

Mazen Salman, PhD.

Prof. Plant Pathology

College of Agricultural Sciences and Technology,

Palestine Technical University/ Kadoorie (PTUK)

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Academics

Degree	University	Country	Year	Field
Ph.D.	Hohenheim/Stuttgart	Germany	2007	Phytopathology
M.Sc.	An Najah National University	Palestine	1999	Biology/plant tissue culture
B.Sc.	An Najah National University	Palestine	1995	Biology

Professional Experience

1- Employment history

- 2020-present : Profesor of plant pathology, Department of Agricultural Biotechnology, , Palestine Technical University Kadoorie, Palestine.
- 2019-2020: Fulbright Visiting Scholar, UC Davis, USA
- 2018-2019 : **Head of Horticulture and Agricultural Extension Departement**, Faculty of Agricultural Science and Technology, Palestine Technical University Kadoorie, Palestine.
- 2016-2017: Research visitor, UC Davis, USA
- 2014-2016: **Dean of Scientific Research and Graduate Studies**, Palestine Technical University Kadoorie, Palestine
- 2012-2014 : **Director, Technical and Applied Research Center**, Palestine Technical University Kadoorie, Palestine
- 2010-2012 : Assistant Professor, Palestine Technical University Kadoorie, Palestine
- 2007-2010: Research visitor ,Christian Albrecht University of Kiel, Germany
- 2000-2002: Research assistant, Al Quds University, Palestine
- 1999-2000: Research assistant, Department of Evolution Systematics and Ecology, The Hebrew University of Jerusalem, Israel

2- Research Experience / Projects and Grants

- Molecular Screening of susceptible and resistant olive genotypes against Olive Knot Disease.
- 2018 Treatment of Olive Mill Waste Water (OMWW) and Potential Use in Agriculture PADUCO II
- 2014-2016: PTUK Coordinator of Palestinian-Dutch Academic Cooperation Program on Water (PADUCO)
- 2012-2013: International Foundation for Science (IFS), Possibilities of biological control of Peacock spot disease caused by *Spilocaea oleagina* on Olive using bacteria
- Innovative detection technique of plant pathogens using VIS/NIR
- Use of bacteria as biocontrol agents against Fusarium Wilt disease of watermelon caused by *Fusarium oxysporum* f. sp. *niveum* in Palestine
- Control of Orobanche using bacteria and fungi as biological control agents: effect of bacteria on Orobanche germination and host plant-parasite interaction
- Use of White Rot Fungus in Dephenolization of Olive Mill Wastewater

3- Teaching Experiences

Graduate Courses

- PhD courses: Advanced Plant Pathology
- MSc courses: Biotechnology for Crop Protection

Undergraduate Courses

- Principales of plan protection
- Plant pathology
- Integrated Pest Management
- Microbiology
- Biology 101
- Biology 102

Awards and Fellowships

- 2019 : Fulbright Visiting Scholar
- 2016: Distinguished Arab Scientist/ Arab Fund Fellowship Program
- 2014: Zamalah Fellowship/ Bank of Palestine
- 2002-2007: German Academic Exchange Service (DAAD) PhD Scholarship

Memberships

2012-2019 Member of Higher Council of Innovation and Excellency, Palestine

Languages

Arabic, English and German

Journal reviewer

- Crop Protection, Elsevier
- Australasian Plant Pathology, Springer
- Journal of Agriculture and Environment for International Development (JAEID), Italian Agency for Development Cooperation

Publications

Google scholar:

<https://scholar.google.com/citations?user=hH5mT6kAAAAJ&hl=en>

(1) Papers published in journals

Zyoud, A., I. M. Nassar, M. Salman, S. Iwissat, S. Zyoud, M. H. S. Helal, T. W. Kim, M. Rahil, R. Abuamsha, N. Shahin, W. Voogt, K. Kujawa, and H. S. Hilal. (2021). "Nano-ZnO Film Photocatalysts in Bench-Scale Continuous-Flow Mineralization of Olive Mill Waste Contaminants in Water." International Journal of Environmental Science and Technology. doi: 10.1007/s13762-021-03291-5.

