

CURRICULUM VITAE

LUMA S. AL-BANNA ALHAWWARI

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<i>Institution</i>	<i>Major/Area</i>	<i>Degree/Date</i>
University of Jordan	Agriculture/ Plant Production & Protection	B.S. 1981
University of California, Davis	Plant Pathology/Nematology	M.Sc. 1992
University of California, Davis	Plant Pathology/ Nematology	Ph. D. 1996

APPOINTMENTS

Aug 2023-Now	Assistant Dean for Alumni Affairs
Sep2015- Aug 2021	Department Head, Department of Plant Protection , School of Agriculture, University of Jordan
Nov2009-Aug 2013	Department Head, Department of Plant Protection , School of Agriculture, University of Jordan
2019-2021	Ambassador of Bonn University
2015-Now	JICA (Japan International Cooperation Agency) coordinator at School of Agriculture
2019-Now	Professor , Department of Plant Protection, School of Agriculture, University of Jordan
2006- 2019	Associate Professor , Department of Plant Protection, School of Agriculture, University of Jordan
1996-2006	Assistant Professor , Department of Plant Protection, Faculty of Agriculture, University of Jordan
1999-2002	Assistant Dean for community services , Faculty of Agriculture, University of Jordan
1993-1996	Research Assistant , Department of Nematology, University of California, Davis
1981-1990	Research and Teaching Assistant , Department of Plant Protection, University of Jordan, Amman

AWARDS AND HONORS:

2005	Fulbright Alumni Development Grant to conduct a collaborative work with Dr. Patricia Stock at University of Arizona 10-17 February 2005
1995	Merlin Alen Award, Plant Nematology Dept., University of California, Davis
1995	Block Award, Plant Pathology Dept., University of California, Davis
1994-1995	UCD and Humanities Graduate Research Award 1994/1995. University of California, Davis
1993-1994	Jastro Shield scholarship. University of California, Davis
1993	Non Resident Tuition Fellowship, University of California, Davis
1990-1992	Fulbright Fellowship to study for a Masters Degree. Washington, DC
2015	Travel grant, University of Bonn, Germany

PROFESSIONAL MEMBERSHIPS:

Northern California Associations of Parasitologists from 1991 till 1994

Society of Invertebrate Pathologists

Jordanian Agricultural Engineers Association

The Arab Society for Plant Protection

RESEARCH:

AREAS OF INTEREST:

- Systematics of nematodes
- Epidemiology of Plant diseases particularly plant parasitic nematodes
- Management of plant diseases using biological and natural products

MEETING PRESENTATIONS:

February 1990. "Augmentation of soil solarization effects by application of solar-heated water". First International Conference of Soil Solarization, Amman, Jordan.

October 1993. "Nematode Associates of Native Grape in California". The joint Annual Meeting of the American Society of Tropical Medicine and Hygiene and the American Society of Parasitologists. Atlanta, Georgia.

July 6-July 10, 1995. "Phylogeny of nematodes of the genus *Pratylenchus*". Joint Meeting of the American Society of Parasitologists and The American Association of Veterinary Parasitologists. Pittsburgh, Pennsylvania.

July 6-9, 1999. "Evaluation of municipal sewage sludge treatments on helminths eggs" Joint Meeting of the American Society of Parasitologists and The Society of Nematologists. Monterey, California, USA

October, 2000, "Occurrence of *Heterodera latipons* in Jordan " Seventh Arab Congress of Plant Protection, Amman, Jordan.

October, 18-21, 2005. "Survey and assessment of entomopathogenic nematodes (Steinernematidae, Heterorhabditidae) in Jordan". 5th Asia-Pacific Congress of Entomology. Jeju, Korea.

October, 21-23, 2009. "Cloning of parasitism genes from the Mediterranean Cereal Cyst Nematode *Heterodera latipons*". 1st International Cereal Cyst Nematode Initiative (ICCNi) Workshop . Antalya Turkey.

October, 26-30, 2009. Response of cereals and legumes to root knot nematodes. 10th Arab Congress of Plant Protection, Beirut Lebanon.

September, 22-23, 2012. "Characterization of a fungus parasitizing Mediterranean Cereal Nematode (*Heterodera latipons*)". 3rd International Cereal Cyst Nematode Initiative (ICCNi) Workshop, Adana, Turkey.

September, 23-27, 2012. "Ecotoxicity of zeolitic nanoparticles on the nematodes *Caenorhabditis elegans* and *Meloidogyne incognita* ". 31st International Symposium of the European Society of Nematologists, Adana, Turkey.

November 9-13, 2014. "Entomopathogenic nematodes *Heterorhabditis bacteriophora* and *Steinernema feltiae* suppressive root knot nematodes *Meloidogyne incognita* on two cucumber cultivars and increase of growth". 11th Arab Congress of Plant Protection, Amman- Jordan.

November 9-13, 2014. "Evaluation of silver nanoparticle applications on infestation of rootknot nematode on tomato". 11th Arab Congress of Plant Protection, Amman- Jordan.

