

Curriculum Vitae



Name : Hail Kamel SHANNAG
Date of Birth : November 10, 1957
Place of Birth : Soum, Irbid/Jordan
Nationality : Jordanian
Sex : Male
Marital Status : Married, Four Children
Address : Department of Plant Production, Faculty of Agriculture, Jordan
University of Science and Technology, P. O. Box 3030, Irbid 22110,
Jordan, Fax: (962-2) 7095069, Tel: (962-2) 7201000 (ext. 22257),
E mail: hail@just.edu.jo

Academic Record:

1973-1976 : Irbid High School, Irbid, Jordan
1976-1980 : B. Sc. (Plant Protection), University of Mosul, Iraq.
1981-1985 : M.Sc. (Plant Protection), University of Göttingen, West Germany. M.Sc.
Research Title: Biology and Damage Caused by the Olive Fruit Fly "*Dacus oleae* Gemelin".
1985-1989 : Ph. D. (Entomology), University of Hannover, West Germany.
Ph.D. Research Title: The Damage to Greenhouse Cucumbers "*Cucumis sativus* L." by the White Fly "*Trialeurodes vaporariorum* (Westwood)".
1989 : Diploma in Higher Education and International Development, University of Kassel, West Germany.

Experience

- 1990 : Researcher at the National Center for Agricultural Research and Technology Transfer, Amman, Jordan.
- 1990-1992 : Full-time Lecturer within the Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.
- 1994-2000 : Assistant Professor of Entomology within the Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.
- 2000-2008 : Associate Professor of Entomology within the Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.
- 2009-present : Full Professor of Entomology within the Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan.

Awards:

- 1992-1993 : Post Doctorate at Texas Tech University, Texas, USA.
- 1993-1994 : Post Doctorate at University of Florida, Florida, USA.
- 2011-2012 : Fulbright scholarship at University of Florida, Florida, USA
- 2016-2017 : The Distinguished Scholar Award / The Arab Fund Fellowship Program at University of Florida, Florida, USA

Administrative Duties:

- 1990-1991 : Assistant Director and Head of Horticulture Department at Agriculture Center for Research and Production.
- 1991-1992 : Head of Horticulture Department at the Agricultural Center for Research and Production, Jordan University of Science and Technology.
- 1996-1997 : Assistant Director and Head of Horticulture Department at the Agricultural Center for Research and Production, Jordan University of Science and Technology.
- 1998-2000 : - Assistant Dean for the Faculty of Agriculture, Jordan University of Science and Technology.
- Director of the Agricultural Center for Research and Production.

- Director of the Agriculture Station.
- 2000-2002 : Chairman, Department of Plant Production, Jordan University of Science and Technology.
- 2015-2016 : Vice dean, Faculty of Agriculture, Jordan University of Science and Technology.

Language : Arabic, English, German.

Scientific Societies:

- Jordan Agricultural Engineers Association
- The Arab Society of Plant Protection.
- The German Society of Plant Protection.
- Japanese Society of Applied Entomology and Zoology
- Societe Entomologique de France
- Committee member of Scientific Research Support Fund / Sector of Agricultural and Veterinary Sciences, Ministry of High Education, Amman, Jordan
- Editorial board member of Jordan Journal of Agricultural Science
- Editor of International Journal of Agricultural Policy and Research
- Editorial board member of International Journal of Interdisciplinary Research, Thailand
- Peer Reviewer for the Qatar National Research Fund
- Reviewer of Universal Journal of Agricultural Research, USA

Undergraduate Courses Taught:

- Fundamental Entomology
- Economic Entomology
- Integrated Pest Management
- Beekeeping (for Non-Agriculture Students)
- Summer Practical Training
- Undergraduate Seminar

Graduate Courses Taught:

- Advanced Economic Entomology
- Insect Morphology and Physiology
- Biological Control of Plant Pests
- Pests of Horticultural Plants
- Pests of Field Crops
- Insect Pests of Public Health
- Graduate Seminar

Graduate Students

- Supervisor of many master students
- Member of the examination committees for several MSc and PhD students
- Academic advisor for graduate students

Meetings and Conferences

- Plant protection conference, Gent, Belgium
- 2nd agricultural exhibition, Ministry of Agriculture, Jordan
- 3rd agricultural scientific conference, Mouta University, Jordan
- 5th agricultural scientific conference, Al-Balqa' Applied University, Jordan.
- 6th Jordanian agricultural scientific conference, Jordan University, Jordan
- Water crisis management in arid regions workshop, Al-Balqa' Applied University, Jordan
- Water and salinity management conference, Jordan University of Science and Technology
Jordan
- Role of scientific research in desertification management conference, University of Science
and Technology, Jordan
- Oral presentation at expert consultation on biopesticides and biofertilizers for sustainable
agriculture, Taichung, Taiwan
- Oral presentation at the faculty scientific day, Jordan University of Science and Technology,
Jordan