- Kleef, F., Salman, M. Antifungal Effect of *Ambrosia artemisiifolia* L. Extract and Chemical Fungicide Against *Spilocaea oleagina* Causing Olive Leaf Spot. Arab J Sci Eng (2021). <https://doi.org/10.1007/s13369-021-05397-x>
- Salman, M., Greenhut, R. Preece, J., Ferguson L., and Kluepfel D. (2020). "Field Evaluation of Olive (*Olea Europaea*) Genotypes for Resistance to *Pseudomonas Savastanoi* Pv. *Savastanoi*." Journal of Plant Pathology 102(3):663–70. doi: 10.1007/s42161-020-00549-8.
- Kleef F. and **Salman M.** (2020). Genetic diversity among *Spilocaea oleagina* isolates from different regions in Palestine. Journal of the Arab American University 6 (1), 1-14
- Salman M.** (2020). Biological control of Peacock spot disease caused by *Spilocaea oleagina* on Olive using bacteria. Palestine Technical University Research Journal 8 (1): 9-13
- Salman M.**, Mahmoud R., Fadda Z., Alabdallah O., Najjar K, Radwan J. and Abuamsha R. (2019). First report of *Fusarium euwallaceae* on avocado trees in Palestine, Archives of Phytopathology and Plant Protection, 52:9-10, 930-937, DOI: 10.1080/03235408.2019.1682904
- Zyoud A., Alkowni R., Yousef O., **Salman M.**, Hamdan S., Helal M. H., Jaber S. F., Hilal H. S (2019). Solar light-driven complete mineralization of aqueous gram-positive and gram-negative bacteria with ZnO photocatalyst. Solar Energy 180: 351–359
- Mazen Salman** (2017). Biological control of *Spilocaea oleagina* the causal agent of olive leaf spot disease, using antagonistic bacteria. Journal of Plant Pathology 99(3):741-744. DOI: <http://dx.doi.org/10.4454/jpp.v99i3.3958>
- Mazen Salman**, Nabil Shahin, Nawaf Abu-Khalaf, Mohammad Jawabrih, Basima Abu Rumaileh, Ruba Abuamsha and Sameer A. Barghouthi (2017). Antagonistic activity of *Pseudomonas fluorescens* against *Fusarium oxysporum* f. sp. *nievum* isolated from soil samples in Palestine. Journal of Plant studies, 6(2): 1-8 DOI: <https://doi.org/10.5539/jps.v6n2p1>
- Mazen Salman**, Naser Salameh, Saeid Abu-Romman (2017). Germination and seedling growth of barley as affected by *Artemisia annua* water extract. Plant Omics Journal, 10 (1):1-6. DOI:10.21475/poj.10.01.17.241
- Shahin N., Amjad A., Reiman J., AlKhalil S. and **Salman M.** (2017). PCDD/PCDF and pl-PCBs Concentration in Ambient Atmosphere in the City of Tulkarm Using Passive Air Sampler. Environment and Pollution, 6(2): 34-40. DOI: <https://doi.org/10.5539/ep.v6n2p34>
- N Shahin, N Abu-Khalaf, **M Salman**, H Parlar (2016). Testing the Possibility of Photochemical Synthesis of Chlorinated Phenols, Benzenes and Biphenyl: Pre-study Guide for Standards Synthesis. Palestine Technical University Research Journal 4 (2), 73-78
- Mazen Salman**, Nawaf Abu-Khalaf, Basima Abu Rumaileh, Mohamad Jawabreh and Ruba Abuamsha. Detoxification of Olive Mill Waste Water Using the White Rot Fungus *Phanerochaete chrysosporium* (2014). International Journal of Environment and Sustainability, 3(1): 1-6.
- Hajaj Hajjeh, **Mazen Salman**, Ruba Abuamsha, Mohamad Abueid Mohammad Jawabreh, Abd-Almonem Hawamda and Basima Abu Rumaileh (2014). Latent Infection of Olive Leaf Spot Disease on Palestinian Olives. Annual Research & Review in Biology, 4(15): 2517-2524
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers (2014). Role of Different Additives on Survival of *Serratia plymuthica* HRO-C48 on Oilseed Rape Seeds and Control *Phoma lingam*. British Microbiology Research Journal, 4(7): 737-748.