November 9-13, 2014. "Disease management of organic tomato under greenhouse conditions in the Jordan valley". 11th Arab Congress of Plant Protection, Amman- Jordan.

September, 12-15, 2015. “Current status of cyst and root lesion nematodes attacking cereals in Jordan” Fifth International Cereal Nematode Initiative workshop, Ankara, Turkey.

December, 2-5, 2015. “the 15th Agricultural International conference” , Antalya, Turkey.

August, 28 –September, 1, 2016. “Efficacy of copper phosphonate on root-knot nematode and cucumber Fusarium wilt fungus”. 32nd Symposium of the European Society of Nematologists, Braga-Portugal.

September, 11-16, 2017. “Sulfur and metal sulfide nanoparticles to suppress nematode”. Sixth International Cereal Nematode Symposium. Agadir- Morocco.

September, 11-16, 2017. “Occurrence and distribution of root lesion nematodes (*Pratylenchus* spp.) on wheat in Jordan”. Sixth International Cereal Nematode Symposium. Agadir- Morocco.

November, 11, 2017. “Pest Management of protected cucumber under organic farming system in the Jordan Valley”. 8th Conference on Scientific Research in Jordan, Jordan Society of Scientific Research, Amman Amman- Jordan.

November, 9, 2019. “Soil Solarization to manage soil borne agricultural pests: Jordanian Research Innovations ”. 9th Conference on Scientific Research in Jordan, Jordan Society of Scientific Research, Amman Amman- Jordan.

GRANTS RECEIVED

\$40,000	Forage crops improvement,, Dr. Mahfouz Abu Zant, Dr. Hani Soub, Dr. Luma Al Banna , Higher Council for Sciences and Technology, 1997-1999.
\$5000	Survey of Plant Viruses transmitted by NEPO viruses, Dr. Akel Mansour and Dr. Luma Al Banna . Deanship of Scientific Research/University of Jordan, 1999-2001.
\$14,000	Efficacy of Jordanian strains of <i>Bacillus thuringiensis</i> on root knot nematodes, Dr. Luma Al Banna and Dr. Hal Kyamy Horani, Deanship of Scientific Research/University of Jordan, 2003-2006.
\$18,000	Effect of Jordanian plant extracts on root knot nematodes. Dr. Rula Darwish, Dr. Talal Aburjai, Dr. Luma Al Banna . Deanship of Scientific Research/University of Jordan, 2004-2006.
\$ 100,000	Cloning <i>cry</i> genes from the Novel Jordanian <i>Bacillus thuringiensis</i> ser. <i>jordanica</i> (serotype H71) and Developing Transgenic Tomato (<i>Solanum lycopersicum</i> L.) for Resistance Against the Root Knot Nematodes <i>Meloidogyne incognita</i> and <i>M. javanica</i> Dr. Munther Sadder, Dr. Hala Khyami, Dr. Luma Al Banna , Manko Centre & , Deanship of Scientific Research / University of Jordan, 2004-2006.
\$ 86,000	Entomopathogenic Nematodes in Jordan, An Environmentally Safe Alternative to benefit Agriculture in Desert Systems. Dr. Patricia Stock, Dr. Luma Al Banna , Dr. Ahmad Khatbeh and Dr. Rula Darwish, IALC, University of Arizona / USDA , 2004-2006.
\$18,000	Response of cereal and legume cultivars to Jordanian races of root knot nematodes. Dr. Walid Abu Gharbieh and , Dr. Luma Al Banna . Manko Centre, 2006-2008.
\$20,000	Parasitism genes of <i>Heterodera latipons</i> . Dr. Luma Al Banna and Dr. Munther Sadder. Deanship of Scientific Research / University of Jordan, 2007-2009.
\$ 40,000	Efficacy of Jordanian strains of <i>Bacillus thuringiensis</i> on soil borne plant fungal pathogens., Dr. Luma Al Banna , Dr. Hala Khyami, Dr.

	Munther Sadler. Deanship of Scientific Research / University of Jordan, 2007-2009.
\$20,000	Toxicity of Jordanian zeolitic nano tuff and other engineered nanoparticles to the nematode <i>Caenorhabditis elegans</i> Dr. Luma Albanna , Dr. Ayoup Ghrair. Dr. Nida Salem, Manko Centre, 2010-2012.
\$ 40,000	Organic Farming of tomato . Dr. Akel Mansour and Dr. Luma AL Banna , 2010-2012.
\$ 70,000	Development of a novel antimicrobial silver nanoparticle for control of soilborne pathogens, EWE (Environment Water Energy)-CT (Clean Technology) center/SABEQ/USAID. Dr. Nida Salem; Dr. Akl Awwad, Dr. Raid Banat, and Dr. Luma Al Banna , 2011-2012.
\$100,000	Pest management of protected cucumber and pepper under organic farming systems in the Jordan Valley. Dr. Abeer Abu Shirbi, Ibtihal Abu Obaid, Ziad Naser, Dr. Luma Al Banna , Scientific Research support Fund, Ministry of Higher Education, 2012-2015.
\$6500	Managing some cucumber diseases using cucurbit rootstocks . Dr. Barakat Abu Irmeileh, Dr. Akel Mansour, Dr. Luma Al Banna , Dr. Nida Salem, Deanship of Scientific Research / University of Jordan, 2014-2016.
\$53,000	A green method for biosynthesis sulfur nanoparticles for control soil borne pathogens, Dr. Akl Awwad, Dr. Nida Salem, Dr. Luma Al Banna , Scientific Research support Fund, Ministry of Higher Education, 2014-2017.

