniques Conducive for Loose Smut of Wheat Development. *Pak. J. Phytopathol.*, Vol. 29(01): 145-152.
5. Zeeshan, M.A., S. Ali, M. Atiq, N. Ahmed, M.U. Ghani, **Binyamin, R.** and M. Rizwan, 2017. Assessment of whitefly mortality and decrease in yellow mosaic disease severity by using insecticides with different modes of action. *Pak. Entomol.*, 39(1):55-60.
6. Haider M., Bukhari, A.A. **Binyamin, R.**, Habib, A. 2016. Fungi associated with guava anthracnose and management of *Colletotrichum gloeosporioides* through biological and chemical means. *Pak. J. Phytopathol.*, Vol. 28(2): 153-160
7. Imran, M., Khan, M.A., Azeem, M., Ahmad, N., **Binyamin, R.**, Riaz, A. 2012. Screening of tomato germplasm for the source of resistance and its management against ToMV. *Pak. J. Phytopathol.*, Vol. 24(1): 53-57.
8. Ahmad, N., Khan, M. A., Ali, S., Khan, N.A., **Binyamin, R.**, Sandhu, A.F., Rehman A. 2011. Epidemiological studies and management of potato germplasm against PVX and PVY. *Pak. J. Phytopathol.*, Vol. 23 (2): 159-165.

International Journals

1. Rana, M. S., Bhandana, I. M., Moussa, M. G., Khan, Z., Kamran, M., Alam, M., Abbas, M., **Binyamin, R.**, Afzal, J., Syaifudin, M., Din, I.U., Younas, M., Ahmad, I. 2020. A Novel Strategy: Microbes in Relation to Heavy Metals Toxicity and Future Prospects. *Journal of Soil and Plant Biology*. 1: 113-128
 2. Saleem, S., Saeed, S., Ali, S., Habib, A., Zeshan, M.A., **Binyamin, R.**, Khan, A. A., Ghani, M.U. 2020. Analysis of mungbean germplasm against mungbean yellow mosaic virus disease and its management. *International Journal of Biosciences*. 16(4):404-410
 3. Rana, M.S., Bhandana, P., Sun, X., Imran, M., Shaaban, M., Moussa, M.G., Saleem, M.H., Elyamine, A.M., **Binyamin, R.**, Alam, M., Afzal, J., Khan, I., Din, I., Ahmad, I., Younas, M., Kamran, M., Hu, C. 2020. Molybdenum as an Essential Element for Crops: An Overview. *Biomed J Sci & Tech Res* 24(5)-18535-18547.
 4. Raza, M.M., Khan, M.A., Atiq, M., **Binyamin, R.**, Javed, M. 2013. Prediction of citrus canker
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epidemics generated through different inoculation methods. Archives of Phytopathology and Plant Protection, 47 (11): 1335-1348

BOOK CHAPTERS

1. Aslam, B., Rasool, M., Muzammil, S., Siddique, A.B., Nawaz, Z., Shafique, M., Zahoor, M.A., **Binyamin, R.**, Waseem, M., Khurshid, M. and Arshad, M.I. 2020. Carbapenem Resistance: Mechanisms and Drivers of Global Menace. In Pathogenic Bacteria. IntechOpen.
2. Nadeem, S. M., Khan, M. Y. Waqas, M. R. **Binyamin, R.**, Akhtar, S., Zahir, Z. A. 2017. Arbuscular Mycorrhizas and Stress Tolerance of Plants. Arbuscular Mycorrhizas: An Overview. Springer. Pp1-24.
3. Zahir, Z. A., Nadeem, S. M., Khan, M. Y., **Binyamin, R.**, & Waqas, M. R. 2019. Role of Halotolerant Microbes in Plant Growth Promotion Under Salt Stress Conditions. In Saline Soil-based Agriculture by Halotolerant Microorganisms Springer, Singapore.PP209-253.

ABSTRACT PUBLISHED

1. Masroor, A., Kanwal, G., Hafeez, O.B.A., **Binyamin, R.**, Mariam, M. 2019. Bacillus isolates treatment impart differential effect on *Raphanus sativus* seed germination. “International Horticulture Conference” BZU Multan. Pp-16
2. Hafeez, O.B.A., Masroor, A., Mariam, M., **Binyamin, R.**, Akbar, A. 2019. Biopriming of radish seeds for improving seed quality attributes. “International Horticulture Conference” BZU Multan. Pp-20
3. Khan, N.A., **Binyamin, R.**, Arshad, M.R., Hafeez, O.B.A., Masroor, A., Mariam, M. 2019. Yield performance of *Pleurotus ostreatus* on industry and agricultural wastes. “International Horticulture Conference” BZU Multan. Pp-205
4. **Binyamin, R.**, Ahmad, N., Akhtar, S., Masroor, A. 2017. SCAR markers linked with Mungbean Yellow Mosaic Virus disease resistance gene. 6th ICPPS Conference on “Plant Health for Sustainable Agriculture” Bahauddin Zakariya University Multan, Pakistan. Pp 147-148
5. Safdar, A., Masroor, A., Hammad, M.A., Akhtar, S., **Binyamin, R.**, Ibrahim, M. 2016. Computational analysis of NIMIN proteins interaction network during SA induced response in *Arabidopsis thaliana*. Conference on “Sustainable Crop and Animal Production Systems” University of Haripur, Haripur Pakistan. Pp-46
6. Akhtar, S., Tahir, M.N., Amin, I., Mansoor, S., Masroor, A., **Binyamin, R.** 2016. Circular molecules of diverse origins associated with cotton leaf curl disease. Conference on “Sustainable Crop and Animal Production Systems” University of Haripur, Haripur Pakistan. Pp-143