- Nawaf Abu-Khalaf and **Mazen Salman** (2013) Detecting plant diseases using visible/near infrared spectroscopy, *NIR news* 24 (4), 12-25
- Nawaf Abu-Khalaf and **Mazen Salman** (2014). Visible/Near infrared (VIS/NIR) spectroscopy and multivariate data analysis (MVDA) for identification and quantification of olive leaf spot (OLS) disease. *Palestine Technical University Research Journal*, 2(1): 1-8
- Mazen Salman**, Mohamad Jawabreh and Basima Abu Rumaileh (2014). The effect of local fungicides on conidial germination of *Spilocaea oleagina* in Palestine. *Palestine Technical University Research Journal*, 2(1): 26-28.
- Ruba Abuamsha, Hajaj Hejjeh and **Mazen Salman** (2014). Role of Overwintering Forms of *Erysiphe necator* in Epidemiology of Grapevine Powdery Mildew in Palestinian Vineyards. *Palestine Technical University Research Journal*, 2(1): 20-25
- Ruba Abuamsha, Mohammed Abueid, Hajaj Hajjeh and **Mazen Salman** (2013). Evaluation of the Incidence and Severity of Olive Leaf Spot caused by *Spilocaea oleagina* in different olive cultivars in Palestine. *Journal of Agriculture and Environment for International Development*, 107 (2): 201 - 212
- Nawaf Abu-Khalaf, Mohammed Almasri, Ahmed Hajjaj, Naser Abbadi, Hakam Salah, Jawad Zakarne, Jamil Harb and **Mazen Salman** (2013). Effect of different plastic liners on the quality of fresh-cut Jew's mallow leaves (*Corchorus olitorius* L.) during storage under different temperatures. *British Journal of Applied Science & Technology*, 3(3): 462-471
- Mazen Salman**, Ruba Abuamsha and Sameer Barghouthi (2013) Interaction of Fluorescent Pseudomonads with *Pythium ultimum* and *Rhizoctonia solani* in Cucumber Roots. *American Journal of Experimental Agriculture*, 3(1): 240-251
- Basel Natsheh, Nawaf Abu Khalaf, Tahseen Sayara, Saed Khayat and Mazen Salman (2013). Multivariate data analysis for bioremediation of contaminated soil through Interactions between heavy metals, microbes and plants. *Palestine Technical University Research Journal* 1(1), 21-28
- Mazen Salman** and Ruba Abuamsha (2012). Potential for integrated biological and chemical control of damping-off disease caused by *Pythium ultimum* in tomato. *BioControl*, 57(5): 711-718.
- Omar Hammoudi, **Mazen Salman**, Ruba Abuamsha and Ralf-Udo Ehlers (2012). Effectiveness of Bacterial and fungal isolates to control *Phoma lingam* on oilseed rape *Brassica napus*. *American Journal of Plant Sciences*, 3, 773-779
- Basel Natsheh, Zaher Barghouthi, Sameer Amereih and **Mazen Salman** (2012). Effect of irrigation with sea water on germination and growth of lentil (*lens culi*). *Journal of Water Resource and Protection* 4:307-310
- Zaher Barghouthi, Sameer Amereih, Basel Natsheh and **Mazen Salman** (2012). Analysis of macro and micronutrients in Soils from Palestine using ion exchange membrane technology. *Open Journal of Soil Science*, 2(1): 44-49
- Mazen Salman**, Abd-Almonem Hawamda, Ahmad Al-Ashqar Amarni, Mahmoud Rahil, Hajaj Hajjeh, Basel Natsheh and Ruba Abuamsha (2011). Evaluation of the incidence and severity of olive leaf spot caused by *Spilocaea oleagina* on olive trees in Palestine. *American Journal of Plant Sciences*, 2 (3): 457-460. doi:10.4236/ajps.2011.23053
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers (2011). Effect of seed priming with *Serratia plymuthica* and *Pseudomonas chlororaphis* to control *Phoma lingam* in different oilseed rape cultivars. *European Journal of Plant Pathology*, 130 (3): 287-295
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehler (2011). Improvement of seed bio-priming of oilseed rape (*Brassica napus* ssp. *oleifera*) with *Serratia plymuthica* and *Pseudomonas chlororaphis*. *Biocontrol Science and Technology*. 21 (2): 199-213

- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehler (2011). Differential resistance of oilseed rape cultivars (*Brassica napus* ssp. *oleifera*) to *Verticillium longisporum* infection is affected by rhizosphere colonisation with antagonistic bacteria, *Serratia plymuthica* and *Pseudomonas chlororaphis*. *BioControl* 56 (1): 101-112.
- Salman M.** (2010). Determination of Antibiotic Activity on Plasmids from fluorescent *Pseudomonads* isolates CW2, WB15 and WB52 against pre emergence damping-off caused by *Pythium ultimum* and *Rhizoctonia solani* in cucumber. *Biological Control*, 53 (2): 161-167.
- Barghouthi, S. and **Salman M.** (2010). Bacterial Inhibition of *Orobanche aegyptiaca* and *Orobanche cernua* Radical Elongation. *Biocontrol Science and Technology*, 20 (4): 423-435.
- Salman M. N.** (2002). Establishment of callus and cell suspension cultures from *Gypsophila paniculata* leaf segments and study of the attachment of host cells by *Erwinia herbicola* pv. *Gypsophilae*. *Plant, Cell, Tissue & Organ Culture*, 69(2): 189-196.