VISITING SCHOLARS

Summer1996	Visit Dr. Scott Gardner's Laboratory at University of Nebraska, Lincoln "Training in new techniques of both morphological and molecular analysis of helminth parasites".
Summer1998	Visit Dr. Isgouhi Kaloshian Laboratory at University of California, Riverside "Developing species –specific molecular diagnostic primes for <i>Pratylenchus</i> species".
Summer1999	Visit Dr. Isgouhi Kaloshian Laboratory at University of California, Riverside "Developing species –specific molecular diagnostic primes for <i>Pratylenchus</i> species".
Summer2001	Visit Dr. Isgouhi Kaloshian Laboratory at University of California, Riverside "Developing species –specific molecular diagnostic primes for <i>Pratylenchus</i> species".
Summer2002	Visit Dr. Valerie Williamson Laboratory at University of California, Davis "Carry out research on the molecular identification of <i>Pratylenchus</i> species".
Summer2003	Visit Dr. Valerie Williamson laboratory at University of California, Davis "Carry out research on the morphological and molecular characterization of the yam nematode <i>Scutellonema bradys</i> "
Summer2004	Visit Dr. Valerie Williamson Laboratory at University of California, Davis "Carry out research on the morphological and molecular characterization of the yam nematode <i>Scutellonema bradys</i> "
Sep.2013- Mar 2014	Visit Prof. Florian Grundler Laboratory at Molecular Phytomedicine Department at University of Bonn, Germany Carry out research on the morphological and molecular characterization of the sugarbeet cyst nematode.
Summer,2016	Teaching 2 lectures in a course entitled Agricultural Entomology and Nematology" for MSc. Students at the two programs ; Crop Science and Agriculture, and Resources Management in the Tropics and Subtropics at University of Bonn, Germany.

PUBLICATIONS:

1. Abed, A., Momany, A., and **Al Banna, L.** 2004. *Heterodera latipons* attacking barley in Jordan. *Phytopathologia Meditrennea*, 43: 311-317
2. Abed A., Al-Momany, A. and **Al-Banna, L.** 2009. Epidemiological studies on the Mediterranean cereal cyst nematode, *Heterodera latipons*, attacking barley in Jordan. Proceedings of the First Workshop of the International Cereal Cyst Nematode Initiative, pp 208-212, 21-23 October 2009, Antalya, Turkey.
3. Abu- Dhaim, E., **Al-Banna, L.** and Khyami-Horani, H. 2006. Evaluation of some Jordanian Bt strains against two species of root-knot nematodes. *Jordan Journal of Agricultural Sciences*, 1: 49-57.
4. Abu-Gharbieh, W. I., Saleh, H., and **Al-Banna, L.** (1991). Application of solar- heated water for soil solarization. Pages 69-77. In: *Soil Solarization. Proceedings of the First International Conference on Soil Solarization*. Amman, Jordan, 19-25 Feb. 1990. FAO Plant Production and Protection Paper (109). Pp396.
5. Abu-Gharbieh, W.I, Kasrawi, M. A., and **Al-Banna, L.** 1989. Screening tomatoes against two species of root-knot nematodes. *Tomato Genetics Cooperative*, 39: 5.
6. Abu Irmaileh, B., Mansour, A., **Al Banna, L.**, and Badwan, H. 2014. Comparative tolerances of two Cucumis species to salinity, *Rhizoctonia solani* and *Meloidogyne incognita*. *Plant Genetic Resources*, 12(2): 178–184.
7. Abumuslem, M.; Toktay, H.; Sadler, M.T.; Dababat, A.A.; Salem, N.M.; AL-Banna, L. Morphological and Biochemical Changes in the Mediterranean Cereal Cyst Nematode (*Heterodera latipons*) during Diapause. *Pathogens* 2024, 13, 656.
<https://doi.org/10.3390/pathogens13080656>
8. Akash, M., **Al-Banna L.**, Al-Awaida, W., Hidmi, T. 2014. Differentially expressed TDFs by cDNA-AFLP in tomato infected with *Fusarium oxysporum f. sp. lycopersici*. *The Research on Crops*, 15(2): 423-431.
9. **Al Banna , L** and Gardner , S. 2024. The Phylum Nemata. *Encyclopedia of Biodiversity* 3rd edition DOI: 10.1016/B978-0-12-822562-2.00028-1
10. **Albanna, L. S .**, Salem, N. M., Jaleel, G. A. , and Awwad, A. M. 2020. Green synthesis of sulfur nanoparticles using *Rosmarinus officinalis* leaves extracts and anti-nematicidal activity against *Meloidogyne javanica*. *Chemistry International* 6(3) (2020) 137-143.

