

Curriculum vitae,



PERSONAL DATA

Name: Prof. Walid I. Abu-Gharbieh
Nationality Jordanian
Date of birth: Nov. 2, 1935
Family status: Married, with 3 sons
Status: University of Jordan

ADDRESS

Faculty of Agriculture, University of Jordan.
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EDUCATION

Ph.D.- Plant Nematology, Univ. Florida, USA (1968)
Post-Doctorate- Nematology, Univ. Florida, USA (1969)
M.Sc. - Plant Pathology, Rutgers Univ., N.J., USA (1962)
B.Sc.- Pesticides, Alexandria Univ., Egypt (1958)

LANGUAGES

Arabic: Native language
English: Language of instruction
German: One year at the Univ. of Florida

POSITIONS HELD

1991-1993 Dean, Faculty of Agriculture, Univ. of Jordan.
1973- Head, Plant Production & Protection Dept., Faculty of Agriculture, Univ. of Jordan (Three periods = 9 years).
1969-1973 Head, Plant Protection Dept. Directorate of Agricultural Research & Extension, Ministry of Agriculture, Jordan.
1964-1965 Director, Dier Alla' Agric. Expt. Station.
1959-1960 Director, Wadi Fara' Agric. Expt. Station.

SPECIALIZATION

1. Plant Nematology: Surveys, ecology, host-parasite relationship, screening for resistance, and control.
2. Soil Solarization.
3. Plant Pathology.

EXPERIENCE

- 1- (1958-1973) Agricultural Research Dept., Ministry of Agriculture, Amman, Jordan. Assist Res., Researcher, Head of Dept.
- 2- (1973 to 2006) Faculty of Agriculture, Univ. of Jordan, Asst. Prof., Assoc. Prof. (1977) and Prof. (1982).
- 3- (1973 to 2006) Executed many research projects in Plant Nematology in Jordan.
- 4- (1982 to 2006) Team leader and principal investigator of several research projects on "soil solarization".
- 5- (1973 to date) Participated in several missions and carried out technical and scientific assignments for the FAO, UNDP, and Arab Organization for Agricultural Development in Jordan, Yemen, United Arab Emirates, Oman, Italy and Palestine.
- 6- (1991) Head of Organizing Committee of the "1st International Conference on Soil Solarization", Jordan; (1997) Member of the Organizing Committee of the

“2nd International Conference on Soil Solarization”, and Integrated Management of Soil Borne Pests”, Syria.

7- (1997) Participated in the International Taskforce on IPM of Soil Borne Pathogens at ICARDA in Syria and UK.

SCOPE OF WORK

(1) Teaching:

a- Undergraduate courses: Principles of Plant Nematology; Plant Pathology; Agriculture in Jordan.

b- Graduate courses: Economic Nematology; Nematode Ecology.

(2) Research:

a- Undertaking survey studies on occurrence and distribution of plant-parasitic nematodes on crop plants.

b- Assessment of ecological factors on nematode field populations.

c- Host-parasite relationship studies, including nematode pathogenicity and histopathology.

d- Control of phytonematodes (especially root-knot nematodes) on vegetable and fruit crops using chemical, cultural, crop resistance and physical means.

e- Pronounced emphasis is also given to use of pre-and post soil solarization for control of soil borne plant pathogens on fruit trees.

(3) Supervision of graduate students:

Supervised 23 graduate students for M.Sc. degree, and two students for Ph.D. degree (a recently opened program). Graduate programs require writing thesis.

PROFESSIONAL QUALIFICATIONS

1- Member founder (1981) and president of the Arab Society for Plant Protection (1982-1986).

2- On the Editorial Board of scientific journals: *Dirasat* (University of Jordan); *Phytopathologia Mediterranea* (International); *Arab Journal of Plant Protection* (Regional); *Mosul Journal for Agricultural Research* (Iraq).

- 3- Organized (Chairman or member) many conferences, congresses & workshops at the national, regional and international levels.
- 4- Representative of Jordan in the “International Meloidogyne Project”- North Carolina State University & USDA (1975-1993).
- 5- Participated in numerous conferences, congresses and workshops in many countries of the world. Also, participated as invited speaker on several occasions.

MEMBERSHIP IN PROFESSIONAL SOCIETIES AND WORKING GROUPS

- 1- Society of Nematologists.
- 2- Arab Society for Plant Protection.
- 3- Mediterranean Phytopathological Union.
- 4- International “Working Group on Soil Solarization”.
- 5- Head, “Nematology Group” in Jordan.
- 6- Head, Advisory Committee” of the Arab Society for Plant Protection.