(2) Refereed conference proceedings

- Mazen Salman**, Abdul-Jalil Hamdan, Bader Al Hawamdeh, Salamah Shubib, Imad Eid Mohammad Al-Qurnah and Shadi Salman. Efficacy of conventional pesticides on larval mortality of olive leaf midge. The 4th International conference on Olive in Palestine, Palestine Technical University-kadoorie, 19-20 Nov. 2019
- Abdul-Jalil Hamdan, **Mazen Salman**, Bader Al Hawamdeh, Salamah Shubib, Imad Eid, Mohammad Al-Qurnah, Ragheb Kmail and Shadi Salman. Surveillance of Olive pests in the West bank, 2019. The 4th International conference on Olive in Palestine, Palestine Technical University-kadoorie, 19-20 Nov. 2019
- Fatema Kleef and **Mazen Salman**. Genetic variation among *Spilocaea oleagina* isolates from different regions in Palestine. The 4th International conference on Olive in Palestine, Palestine Technical University-kadoorie, 19-20 Nov. 2019
- Sajida Iwissat, Hikmat S. Hilal, Ahed Zyoud, Ibrahim Nassar, Mahmoud Rahil, Nabil Shahin, Ruba Abuamsha, **Mazen Salman**. Bioremediation of Olive Mill Wastewater (Zibar) using *Phanerochaete chrysosporium* and Possible Use in Agriculture. The 4th International conference on Olive in Palestine, Palestine Technical University-kadoorie, 19-20 Nov. 2019.
- Ibrahim Nassar, Ahed H. Zyoud, **Mazen Salman**, Sajida Iwissat, Mahmoud Rahil, Ruba Abuamsha, Nabil Shahin, Hikmat S. Hilal. Continuous flow photodegradation of olive Zibar contaminants with simulated solar light using supported ZnO nanoparticles. The 4th International conference on Olive in Palestine, Palestine Technical University-kadoorie, 19-20 Nov. 2019.
- Salman M.** and Kluepfel D. Improved media for isolation of *Pseudomonas savastanoi* pv *savastanoi* from olive knots and development of an in vitro pathogenicity bioassay. 2017 APS Annual Meeting, San Antonio, Texas, USA 5-8 August 2017
- Nawaf Abu-Khalaf, **Mazen Salman**, Basima Abu Rumaileh, Mohammad Jawabreh and Nabil Shahin Feasibility study for identification and quantification of olive oil adulteration in Palestine using visible/near infrared (VIS/NIR) spectroscopy. The 4th. Conference of Biotechnology Research and Application in Palestine. 21st March 2016
- Mazen Salman**, Nawaf Abu-Khalaf, Basima Abu Rumaileh, Mohammad Jawabreh, Nabil Shahin and Ruba Abuamsha. Use of bacteria as biocontrol agents against *Fusarium* wilt disease of watermelon caused by *Fusarium oxysporum* f. sp. *niveum*