11. **Al Banna L.** Sadder, M., Lafi, H, A., Dawabah AM., Al-Nadhari, S.N. 2018. Bioinformatics analysis of ubiquitin expression protein gene from *Heterodera latipons*. Saudi Journal of Biological Sciences. <https://doi.org/10.1016/j.sjbs.2018.06.005>
12. **Al Banna, L.** Salem, N., Ghrair, A. M., and Habash, S. S. 2018. Impact of silicon carbide nanoparticles on hatching and survival of soil nematodes *Caenorhabditis elegans* and *Meloidogyne incognita*. Applied Ecology and Environmental Research 16(3): 2651-2662.
13. **Al Banna L.**, Khyami-Horani, H., Sadder, M. and Abu Zahra, S. 2016. Efficacy of some local *Bacillus thuringiensis* isolates against soil borne fungal pathogens. African Journal of Agricultural Research, 11: 1750-1754.
14. **Al-Banna L**, Al Abded, A, Fattash, I., Khرفan, W., Lafi, H., Abu Shweimeh, T., Mazrawi, D., and Abu Al Ragheb, I. 2015. Current status of cyst and root lesion nematodes attacking cereals in Jordan . Proceedings of the Fifth International Cereal Nematode Initiative Workshop, pp 25-34, 12-15 September 2015, Ankara, Turkey.
15. **Al-Banna, L.**, Ploeg, A. T., Williamson, V. M., and Kaloshian, I. 2004. Discrimination of six *Pratylenchus* Species using PCR and species-specific primers. Journal of Nematology 36: 142-146.
16. **Al-Banna, L.**, and Khyami-Horani, H. 2004. Nematicidal activity of two Jordanian strains of *Bacillus thuringiensis* on root-knot nematodes. Nematologia Mediterranea, 32: 41-45.
17. **Al-Banna, L.**, R. Darwish and T. Aburjai.. 2003. Effect of plant extracts and essential oils on root-knot nematode. Phytopathologia Mediterranea, 42: 123-128.
18. **Al-Banna, L.**, and Williamson, V. M., and Gardner, S. L. 1997. Phylogenetic analysis of nematodes of the genus *Pratylenchus* using nuclear 26S rDNA. Molecular Phylogenetics and Evolution, 7: 94-102.
19. **Al-Banna, L.**, and Gardner, S. L. 1996. Nematode diversity of native species of *Vitis* in California. Canadian Journal of Zoology, 74: 971-982.
20. **Al-Banna, L.**, and Gardner, S. L. 1993. Three nematode species from endemic grape in California (*Vitis*). Proceedings of the Helminthological Society of Washington, 60: 243-249.
21. Al-Karablieh, N., Khlaif, H. and **Al Banna, L.** 2006. Identification of *Agrobacterium tumefaciens* strains by PCR-RFLP analysis of the 16S-rDNA. Jordan Journal of Agricultural Sciences, 2: 209-221.
22. Al-Nsour, A., Mansour, A., **Al-Banna, L.**, Salem, N. 2010. Detection of Ringspot virus on stone fruit trees in Jordan. Jordan Journal of Agricultural Sciences, 6(2): 240-246.

23. Al-Qasim M., Assas, K. **Banna, L.**, and Abu-Gharbieh, W. 2011. First report: Plant parasitic nematodes associated with peaches (*Prunus persica*) at Damascus and Hama Governorates, Syria. Damascus University Journal 27: 365-378.
24. Elson-Riggins, J. G., **Al-Banna, L.**, Platzer, E. G., and Kaloshian, I. 2001. Characterization of *Otostrongylus circumlitus* from Harbor and Northern Elephant Seals. Journal of Parasitology, 87: 73-78.
25. Gardner, S. L., Fong, E. B., **Al-Banna, L.**, and Raymond, S. 1994. A new species of *Vexillata* (Nemata :Ornithostongylidae) from the coarse-haired pocket mouse *Chaetodipus hispidus* in New Mexico. Journal of Parasitology, 80: 591-594.
26. Habash, S., and Al Banna, L. 2011. Phosphonate fertilizers suppressed root knot nematodes *Meloidogyne javanica* and *M. incognita*. Journal of Nematology, 43: 95-100.
27. Habash, S., Bess, A., Bess, M., and **Al Banna, L.** 2014. Effect of phosphonate fertilizers on the growth of soil fungi. Journal of Life Sciences, 10: 835-840.
28. Hatter, B. I., Abu-Gharbieh W. I., and **Al-Banna., L.** 1988. Effect of elemental sulfur and sulfuric acid soil amendments on root- knot nematode and tomato growth in calcareous soils. Damascus University Journal, 4: 35-56.
29. Jaabari, AM., Al Abded A., Dababat AA., **Al-Banna L.** 2015. Response of barley, oat and wheat to the Mediterranean cereal cyst nematode *H. latipons* . Proceedings of the Fifth the International Cereal Nematode Initiative Workshop, pp 185-192, 12-15 September 2015, Ankara, Turkey.
30. Kherfan, W., Ogbonnaya, F. C., and **Al Banna, L.** 2016. Response of wheat to a Jordanian isolate of Mediterranean cereal cyst nematode (*Heterodera latipons*). Australasian Plant Pathology, 45: 19-28.
31. Khyami-Horani, H., and Al Banna, L. 2006. Efficacy of *Bacillus thuringiensis* jordanica against *Meloidogyne javanica* infecting tomato . Phytopathologia Mediterranea, 45: 153–157
32. Lafi, H., Sadder, M. and **Al Banna, L.** 2009. Cloning of parasitism genes from the Mediterranean cereal cyst nematode, *Heterodera latipons*. **Cereal Cyst Nematodes: Status, Research And Outlook** . Proceedings of the First Workshop of the International Cereal Cyst Nematode Initiative, pp 208-212, 21-23 October 2009, Antalya, Turkey.
33. Lafi, H. A., **Al Banna, L.**, Sadder, M., and Migdadi, H.M. 2016. Morphological and morphometrical analysis of *Heterodera* spp. populations in Jordan. Saudi Journal of Biological Sciences, 23 (1): 108-114.