HONORS:

Awarded the honor of (FELLO) by the "Arab Society for Plant Protection" in 2009. The first honor granted by the Society after thirty years of its foundation.

RESEARCH PUBLICATIONS

Abu-Gharbieh, W. I., and G.C. Smart, Jr. (1969). A polyethylene bottle applicator for sealing microscope cover glasses with a slide ringing compound. *Nematologica*, 15:615-618.

Abu –Gharbieh, W. I., A.H. Hammou, and S.K. Sane. (1973). Chemical control of *Erysiphe cichoracearum* on cucumber in the Jordan Valley. *Fungicide and Nematicide Tests*, 29:57.

- Abu –Gharbieh, W. I.,** S.H. Mufaddi. (1973). Chemical control of *Erysiphe cichoracearum* on cucumber in Wadi Dhuleil. *Fungicide and Nematicide Tests* 29:57.
- Abu –Gharbieh, W. I.,** S.H. Mufaddi. (1973). Chemical control of *Leveillula taurica* on tomato. *Fungicide and Nematicide Tests*, 29:57.
- Abu-Gharbieh, W. I.,** and A. Hammou. (1977). Population dynamics and effect of *Meloidogyne incognita* on different plantings of tomato in the Central Jordan Valley. *Nematol. Medit.*, 5:227-232.
- Abu- Gharbieh, W.I.** (1979). The root-knot nematode, tomato yellow leaf curl virus and Orobanche in Jordan. *Plant Disease Reporter*, 62:263-266.
- Abu-Gharbieh, W. I.** (1979). The Root-Knot Nematodes, *Meloidogyne* spp, in Jordan. Pages 16-20. In: *Proceedings Res. Plann. Conf. On Root-Knot Nematodes, Meloidogyne spp.* (IMP) Cairo, Egypt.
- Abu –Gharbieh, W. I.** (1979). The Root-Knot Nematodes, *Meloidogyne* spp., in Jordan. Pages 24-29. In: *Proceedings of the Second Res. & Plann. Conf. On Root-knot Nematodes, Meloidogyne spp.* Athens, Greece.
- Abu- Gharbieh, W. I.** (1980). The Root-Knot Nematodes, *Meloidogyne* species in Jordan. In: *Proceeding of the Third Res. Plann. Conf. on Root-Knot Nematodes.* Sept. 13-17. Coimbra, Portugal.
- Abu-Gharbieh, W. I.** (1982). Reaction of locally grown eggplant, hot and bell pepper cultivars to *Meloidogyne javanica*. *Dirasat* (Agric. Studies), 9: 205-206.
- Abu –Gharbieh, W.I.** (1982). Identification of *Meloidogyne* species in the major irrigated areas of the East Bank of Jordan. *Dirasat* (Agric. Studies), 9:7-12.
- Abu-Gharbieh, W. I.** (1982). Dates, rates and methods of DBCP application for control of *Meloidogyne javanica* on tomato. *Dirasat*, 9:33-39.

Nazer, I. K., A. B. Hallak, **W. I., Abu-Gharbieh** and N.S. Saleh. (1982). Bromine residues in the soil and fruits of certain crops after soil fumigation with methyl bromide. *Jour. Radioanalytical Chemistry*, 24:113-116.

Abu-Gharbieh, W. I., and S. A. Tamimi. (1982). Reaction of wheat and Triticale cultivars to the wheat gall nematode and covered smut in Jordan. *Dirasat (Agric. Studies)*, 9:91-96.

Abu-Gharbieh, W. I. (1982). Distribution of *Meloidogyne javanica* and *M. incognita* in Jordan. *Nematologica*, 28:34-38.

Abu-Gharbieh, W. I. (1982) Effect of cultural vs. chemical treatments for control of *Meloidogyne javanica* on tomato. *Dirasat*, 9:155-162.

Khtoom, M. and **W. Abu-Gharbieh.** (1983). Effect of methyl bromide soil fumigation and black plastic mulching on cucumber grown in plastic tunnels in the Jordan Valley. *Arab Journal of Plant Protection*, (1):33-34. (In Arabic).

Abu-Gharbieh, W.(1983).Comparative effect of several soil pesticides on cucumber grown in plastic houses. *Arab Journal of Plant Protection*, (1):33. (In Arabic).