STUDENTS SUPERVISED

- M.Sc (Hons) = 02 (As a Supervisor, Degree Completed)
 - M.Sc (Hons) = 02 (As a Supervisor, Thesis Write up)
 - M. Phil Microbiology =02 (As Co-Supervisor, Degree Completed)
 - M.Sc Botany = 13 (As a Supervisor, Degree Completed)
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- M.Sc Chemistry = 02 (As a Supervisor, Degree Completed)
 - M.Sc Sociology = 03 (As a Supervisor, Degree Completed)

TRAININGS/SEMINARS

Scientific/Professional Events Attended

1. Attended “International Conference on Environmental Toxicology and Health” Feb. 25-27, 2019, organized by CIIT, Vehari.
 2. Attended "International Horticultural Conference Pakistan 2019" Feb. 26-28, 2019, organized by BZU Multan.
 3. Attended “1st International Conference "Soil and Crop Health in Changing Environment", Nov. 28-29 2018, organized by MANSUA Multan.
 4. Attended “2nd Sino-Pak Conference "Innovations in Cotton Breeding and Biotechnology", Nov. 26-27 2018, organized by MANSUA Multan.
 5. Attended 6th International Conference of Pakistan Phytopathological Society "Plant Health for Sustainable Agriculture", Nov. 20-22, 2017 organized by BZU Multan.
 6. Attended Seminar "EU Research and Innovation Program Horizon-2020" August 24, 2017, organized by PSF and BZU Multan.
 7. Attended International Workshop "Application of Computational Biology and Biotechnology" July 31st 2017, organized by NIBGE Faisalabad.
 8. Workshop on “Technical and Patent Writing” 28th January 2017, organized by Department of Chemistry, UAF.
 9. Training on “Professional development of teachers teaching through medium of English” under transforming English language skills, 23rd to 27th January 2017, organized by UAF in collaboration with HEC.
 10. “International Seminar on Seed Longevity, Drying and Storage” 24th November 2016, organized by UAF Sub-Campus Burewala-Vehari.
 11. Participated in “A three-day workshop on Research Methods and Data Analysis using SPSS" 25th-27th July 2016, organized by UAF Sub-Campus Burewala-Vehari.
 12. Attended one day Training on “ISO 14001:2004 Environmental management system” 12th April, 2016, organized by CIIT, Vehari.
 13. Attended one day Training on “Occupational health and safety awareness” 13th April, 2016, organized by CIIT, Vehari.
 14. Attended one day workshop on “Importance of value chain in agri. Business in Pakistan” 16th March, 2016, organized by UAF Sub-Campus Burewala-Vehari.
 15. Attended “Grant writing workshop” on 1st June, 2015, organized by UC Davis and UAF.
 16. Attended Indigenous on Campus Training (IOT) from 15th to 19th December 2014 at University of Agriculture Faisalabad.
 17. Training course on Tunnel Technology from University of Agriculture Faisalabad, Pakistan.
 18. Training course on Advance Landscape Techniques from University of Agriculture Faisalabad, Pakistan.
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Scientific Events Organized

1. Organized one day seminar/workshop on “Food and Nutrition” Dec. 18, 2019, at UAF, Sub-Campus Burewala-Vehari.
 2. Organized one day training workshop “Emerging Standards for Sustainable Food Business” Nov. 19, 2019, at UAF, Sub-Campus Burewala-Vehari.
 3. Organized “One Day Training on Plant Disease Diagnosis” June 21, 2019 , at UAF, Sub-Campus Burewala-Vehari.
 4. Organized "One day Workshop on Statistical Package for Social Sciences" April 15, 2018, at UAF, Sub-Campus Burewala-Vehari.
 5. Organized "One day Training for Thesis and Research Writing" March 04, 2018, at UAF, Sub-Campus Burewala-Vehari.
 6. Organized one day seminar on “Internship Orientation and Report Writing” Jan. 30, 2018, at UAF, Sub-Campus Burewala-Vehari.
 7. Organized "One day Training on Scientific Writing" April 09, 2017, at UAF, Sub-Campus Burewala-Vehari.
 8. Organized Workshop "Hands on DNA Manipulation tools, Phase-1" March 11, 2017, at UAF, Sub-Campus Burewala-Vehari.
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