- Oral presentation at beekeeping workshop, Jordan University of Science and Technology, Jordan

Attended Workshops

- Education Technology
- Evaluation and Measurements
- Electronic Learning
- Creativity and Innovation Skills

Community Services

- Consultant for plant pest managements at university farms and local community
- Evaluating scientific research papers for some national and international journals
- Lecturing on the integrated pest management in Hia Bent Al-Husein School
- Education program about honeybee pests and their management in Jordan
- Member of the following committees;
 - Alternatives to methyl bromide, Jordanian Environmental foundation, Jordan
 - Assessment of pesticide residues by radiation, Ministry of Energy, Jordan
 - Use of male sterile technique for Mediterranean Fruit fly management, Ministry of Energy, Jordan
 - Insecticide selection to control household insects, Irbid province, Jordan
 - Accreditation for plant protection specialization, Ministry of Higher Education, Jordan
 - Integrated pest management programs in vegetables at the National Center for Agricultural Research and Technology Transfer, Jordan.
 - Rain-fed agricultural research council at National Center for Agricultural Research and Technology Transfer, Jordan
 - Department committees (curriculum/accreditation, faculties promotions, research, graduate studies, faculties selection, textbooks)

- Committee member of the sector of the agricultural and veterinary sciences in the directorate of the fund for scientific research and innovation support at Ministry of Higher Education and Scientific Research, Amman, Jordan.

Delivered Workshops

- Workshop for agriculture engineers on pecan pests management sponsored by the Ministry of Agriculture
- Workshop for agriculture engineers on integrated pest management of wheat moth sponsored by the Ministry of Agriculture
- Workshop for Jordanian farmers in Badia regions on new approaches of stone fruit pest management and organic farming sponsored by European Union
- Workshops for Jordanian farmers in Ajloun province on the management of fruit tree pests and the proper use of pesticides sponsored by biodiversity project at the National Center for Agricultural Research and Technology Transfer, Jordan
- Training agriculture engineers under several programs sponsored by the Jordanian Agriculture Engineer Association.
- Workshop for agriculture engineers and private sectors on olive pest diagnosis and management sponsored by EMAST
- Workshop on insect pests of public health
- Workshop on insect pests of pomegranate and their management

Papers Published in Refereed International Journals

1. **SHANNAG, H. K.**, KLEINEKE-BORSCHERS, A. & ZEBITS, C. P. W. (1990). Beziehungen zwischen Befallsdichte und Schaden in System Gewächshausgurke/Weiße Fliege. *Anzeige für Schädling Pflanzenschutz und Umweltschutz*. 63:1-7. (in German)
2. **SHANNAG, H. K.**, WEBB, S. E. & CAPINERA, J. L. (1994). Entomopathogenic nematode effect on pickleworm (Lepidoptera:Pyralidae) under laboratory and field conditions. *Journal of Economic Entomology*. 87(5): 1205-1212.
3. **SHANNAG, H. K.** & CAPINERA, J. L. (1995). Evaluation of entomopathogenic nematode