34. Lafi, F.F., AlBladi, M.L., Salem, N. M., **Al-Banna, L.**, Alam, I., Bajic, V.B., and Hirt, H. 2017. Draft Genome Sequence of the Plant Growth–Promoting *Pseudomonas punonensis* Strain D1-6 Isolated from the Desert Plant *Erodium hirtum* in Jordan. *Genome announcements* 5 (2), e01437-16.
35. Mamluk, O. F., Abu-Gharbieh, W. I., Gardner Shaw, C., Al-Musa, A., and **Al-Banna, L.**. 1984. A checklist of plant diseases in Jordan. Faculty of Agriculture, University of Jordan, Amman-Jordan. 107pp.
36. Mansour, A., **Al-Banna, L.**, Salem, N., and Alsmairat, N. (2014) Disease management of organic tomato under greenhouse conditions in the Jordan Valley. *Crop Protection* 60: 48-55.
37. Sadder, M.T., Khyami-Horani, H., and **Al-Banna, L.** 2006. Molecular Polymorphism of Jordanian *Bacillus thuringiensis* isolates using RAPD marker. *World Journal of Microbiology and Biotechnology*, 22: 1307-1312.
38. Saleh, H., Abu-Gharbieh, W. and **Al-Banna, L.** 1989. Augmentation of soil solarization effects by application of solar-heated water. *Nematologia Mediterrenea*, 17: 127-129.
39. Salem, N. M., **Albanna, L. S.**, Awwad, A. M., Ibrahim, Q. M., and Abdeen A.O. 2015. Green synthesis of nano-sized sulfur and its effect on plant growth. *Journal of Agricultural Science*, 8 (1): 188.
40. Salem, N. M., **Albanna, L. S.**, and Awwad, A. M. 2016. Green synthesis of sulfur nanoparticles using *Punica granatum* peels and the effects on the growth of tomato by foliar spray applications. *Environmental Nanotechnology, Monitoring and Management*, 6: 83-87.
41. Salem, N. M., **Albanna, L. S.**, and Awwad, A. M. 2016. Seed germination and growth of cucumber (*Cucumis sativus*): effect of nano-crystalline sulfur. *Journal of Agricultural Science*, 8 (10): 219.
42. Salem, N. M., **Albanna, L. S.**, and Awwad, A. M. 2016. Toxic heavy metals accumulation in tomato plant (*Solanum lycopersicum*). *ARPN Journal of Agricultural and Biological Science*, 11: 399-404.
43. Salem, N. M., **Albanna, L. S.**, Ibrahim, Q. M., and Abdeen A.O., and Awwad, A. M. 2016. Sulfur nanoparticles improves root and shoot growth of tomato. *Journal of Agricultural Science*, 8 (4): 179.
44. Sharar, M., Bozeyya, A., **Al-Banna, L.** and Al-Bawab, A. 2017. Fungicidal and nematicidal activities for essential oils formulated in Janus emulsion. *Green Chemistry Letters and Reviews*, 10: 121–128.

45. Snouper, AF., Sadler, MT., **Al-Banna, L.**, Al- Sayeq, S., Al-Majali, E., Al-Shibly, A., and Al-Antary, TA. 2021. Mining for parasporin toxin genes in jordanian *Bacillus thuringiensis* strains. Fresenius Environmental Bulletin, 30: 3689-3703.
46. Stock , S.P., **Al Banna, L.**, Darwish, R., and Katbeh, A. 2008. Diversity and distribution of entomopathogenic nematodes (Nematoda: Steinernematidae, Heterorhabditidae) and their bacterial symbionts (λ -Proteobacteria: Enterobacteriaceae) in Jordan. Journal of Invertebrate Pathology, 98: 228-234.
47. Wreikat, B., Khlaif, H., and **L. Al-Banna**. 2006. Detection and Identification of bacterial speck of tomato (*Pseudomonas syringae* pv. *Tomato*) by polymerase chain reaction. Jordan Journal of Agricultural Sciences, 2: 45-56.

References in Arabic . مراجع باللغة العربية .