Al-Asa'd, M. and **W. Abu-Gharbieh.**(1986). Effect of soil solarization and plastic tarping for control of soil fungi and nematodes in the Jordan Valley. *. Arab Journal of Plant Protection*, (1):48-49. (In Arabic).

Abu-Gharbieh, W. I. (1987). Plant-parasitic nematodes on cereal and forage crops in Jordan (pages 160-168) In: *Proceedings of a Workshop on Nematodes Parasitic to Cereals and Legumes in Temperate Semi-Arid Regions*, Larnaka, Cyprus 1-5, March 1987.

Al-Raddad, A., **W. Abu-Gharbieh** and H. Saleh. (1988). Effect of soil solarization on the endomycorrhizal fungus *Glomus Mosseae* and *Fusarium*. *Dirasat*, 15(10):85-95. (In Arabic).

Hattar, B.I., **W. I. Abu-Gharbieh** and Luma Al-Banna. (1988). Effect of elemental sulfur and sulfuric acid soil amendments on the root-knot

nematode and tomato growth in calcareous soils. *Damascus Univ. Journal* 14:35-560.

Saleh, H., **W. I. Abu-Gharbieh** and L. Al-Banna. (1989). Augmentation of soil solarization effect by application of solar-heated water. *Nematol. Medit.*, 17:127-129.

Abu-Gharbieh, W. I., M. A., Kasrawi and L. Al-Banna. (1989). Screening tomatoes against two species of root-knot nematodes. *Tomato Genetics Cooperative*, 39:5.

Al.As'ad, M.A. and **W. I. Abu-Gharbieh**. (1990). Use of black plastic tarping for soil solarization. *Int. Nematol. Network Newsl.*, 7(2) 33-34.

Abu-Blan, H., **W. I. Abu-Gharbieh** and H. Saleh. (1990). Efficiency of soil solarization for different durations in controlling soilborne pathogens at varying soil depths in the Jordan Valley. *Dirasat*, 17: 72-85.

Saleh. H., **W. I. Abu –Gharbieh**, and H. Abu-Blan. (1990). Effect of “Solarization” using different thicknesses of black plastic tarping on soilborne pathogens. *Dirasat*, 17:41-53.

Abu-Gharbieh, W. I. and L. Al-Banna (1991) Screening of processing tomato cultivars to two species of the root-knot nematode. *First Jordanian Plant Protection Conference*. Amman, Jordan. (Abstract).

Abu-Gharbieh, W. I., H. Saleh, and H. Abu-Blan. (1991). Use of black plastic for soil solarization and post-plant mulching. Pages 229-242. In: *Soil Solarization. Proceedings of the First International Conference on Soil Solarization*. Amman, Jordan,

Abu-Gharbieh, W. I., H. Saleh, and L. Al-Banna. (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.

Al-As`ad, M.A. and **W. I. Abu-Gharbieh**. (1991). Low –cost soil solarization using preplant black plastic cover. *Dirasat*, 18: 28-32.

Muhammad, A.G., M.A. Suwwan and **W. I. Abu-Gharbieh.** (1991). Effect of silver thiousulfate on yield and growth of plastic house tomato in root-knot nematode infested soil. *Emirates J. Agric. Sci.*, 3:41-65.

Abu-Blan, H.A. and **W. I. Abu –Gharbieh.** (1993). Effect of soil solarization on winter planting of potato, cauliflower and cucumber in the Central Jordan Valley. *Dirasat*, 21: 203-213.

Musallam, Z., and **W. I. Abu-Gharbieh.** (1993). Effect of soil solarization and MB fumigation on fusarium wilt of muskmelon in Jordan. *First Jordanian Agric. Conference.* (Abstract).

Al-Qasem, M.S. and **W.I. Abu –Gharbieh.** (1995). Occurrence and distribution of the citrus nematode (*Tylenchulus semipenetrans*) in Jordan. *Nematol. Medit.*, 23:335-339.

Fakhouri, W.D, Khlaif, H. and **W. I. Abu-Gharbieh.** (1996). Interaction between *Meloidogyne javanica* and *Agrobacterium tumifaciens* on tomato plants. *Pak. J. Nematol.*, 14(3): 49-54.

Abu – Gharbieh, W. I. (1997). Pre-, and post –plant soil solarization. *FAO Plant Production and Protection Paper*, 147:15-34.