- in Palestine The 4th. Conference of Biotechnology Research and Application in Palestine. 21st March 2016
- Nawaf Abu-Khalaf, **Mazen Salman** Feasibility study of remote sensing for olive leaf spot (OLS) using spectroscopy and support vector machine (SVM) classification. The 5th International workshop in Biotechnology, under the theme "Biotechnology and its role in the economic development in the Arab world". Khartoum, Sudan. 25th - 26th March, 2014
- Mazen Salman** and Amer Marei. Use of white rot fungus *Phanerochaete chrysosporium* in dephenolization of olive mill waste water. Olive mill wastes and low quality water in agriculture: Effects and interactions in soil. 3rd - 5th April, 2013 - Landau/Pfalz, Germany
- Mazen Salman** and Hajaj Hajjeh Determination of latent infection with *Spilocaea oleagina* on olive trees cultivar nabali in Palestine. The 7th Scientific Agricultural Conference, Jordan University for Science and technology, 8-10 October 2012
- Mazen Salman** and Ruba Abuamsha Integrated control of pre-emergence damping-off caused by *Pythium ultimum* in cucumber using bacteria and chemical fungicides. The 3rd Conference on biotechnology and Applications in Palestine, Al-Quds University, 20 October 2012
- Nawaf Abu-Khalaf and **Mazen Salman**. Inhibiting tomatoes gray mold (*Botrytis cinerea*) postharvest disease using biological control. In: The 7th Scientific Agricultural Conference in Faculty of Agriculture. Jordan University of Science and Technology, 8-10 October
- Mazen salman**. Action of Fluorescent *Pseudomonads* against Seedling Diseases in Cucumber Caused by *Pythium ultimum* (Trow) and *Rhizoctonia solani* Kühn. Jahrestagung 2009 des AK Biologische Bekämpfung von Pflanzenkrankheiten, Berlin, Germany, 19-20 March 2009.
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers. Seed treatment of OSR with *Serratia plymuthica* (Rhizostar): Colonization of rhizosphere in the presence or absence of pathogen infection with *P. lingam* and *V. longisporum*. Jahrestagung des AK Biologische Bekämpfung von Pflanzenkrankheiten, Berlin, Germany, 19-20 March 2009.
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers. Seed treatment of OSR with *Serratia plymuthica* (Rhizostar): Colonization of rhizosphere in the presence or absence of pathogen infection with *P. lingam* and *V. longisporum* . Jahrestagung 2009 des AK Biologische Bekämpfung von Pflanzenkrankheiten, Berlin, Germany, 19-20 March 2009.
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers. Seed Treatment with *Serratia plymuthica* and *Pseudomonas chlororaphis* to control *Verticillium dahliae* and *Phoma lingam* in Oilseed Rape Cultivars. German Plant Protection Conference, Kiel, Germany, 22-25 September 2008.
- Ruba Abuamsha, **Mazen Salman** and Ralf-Udo Ehlers. Effect of pathogen infection on root colonization of oilseed rape by antagonistic bacteria. Crop Protection Symposium May 2008, Gent, Belgium.

(3) Papers published in refereed local conference proceedings

- M. Salman**, Nawaf Abu-Khalaf, Basima Abu Rumaileh, Mohammad Jawabrih, Nabil Shahin, Ruba Abuamsha (2016). Use of bacteria as biocontrol agents against *Fusarium* wilt disease of watermelon caused by *Fusarium oxysporum* f. sp. *niveum* in Palestine. The 4th. Conference of Biotechnology Research and Application in Palestine. The Arab American University, Jenin, Palestine, 21 March.
- M. Salman** N. Abu-Khalaf, B. Abu Rumaileh, M. Jawabreh, N. Shahin (2016). Feasibility study for identification and quantification of olive oil adulteration in

- Palestine using visible/near infrared (VIS/NIR) spectroscopy. The 4th. Conference of Biotechnology Research and Application in Palestine. The Arab American University, Jenin, Palestine, 21 March.
- Abu-Khalaf N. and **Salman M.** Sensing olive diseases using spectroscopy “A feasibility study”. The Second International Conference on Olive in Palestine (SICOP). Palestine Technical University – Kadoorie (PTUK), Tulkarm, Palestine, 25 - 26 Nov, 2013
- Mazen Salman** and Ruba Abuamsha. Potential for integrated biological and chemical control of damping-off disease caused by *Pythium ultimum* in tomato. Agriculture Development Challenges in Palestine. Al Quds Open University, Qalqilya, Palestine, April 25-26, 2011.
- Salman M.**, Hawamda A-M. and Al Ashqar A.A. Evaluation of the incidence and severity of olive Leaf spot caused by *spilocaea oleagina* on olive trees in Palestine. The First International Conference on Olive in Palestine (ICOP): Status and Challenges. PTUK, Tulkarm, Palestine, 8-10 February 2011.
- Hammad O., Tebawee, A-R., Alnatsha, B., **Salman, M.**, and Bsharat, S.A. Assessment of acidity and peroxide of olive oil samples in the West Bank throughout period 2002-2010. The First International Conference on Olive in Palestine (ICOP): Status and Challenges. PTUK, Tulkarm, Palestine, 8-10 February 2011.
- Mazen Salman** and Ruba Abuamsha Integrated control of pre-emergence damping-off caused by *Pythium ultimum* in cucumber using bacteria and chemical fungicides. The 3rd Conference on biotechnology and Applications in Palestine, Al-Quds University, 20 October 2012
- Mazen Salman** Nanotechnology for plant pathogen control. International Palestinian Conference on Nanotechnology for advanced Material and Device. An-Najah National University and Palestine Technical University Kadoori, March 26 – 28, 2012

(5) Books

- Banan Al Sheikh, **Mazen Salman**, Jaber Masalha, Khaled Salem, Mimi Ron and Avi Shmida (2000). Preliminary Checklist and Ecological Data-Base of Plants of the West Bank. Al Quds University, Faculty of Science and Technology, Department of Life Sciences, Abu Deis, West Bank.