1. **لما البنا و عبد العظيم بابكر زيدان 2010** . الفصل الرابع " تقسيم النيماطودا " **لما البنا و عبد العظيم بابكر زيدان** في كتاب نيماطودا النبات في البلدان العربية/ الجزء الأول. المؤلفون وليد أبو غربية و أحمد سعد الحازمي وزهير عزيز اسطفان وأحمد عبد السميع دواة دار وائل للنشر.
2. أحمد سعد الحازمي وزهير عزيز اسطفان و **لما البنا وأمين وفدي أمين 2010** الفصل الرابع والعشرون "المكافحة الأحيائية لنيماطودا النبات" في كتاب نيماطودا النبات في البلدان العربية/ الجزء الأول المؤلفون وليد أبو غربية و أحمد سعد الحازمي وزهير عزيز اسطفان وأحمد عبد السميع دواة دار وائل للنشر.

TEACHING:

COURSES TAUGHT

1. Undergraduate courses

Principles of Plant Protection	1996, 1997,1998, 1999, 2001, 2002, 2003, 2005,2008, 2010, 2011, 2013
Plant Pathology	1997,1998, 2001, 2002, 2003
Epidemiology of Plant Diseases	1997,1998, 1999, 2000, 2001, 2005,2007, 2008,2012, 2017, 2019, 2020
Plant Nematology	1996, 1999, 2000, 2004, 2005,2007,2008, 2009,2010,2011,2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
Field Practices in Plant Pathology	2003/2004, 2008, 2012, 2018
Fungal Diseases of Crops	2000, 2001

2. Graduate courses

Advanced Nematology	1997, 1998, 2000, 2001, 2016
Nematode Taxonomy	1998, 2000,
Epidemiology of Plant Diseases	1997, 1999, 2001
Nematode Ecology	2007, 2010, 2015,2016
Ecology & Management of Plant Diseases	2002, 2004, 2005, 2007, 2009, 2014, 2018; 2020
Host-Plant Interaction	2011, 2014

DOCTORAL STUDENT

Dr. Adel Al Abed 1999-2001 Co-advisor Thesis: Epidemiological studies of the cereal

Dr. Aydah Alnsour	1999-2002	Co-Advisor	cyst nematodes <i>Heterodera latipons</i> on barley Thesis: Tomato ringspot nepoviruses of stone fruits in Jordan”
Dr. Younis badr	2011-2013	Advisor	Thesis: Investigating the suppressive effects of entomopathogenic nematodes on root knot nematodes attacking cucumber
Dr. Lina Irshaid	2015- 2017	Major Advisor	Thesis: Pathogenicity of a Jordanian isolate of the dagger nematode (<i>Xiphinema</i> sp.) on Aleppo pine <i>Pinus halepensis</i> ; Molecular and Histological Studies

MASTERS STUDENTS

Eman AbuDhaim	2000-2002	Major Advisor	Thesis: Efficacy of Jordanian isolates of <i>Bacillus thuringiensis</i> on root knot nematode
Bilal Wreikat	2003-2005	Major Advisor	Thesis: Detection and identification of bacterial speck of tomato (<i>Pseudomonas syringae</i> pv. <i>Tomato</i>) by polymerase chain reaction
Hamze Lafi	2006-2008	Co Advisor	Thesis: Cloning of parasitism genes from the Mediterranean cereal cyst nematode <i>Heterodera latipons</i>
Alia Snooper	2007-2009	Co-Advisor	Thesis: Mining for parasporal toxin genes in Jordanian <i>Bacillus thuringiensis</i> strains
Manal Zaben	2007-2009	Co-Advisor	Thesis: Genetic analysis of Jordanian <i>Bacillus thuringiensis</i> isolates by using pulsed field gel electrophoresis
Samer Habash	2008- 2010	Major Advisor	Thesis: Effect of calphos, magphos, and phosphorus fertilizers on root knot nematodes <i>Meloidogyne javanica</i> and <i>M. incognita</i>
Yahya Dana	2008- 2010	Major Advisor	Thesis: Use of Jordanian bacterium isolate to manage root knot nematodes (<i>Meloidogyne javanica</i> and <i>M. incognita</i>) and citrus nematode (<i>Tylenchulus semipenetrans</i>)
Wafa Khrfan	2010-2012	Major Advisor	Thesis: Characterization of genetic resistance against Mediterranean cereal cyst nematode (<i>Heterodera latipons</i>) in wheat
Tareq Hidmi	2011-2013	Co-Advisor	Thesis: Comparison between susceptible and resistant tomato cultivars to <i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> using cDNA-AFLP
Mouna Sharar	2012-2014	Co advisor	Thesis: Preparation of Janus Emulsion Formulation from Essential Oils with Fungicidal and Nematicidal Activities
Gharam Abu Jaleel	2015-2016	Advisor	Thesis: Efficacy of Copper phosphonate on Root knot nematode/ Fusarium wilt complex on cucumber
Seham salheen	2016 - 2017	Major advisor	Thesis: Distribution of root lesion nematodes (<i>Pratylenchus</i> spp.) on wheat in Jordan