Abu –Blan, H., **W. I. Abu-Gharbieh,** and F. Shatat. (1997). Long-term effect of soil solarization on density levels of *Fusarium solani* in established fruit – tree orchards. *FAO Plant Production and Protection Paper 147*, 121-130.

Said, Haleemah, and **W. I. Abu-Gharbieh.** (1997). Effect of soil solarization against *Meloidogyne javanica* and *Heterodera schachtii* in Jordan Valley. *FAO Plant Production and Protection Paper 147*, 291-300.

Badawi,Samah, and **W. I. Abu-Gharbieh.(2000).** Efficacy of certain non-fumigant nematicides for the control of *Meloidogyne javanica* on tomato. *Pakistan Journal of Nematology*, 18: 59-68.

Al-Azzeh, T.K., and **W. I. Abu-Gharbieh**. (2003). Effect of selected non-fumigant nematicides on *Tylenchulus semipenetrans*- infected sour orange seedlings. *Pakistan Journal of Nematology*, 21:121-131.

Shatat, F.A., **W. I. Abu-Gharbieh**, and H.S. Abu Blan. (2003). Effect of post –plant soil solarization on growth of seven fruit tree species. *Dirasat*, 30:274-279.

Abu-Gharbieh, W. and T. Al-Azzeh. 2004. A Checklist on Nematode – Plant Associations in the Arab Countries. *Arab J. Pl. Prot.*, 22: 1-22. (In Arabic).

Al-Azzeh, T.K., and **W.I. Abu-Gharbieh**. (2004). Effect of oxamyl and phenamiphos on egg hatching, motility, and root penetration of *Tylenchulus semipenetrans*. *Nematol medit.*, 32:19-23.

Al-Azzeh, T.K., and **W.I. Abu-Gharbieh**. (2004). Race identity and damage threshold of *Tylenchulus semipenetrans* on sour orange in Jordan. *Nematol. medit.*, 32:25-29.

Naji, I. and **W.I. Abu-Gharbieh**. (2004). Effect of *Meloidogyne javanica* and *M. incognita* on resistance of muskmelon cultivars to Fusarium wilt. *Phytopathol. medit.*, 43: 360-368.

Karajeh, M., **W. Abu-Gharbieh**, and S. Masoud. (2005). Virulence of root-knot nematodes, *Meloidogyne* spp., on tomato bearing the Mi gene for resistance. *Phytopathologia Mediterranea*, 44 (1):24-28.

Karajah, M. and **W.I. Abu-Gharbieh**. (2005). First report on the root-knot nematode *Meloidogyne arenaria* race 2, from Jordan. *Plant Disease*, 89:206.

Abu-Gharbieh, W.I., M. Karajeh and S. Masoud. (2005). Current distribution of the root-knot nematodes (*Meloidogyne* species and races) in Jordan. *Jordan Journal of Agricultural Sciences*, 1(1) 43-47.

Karajeh, M.R., **W.I. Abu-Gharbieh** and S. H. Masoud. (2006). A comparison among diagnostic means used to identify root- knot nematodes (*Meloidogyne* species and races) from Jordan. *Pak. J. Nematol.*, 24(1) 27-38.

Abu-Gharbieh, Walid I. and Muwaffaq R. Karajeh. (2006). Response of recently introduced cultivars of vegetable crops to the root-knot nematodes (*Meloidogyne* species and races) in Jordan. *Dirasat*, (Agricultural Sciences), 33(3):165-171.

Al-Qasem, M., **W. Abu-Gharbieh** and K. Assas. 2009. Nematophagal ability of Jordanian isolates of *Paecilomyces variotii* on the root-knot nematode *Meloidogyne javanica*. *Nematol. mediterr.*, 37: 53-57.

Qasem, M., K. Al-Assas and **W. Abu-Gharbieh**. 2009. Susceptibility of certain peach root- stocks to infection by the Javanese root-knot nematode *Meloidogyne javanica*. *Arab J. Pl. Prot.*, 27 (2): 1-5.

Abu-Gharbieh, W.I., A.G. El-Sherif and E.A. Edongali. 2010. The Biology of Nematodes . Pp. 61-86. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abu-Gharbieh, W.I., H.Z. Aboul-Eid, Al-Yahya, F. A. and S. Sellami. 2010. Development of Phytonematology in the Arab Countries. Pp. 141-188. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Stephan, Z.A. and **W.I. Abu-Gharbieh**. 2010. Root-Knot Nematodes (*Meloidogyne* spp.): Damage, Losses and Control. Pp. 285-328. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Stephan, Z.A. and **W.I. Abu-Gharbieh**. 2010. Cereal Seed-Gall Nematode (*Anguina tritici* Steinb). Pp. 437-464. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abd- Elgawad, M.M , F.A. Al-Yahya, Z.A. Stephan and **W.I. Abu-Gharbieh**. 2010 .Citrus Nematode (*Tylenchulus semipenetrans*). Pp. 553-586. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S.

Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abu-Gharbieh, W.I., M.M. Abd- Elgawad, A. B. Z. Al-Amiri. And F.A. Al-Yahya. 2010. Ecological Factors Affecting Nematode Populations. Pp. 603-642. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abu-Gharbieh, W.I., Allouf, Nada, S. and M.M.A. Youssef. 2010. Nematodes of Vegetable Crops. Pp. 715-772. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abu-Gharbieh, W.I. and N. Al-Hassani. 2010. Cultural Practices for Nematode Management. Pp. 1059-1086. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Abu-Gharbieh, W.I., K.H. Dabaj, A.E. Ismail and N.R. Al-Hassani. 2010. Nematode Control by Physical Means. Pp. 1087-1146. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Osman, A.A., **W.I. Abu-Gharbieh** and Z.A. Stephan. 2010. Use of Nematicides for Nematode Control. Pp. 1147-1182. In: *Plant Nematology in the Arab Countries*. W.I. Abu-Gharbieh, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). Dar Wael for Publishing, Amman, Jordan. (In Arabic).

Karajeh, M. R., W.I. Abu-Gharbieh and S.A. Masoud. 2010. DNA extraction and PCR based diagnosis of root-knot nematodes (*Meloidogyne* species and races) in Jordan. Jordan Journal of Agricultural Sciences. (In Print).

Qasem, M., K. Al- Assas, L. Al-banna and W. Abu-Gharbieh. 2010. First report on plant-parasitic nematodes associated with peaches (*Prunus*

persica) in Damascus Reef and Hamah provinces in Syria. University of Damascus Agricultural Sciences Journal. (Accepted) (In Arabic).

PUBLISHED BOOKS

1. Mamluk, O.F., **W.I. Abu-Gharbieh**, C.G. Shaw, A. Al-Musa and L.S. Al-Banna (1984). “*A Checklist of Plant Diseases in Jordan* “. A Publication of the University of Jordan. Amman, Jordan . Printed in Jordan by Ad-Dostour. 107 pp.
2. **Abu-Gharbieh, W.I.** (1994) “*Root-Knot Nematodes, Meloidogyne species, in Jordan*”. Second Edition. University of Jordan Publication. 97 pp (In Arabic).
3. **Abu-Gharbieh W.I.** A. Al- Musa, H. Abu-Blan, A. Al-Momani, H. Khalaif and A. Mansour. (1994). “*Principles of Plant Pathology.*” Dar Wael, Amman, Jordan. 374 pp.(In Arabic)
- 4 **Abu-Gharbieh, W.I.**(1994).”*Laboratory Manual of Plant Nematology.*” University of Jordan Publication, 124 pp.
5. **Abu-Gharbieh, W.I.**, S. Sultan, Sh. Hejjeh, and A. Shqair. (1995). “*Agriculture in Palestine* “. Al-Quds Open University. 306 pp (In Arabic).
6. **Abu- Gharbieh, W.I.**, A.Al-Musa, and H.Abu-Blan. (1995). “*Plant Diseases*”. Al-Quds Open University. 449 pp. (In Arabic).
7. **Abu-Gharbieh, W.I.**, A.S. Al-Hazmi, Z.A. Stephan and A.A.M. Dawabah (Eds.). 2010. "*Plant Nematology in the Arab Countries*". Dar Wael for Publishing, Amman, Jordan. (In Arabic).

SUPERVISION OF GRADUATE STUDENTS:

1. Saleh, H.M. (1979). Biology of *Meloidogyne javanica* (Treub) Chitwood on tomato in the Central Jordan Valley. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 60 pp.
2. Khtoom, M. (1981). Effect of methyl bromide soil fumigation and black plastic mulching on cucumber grown under plastic tunnels. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 74 pp.