- species for the control of melonworm (Lepidoptera:Pralidae). *Environmental Entomology*. 24(1):143-148.
4. **SHANNAG, H. K.**, THORVILSON, H. & SHTNAWI, M. (1998). Changes in photosynthetic and transpiration rates of cotton leaves infested with the cotton aphid, *Aphis gossypii*. *Annals of Applied Biology*. 132: 13-18
 5. EL-SHATNAWI, M. K., GHOSHEH, H. Z., **SHANNAG, H. K.** & EREIFEJ, K. I. (1999). Defoliation time and intensity of Wally barley in the Mediterranean range land. *Journal of Range Management*. 52: 258-262.
 6. **SHANNAG, H. K.** & CAPINERA, J. L. (2000). Interference of *Steinernema carpocapsae* (Nematoda: Steinernematidae) with *Cardiochiles diaphania* (Hymenoptera: Braconidae), a parasitoid of melonworm, *Diaphania hyalinata*. *Environmental Entomology*. 29(3): 612-617.
 7. AL-GHZAWI, A., **SHANNAG, H.** & ZITWOUN, S. (2001). Grooming behavior of *Apis mellifera syriaca* towards the parasitic mite, *Varroa jacobsoni*. *Journal of Applied Entomology*. 125: 85-87.
 8. GHOSHEH, H. Z. & **SHANNAG, H. K.** (2000). Influence of weed and onion thrips, *Thrips tabaci* (Thysanoptera : Thripidae), on onion bulb yield in Jordan. *Crop Protection*. 19: 175-179.
 9. **SHANNAG, H. K.**, AL-GHZAWI, A-M. & ZAITOUN, S. T. (2000). Removal behavior of *Apis mellifera syriaca* towards *Varroa jacobsoni* in Jordan. *Bulletin de la Societe entomologique de France*. 3: 273-278.
 10. ZAITOUN, S. T., AL-GHZAWI, A-M. & **SHANNAG, H. K.** (2000). Population dynamics of the Syrian honeybee, *Apis mellifera syriaca*, under semi-arid Mediterranean conditions. *Zoology in the Middle East*. 21: 129-132.
 11. AL-GHZAWI, A-M., ZAITOUN, S. T. & **SHANNAG, H. K.** (2001). Seasonal cycles of *Apis mellifera syriaca* under Jordanian desert conditions. *Journal of Apicultural Research*. 40(2): 45-51.
 12. AL-GHZAWI, A-M., ZAITOUN, S. & **SHANNAG, H. K.** (2001). Ontogenesis of the parasitic mite, *Varroa jacobsoni*, on Syrian honey bee, *Apis mellifera syriaca*. *Zoology in the Middle East*. 22: 101-106.

13. AL-GHZAWI, A-M., ZAITOUN, S. & **SHANNAG, H. K.** (2001). Damaged *Varoa* mites in the debris of different honey bee subspecies under semiarid Mediterranean conditions. *Bulletin de la Societe entomologique de France*. 106: 193-198.
14. **SHANNAG, H. K.** & OBEIDAT, W. M. (2006). Voracity and conversion efficiency by larvae of *Coccinella septempunctata* L., (Coleoptera: Coccinellidae) on *Aphis fabae* Scop. (Homoptera: Aphididae) reared on two faba bean cultivars with different levels of resistance. *Applied Entomology and Zoology*. 41(3): 521-527.
15. **SHANNAG, H. K.** & OBEIDAT, W. M. (2006). New partially resistant cultivar of faba bean to black bean aphid, *Aphis fabae* Scop. (Homoptera: Aphididae). *Bulletin de la Societe Entomologique de France*. 111(4): 433-438.
16. **SHANNAG, H. K.**, MAKHADMEH, I. & AL-GHUDA, J. (2006). Impact of *Aphis gossypii* GLOVER (Homoptera: Aphididae) on growth rate of okra plant, *Abelmoschus esculentus* L.). *Belgian Journal of Entomology*. 8: 83-90.
17. **SHANNAG, H. K.** & ABABNEH, J. (2007). Effect of black bean aphid, *Aphis fabae* L., on productivity of different faba bean varieties. *Bulletin de la Societe Entomologique de France*. 112(4): 499-504.
18. ZAITOUN, S., AL-GHZAWI, A-M., **SHANNAG, H. K.** & AL-TAWAHA, A. M. (2006). Comparative study on the pollination of strawberry by bumble bees and honeybees under plastic house conditions in Jordan Valley. *Journal of Food, Agriculture and Environment*. 4(2): 237-240.
19. **SHANNAG, H. K.**, QUDAH, J. & MAKHADMEH, B. (2006). Differences in growth and yield responses to *Aphis gossypii* Glover between different okra varieties. *Plant Protection Science*. 43(3): 109-116.
20. **SHANNAG, H. K.** & ABABNEH, J. (2006). Biometry and responses of faba bean varieties to black bean aphid, *Aphis fabae* Scopoli. *American-Eurasian Journal of Agricultural and Environmental Sciences*. 2(4): 328-334.