GRADUATE COMMITTEES

28/03/1998	Master degree committee member for Mohammad Abu El-Asal “ Treatment of transparent polyethylene sheets after soil solarization for direct transplanting; and their effect on root knot nematode”.
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29/12/1999	Master degree committee member for Samah Badawi “ Efficacy of certain non-fumigant nematicides as alternatives to methyl bromide for control of <i>Meloidogyne javanica</i> on tomato”.
02/03/2000	Master degree committee member for Ghaida Jbara “ Ecology and screening for resistance of faba bean necrotic yellows virus in some leguminous crops”.
24/12/2000	Master degree committee member for Ihsan Swaidat “Control of <i>Verticillium</i> wilt on tomato by chemical-induced resistance”.
22/05/2001	Master degree committee member for Monther Tahat “ Effect of two <i>Glomus</i> species and <i>Verticillium dahliae</i> on cucumber growth under greenhouse conditions”.
22/05/2002	Master degree committee member for Nehaya Karablieh “ detection and identification of crown gall bacteria (<i>Agrobacterium tumefaciens</i>) by polymerase chain reaction method”.
21/03/2002	PhD degree committee member for Talab Al-Azzeh “ Host-parasite relationship and control of the citrus nematode <i>Tylenchulus semipenetrans</i> Cobb in Jordan”.
14/01/2003	Master degree committee member for Ihsan Naji “ Effect of the root-knot nematodes <i>Meloidogyne javanica</i> (Treub) chitwood and <i>Meloidogyne incognita</i> (Kofoid and White) Chitwood on Fusarium wilt to muskmelon”.
05/05/2003	Master degree committee member for Sahar Arabyat “ A taxonomic study on the bee flies of Jordan (Diptera: Bombyliidae) “.
07/01/2004	Master degree committee member for Rakan Hijazin “ Detection and identification of olive knot bacteria (<i>Pseudomonas savastanoi</i> pv. <i>savastanoi</i>) by polymerase chain reaction”.
15/04/2004	PhD degree committee member for Mahmoud Khatib “Determination and characterization of <i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> races in Jordan”.
10/3/ 2008	PhD degree committee member for Hazem Shareef ‘ Taxonomical and ecological studies in insects attacking animal carcass in Jordan”.
15/03/2009	PhD degree committee member for Zakarieh Mussalm “Effeciency of entomopathogenic nematodes against <i>Capnodis</i> spp. in stone fruit orchards’ Tishreen University, Syria.
18/08/2009	PhD degree committee member for Muhammad Qasim “ Plant parasitic nematodes associated with peach roots and efficiency of <i>Paecilomyces</i> spp. isolates against the root-knot nematode <i>Meloidogyne javanica</i> ” Damascus University, Syria.
11/2/2010	Master Degree committee member for Ameena Jaweesh “ Entomopathogenic nematodes in Damascus and its pathogenicity on some insect Hosts” Damascus University, Syria.
8/4/2013	Master Degree committee member for Manaji Al Musrati “Aquatic Insects as Bio-Indicators of Water Quality.”
1/7/2013	Master Degree committee member for Jamela "Biological control of powdery mildew (<i>Erysiphe cichoracearum</i>) on cucumber under protected agriculture conditions in Jordan Valley".
30/12/2015	PhD degree committee member for Ibtiha Abu-Obeid “Detect and studying the genetic diversity of <i>Pectobacterium carotovorum</i> subspecies <i>carotovorum</i> (Dyf, 1969) isolatioes, the causal agent of potato soft rot in Jordan”.
5/1/2016	Master Degree committee member for Rebhi Darwazeh “The effect of silver nanoparticles on Fusarium wilt of tomato”.
27/7/2016	PhD degree committee member for Ashraf Alhawamdeh “Integrated Pest Management of the Tomato Leaf Miner <i>Tuta absoluta</i> (Meyrick) (Lepidoptera: Gelechiidae) in Balqa Governorate, Jordan”.
14/7/2016	PhD degree committee member for Hanan Hasan “Identification, Molecular Differentiation and developing of commercial cultivars from wild isolates of king Oyster mushroom <i>Pleurotus eryngii</i> (DC. FR. Que'1) in Jordan ”.
14/12/2016	Master degree committee member for Duaa Ramadan “Diversity of aquatic

	and semi-aquatic insects in Wadi Al-Walah in Jordan ”.
7/12/2016	Master degree committee member for Wafa Nasir “ A Taxonomic study on the ground beetles of Jordan (Coleoptera: Carabidae) ”.
16/7/2017	PhD degree committee member for Belal Wreikat “ Genetic characterization of <i>Pseudomonas savastoni</i> pv. <i>savastoni</i> strains isolated from different olive cultivars grown in Jordan by PCR-RFLP and AFLP”.
9/3/2017	PhD degree committee member for Samer Habash “Identification and characterization of effector proteins of the beet cyst nematode <i>Heterodera schachtii</i> ”.
13/7/2020	PhD degree committee member for Zaid Nabas “ Auchenorrhyncha (Hemiptera) of Jordan ”.