3. Sharawi, S.A. (1982). Control of the root-knot nematodes on olive transplants with Oxamyl. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 128 pp.
4. Al-As`d, M.A. (1983). Effect of solarization on soil-borne fungi and nematodes in the Central Jordan Valley. M.Sc. Thesis. Faculty of Agriculture. University of Jordan. 74 pp.
5. Atieh, S.A. (1986). Pathogenicity and histopathology of *Meloidogyne javanica* and *M. incognita* on olive and tomato. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 145 pp.
6. Barakat, R. (1987). Comparative effect of different colors of polyethylene tarping on soilborne pathogens. M.Sc. Thesis. Faculty of Agriculture. University of Jordan. 82 pp.
7. Khalaiehlah, Raida (1988). Effect of soil solarization using different thicknesses of transparent polyethylene on cucumber grown in plastic houses in the Jordan Valley. M.Sc. Thesis. Faculty of Agriculture, University of Jordna. 119 pp.
8. Abdulhadi, N.K. (1989). Effect of organic amendments, soil solarization, and their interaction on soilborne plant pathogens. M.Sc. Thesis. Faculty of Agriculture, University of Jordan 93 pp.
9. Musallam, Z. (1992) Soil solarization vs. M.B. treatment for control of soilborne pathogens on plastic house cantaloupe in the Jordan Valley. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 77 pp.
10. Qasem, M. (1992) Occurrence and distribution of *Tylenchulus semipenetrans* in Jordan. M.Sc. Thesis. Faculty of Agric., University of Jordan. 96 pp.
11. Al-Balawneh, Abeer (1992) Environmental economic evaluation of soil solarization as a substitute for the chemical

- approach in the Jordan Rift Valley. M.Sc. Thesis (co- advisor).
, Faculty of Agriculture, University of Jordan. 157 pp.
12. Unis, Ibtisam. (1995). Loss Assessment due to the root-knot nematode *Meloidogyne javanica* on eggplant and okra in the Central Jordan Valley. M.Sc. Thesis. Faculty of Agric., University of Jordan.
 13. Sultan, A. (1995). Fusarium wilt and its interaction with the root-knot nematode *Meloidogyne javanica* on watermelon in Jordan. M.Sc. Thesis. Faculty of Agric., University of Jordan. 67 pp.
 14. Saeed, Haleemah (1995). Effectiveness of soil solarization against *Meloidogyne javanica* and *Heterodera schachtii*. M.Sc. Thesis. Faculty of Agriculture, University of Jordan. 76 pp.
 15. Fakhouri, W. (1995). Crown gall disease in Jordan: Biotypes, histology, interaction with root-knot nematode and biocontrol. M.Sc. Thesis (co- advisor), Faculty of Agriculture, University of Jordan. 91pp.
 16. Abu –Al-Asal, M. (1998). Treatment of transparent polyethylene sheets after soil solarization for direct transplanting, and their effect on the root-knot nematode. 86 pp.
 17. Rubeya, H. (1999). Chemical and biological control of the root-knot nematode, *Meloidogyne incognita*, on date palm trees. M.Sc. Thesis, Faculty of Agriculture, University of Jordan. 80 pp.
 18. Badawi, Samah (1999). Efficacy of certain non-fumigant nematicides as alternatives to methyl bromide for control of *Meloidogyne javanica* on tomato. M.Sc. Thesis, Faculty of Agriculture, University of Jordan. 70 pp.

19. Hijaz, Reem (2003). Fungi associated with the root-knot nematodes in Jordan. M.Sc. Thesis, Faculty of Agriculture, University of Jordan. 77 pp.
20. Naji, I. (2003). Effect of the root-knot nematodes *Meloidogyne javanica* (Treub) Chitwood and *Meloidogyne incognita* (Kofoid and White) Chitwood on fusarium wilt of muskmelon. . M.Sc. Thesis, Faculty of Agriculture, University of Jordan. 98 pp.
21. Al- Azzeh, T. (2002). Host-parasite relationship and control of the citrus nematode *Tylenchulus semipenetrans* Cobb in Jordan. PhD Dissertations, Faculty of Agriculture, University of Jordan. 178 pp.
22. Karajeh, M.R. (2004). Identification, distribution and genetic variability of the root-knot nematodes (*Meloidogyne* spp.) in Jordan. . PhD Dissertations, Faculty of Agriculture, University of Jordan. 152 pp.
23. Mohammed S. Al-Qasem. (2008) Plant –parasitic nematodes associated with peach roots and efficiency of *Paecilomyces* spp. isolates against the root- knot nematode *Meloidogyne javanica*. PhD Dissertation (co-advisor), Faculty of Agricultural Engineering, Damascus University. 163 pp.