21. **SHANNAG, H. K.** & ABABNEH, J. (2007). Influence of black bean aphid, *Aphis fabae* Scopoli., on growth rates of faba bean. *World Journal of Agricultural Sciences*. 3(3): 344-349.
22. **SHANNAG, H. K.** (2006). Effect of black bean aphid, *Aphis fabae* Scopoli, on transpiration, stomatal conductance and crude protein content of faba bean. *Annals of Applied Biology*, 151(2): 183-188.
23. **SHANNAG, H. K.** & OBEIDAT, W. M. (2008). Interaction between plant resistance and predation of *Aphis fabae* (Homoptera: Aphididae) by *Coccinella septempunctata* (Coleoptera: Coccinellidae). *Annals of Applied Biology*. 152: 331-337.
24. HAMEED, K. M., GHOSHEH, H. Z., AL-JAMALI, A., **SHANNAG, H.**, & AL-SHYAB, Z. (2008). Parasitic Fungi and Seed Plants Associated with the Natural Vegetation in the Jordan Badia. In: *Jordan's Badia-deepening our understanding*, R. W. Dutton and M. I. Shahbaz (ed.), Academic Publisher Smith. Gordon Nishimura, UK, pp. 175-189.
25. **SHANNAG, H. K.** & FREIHAT, N. M. (2009). Gas exchange of cucumber impaired by tobacco whitefly, *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae). *Jordan Journal of Agricultural Sciences*. 5: 295-305
26. AL-GHZAWI, A. A., ZAITOUN, S. & **SHANNAG, H.** (2009). Management of *Braula orientalis* Örösi (Diptera: Braulidae) in honeybee colonies with tobacco smoke under semiarid conditions. *Entomological Research*. 30:168-215.
27. AL-GHZAWI, A. A., ZAITOUN, S. & **SHANNAG, H.** (2009). Incidence and geographical distribution of honeybee (*Apis mellifera* L.) pests in Jordan. *Annals de la Societe Entomologique de France*. 45: 305-308.
28. **SHANNAG, H. K.**, CAPINERA, J. L. & FREIHAT, N. M. (2013). Use of neem-based insecticides against southern armyworm, *Spodoptera eridania* (Stoll) (Lepidoptera: Noctuidae). *Trends in Entomology*. 9: 45-53.
29. **SHANNAG, H. K.**, CAPINERA, J. L. & FREIHAT, N. M. (2014). Efficacy of different neem-based biopesticides against green peach aphid, *Myzus persicae* (Hemiptera: Aphididae). *Int. J. Agric. Pol. Res.* 2(2): 061-068.
30. **SHANNAG, H. K.**, CAPINERA, J. L. & FREIHAT, N. M. (2015). Effects of neem-based insecticides on consumption and utilization of food in larvae of southern armyworm,

- Spodoptera eridania* (Stoll) (Lepidoptera: Noctuidae). *Journal of Insect Science*, 15(1): 152-158.
31. **SHANNAG, H. K.**, MALAK, A-H. & CAPINERA, J. L. (2017). Comparative assessment of three biologically based insecticides on the survival and development of the whitefly, *Bemisia tabaci* (Hemiptera: Aleyrodidae). *Trends in Entomology*, 13: 35-43.
 32. **SHANNAG, H. K.** & CAPINERA, J. L. (2018). Comparative effects of two novel Betaproteobacteria-based insecticides on *Myzus persicae* (Hemiptera: Aphididae) and *Phenacoccus madeirensis* (Hemiptera: Pseudococcidae). *Florida Entomologist*, 101(2): 212-218.
 33. **SHANNAG, H. K.**, MALAK, A-H. & CAPINERA, J. L. (2018). Responses of the whitefly *Bemisia tabaci* (Hemiptera: Aleyrodidae) to biologically based insecticides. *American Journal of Entomology*, 2(3): 28-35.
 34. **SHANNAG, H. K.**, FREIHAT, N. M., AL-KELANI, M. M. & CAPINERA, J. L. (2019). Population dynamic of olive pit scale, *Pollinia pollini* Costa (Hemiptera: Asterolecanidae) on two olive cultivars in north region of Jordan. *Journal of Agricultural Science and Technology A*, 1: 1-7.
 35. FREIHAT, N. M., **SHANNAG, H. K.** & ALKELANI, M. A. (2021). Effects of supplementary irrigation on performance of 'Nabali' and 'Grossa de Spain' olives under semi-arid conditions in Jordan. *Scientia Horticulturae*, 275 (2021)
 36. **SHANNAG, H. K.** (2021). Efficacy of Betaproteobacteria-based insecticides for management of whitefly, *Bemisia tabaci* (Hemiptera: Aleyrodidae) on cucumber plants (submitted to *Biological Control*)
 37. **SHANNAG, H. K.**, AL-MEFLEH, N. K., and FREIHAT, N. M. (2021). Reuse of wastewaters in irrigation of broad bean and their effect on plant-aphid interaction. *Agricultural Water Management*, 257: 107156.

38. SHANNAG, H. K. and AL-SALMAN, A. A. (2022). Responses of the cotton aphid, *Aphis gossypii* and the predator, *Coccinilla septempunctate*, to application of novel insecticides (submitted to *Phytoparasitica*).