COMMUNITY SERVICES

- **Chair** of Plant Protection Section/ Jordanian Agricultural Engineering association from 2004-2006.
- **Consultant** for Plant Protection Section/ National Center for Agricultural Research and Technology Transfer/ Ministry of Agriculture 2001-2005.
- **Consultant** for RUM agricultural company,2006-2015
- **Committees**

2002	Committee member for “Biopesticides Registration”/ Ministry of Agriculture
2005/2006	Committee member for “Plant Protection Accreditation”/ Ministry of Higher Education
2005 -2007	Committee member for “Fertilizers and Biopesticides”/ National Centre for Biotechnology/ Higher Council for Sciences and Technology
2009-2013	Committee member for Pesticides Registration/ Ministry of Agriculture
2008-2018	Committee member for Technical Committee/ Jordanian Agricultural Engineering Association
2015-till now	Committee member for Pesticides Registration/ Ministry of Agriculture
- **PRESENTATIONS & WORKSHOPS:**
 - October, 2003. " presenting A lecture in Epidemiology of Plant Diseases to the Engineers and Farm advisors of the Jordan Valley Department of Agriculture" University Farm.
 - July 2004 . “Presenting A lecture entitled “ Nematodes attacking citrus “ was given to the Agricultural Engineers at the extension Department at the Ministry of Agriculture/ Baqa’ (part of the workshop held about Citrus production.

- September, 2000. Presenting Three lectures and a laboratory session to trainees /Water quality laboratory staff entitled “Characterization and Analysis of Biological Parameters for Drinking Water Agents of significant pathogen exerted: Nematodes and Cestodes Water and Environment Research and Study Center / University of Jordan, Amman- Jordan.
- May, 26, 2010. Participation in the Workshop entitled “Green building in Jordan guide draft” Ministry of Public Work and Housing, Amman- Jordan.
- October, 25-26, 2010. Participation in the Workshop entitled “ European legislations for importing potato tubers” held by European Union TAIEX , Ramada Hotel Amman- Jordan.
- November, 20-22 , 2011. Participation in the Workshop entitled “ Clean technology Applications in Energy, water and Environment : at the Royal Scientific Society, Amman- Jordan.
- November, 28-29, 2011. Participation in the Workshop entitled ”Invention patents in Biotechnology” At the Ministry of Industry and Trade Amman- Jordan.
- November, 25-26th, 2014. Presenting two lectures entitled : 1. Plant parasitic nematodes 2. Management of root knot nematodes, Veterinary and Agricultural Materials Co. , Kuwait.
- November, 11-17th, 2015. Conducting a workshop entitled “Functional morphology of nematodes” , University of Bonn, Germany.
- November, 19th, 2015. Presenting a lecture entitled “ Current status of nematode management in Jordan”. Bayer CropScience, Monheim, Germany.
- December, 2-5, 2015. Participation in the International Agricultural Fair , Antalya, Turkey.
- March, 23rd, 2016 Presenting a lecture entitled “ Calphos and Magphos for managing plant parasitic nematodes” , Al Qwafel Company, Cairo, Egypt.
- April, 8th, 2016. Participation in the one day training session for the nematicide Vellum , Dead Sea, Jordan.
- April, 8th, 2016. Presenting a lecture entitled “Plant parasitic nematodes” in the one day training session for the nematicide Vellum , Dead Sea, Jordan.
- January, 23-28, 2017. Conducting a workshop entitled “ Discovery of soil nematodes” , University of Coimbra, Portugal.

- September, 11-16, 2017. “Sulfur and metal sulfide nanoparticles to suppress nematode”. Sixth International Cereal Nematode Symposium. Agadir- Morocco.
- September, 11-16, 2017. “Occurrence and distribution of root lesion nematodes (*Pratylenchus* spp.) on wheat in Jordan”. Sixth International Cereal Nematode Symposium. Agadir- Morocco.
- November, 11, 2017. “Pest Management of protected cucumber under organic farming system in the Jordan Valley”. 8th Conference on Scientific Research in Jordan, Jordan Society of Scientific Research, Amman Amman- Jordan.
- November, 9, 2019. “Soil Solarization to manage soil borne agricultural pests: Jordanian Research Innovations ”. 9th Conference on Scientific Research in Jordan, Jordan Society of Scientific Research, Amman Amman- Jordan.
- May, 1- 6, 2022. Anatomical Alterations in Aleppo Pine roots Induced by the dagger nematode *Xiphinema vuittenezi*. The 7th International Congress of Nematology (ICN), Antibes, Juan-les-Pins, France.
- September, 26 – 30, 2022 . Efficacy of a Jordanian isolate of the fungus *Trichoderma viridae* on root knot nematode on wheat . The 8th International Cereal Nematode Symposium. Abant, Turkey.
- September, 26 – 30, 2022 . Investigating the suppressive effects of entomopathogenic nematodes on root knot nematodes attacking wheat. The 8th International Cereal Nematode Symposium. Abant, Turkey.
- October 18-20, 2022 University of Bonn Ambassador meeting, University of Bonn, Bonn Germany