

## **Curriculum Vitae**

**Prof. Dr. Khalid Mousa Al-Absi**

**Professor of Fruit tress physiology**

**University of Mutah**

**Jordan**

**Personal data**

Name: Prof. Dr. Khalid Mousa Ali Al-Absi  
Nationality: Jordanian.  
Gender: Male  
Marital status: Married.



**Present position:** Prof. of fruit trees physiology.  
Department of Plant Production,  
Faculty of Agriculture, University of Mutah.

**Research interest:**

Fruit trees physiology, Plant growth regulators, Drought and salt tolerance, Postharvest physiology, Plant nutrition, Experimental design and analysis.

**Address of contact:**

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**Educational background**

- **B. Sc.** Plant Production and Science  
Department of Plant Production. University of Jordan  
January, 1990, Grade 81.3%.
- **M.Sc.** Plant Production / Horticulture/ Fruit trees production.  
Faculty of Graduate Studies. University of Jordan  
January, 1993, Grade: 83.3%.  
Title of M. Sc. Thesis: "Flower bud initiation, thinning and fruiting of 'Early Crest' peaches as affected by GA<sub>3</sub>".
- **Ph.D.** Horticulture/ Fruit trees production.  
Faculty of Graduate Studies. Department of Horticulture. University of Jordan  
April, 2000, Grade: 3.8 /4.  
Title of Ph.D. thesis: "Physiological and growth response of two olive cultivars to salinity stress".
- **Post-doctorate** University of Kentucky – Department of Horticulture – Lexington, Kentucky, USA. September 2010 –August 2011.

**Previous positions held**

- Teaching assistant at Dept. of Plant Production. University of Jordan. 1991-1993.
- A researcher at National Center for Agricultural Research and Technology Transfer (NCARTT), Al-Shoubak center, 1994.
- Teaching and research assistant at Dept. of Plant production, Faculty of Agriculture . University of Mutah. 1995-1996.

- Assistant Prof. at Dept. of Plant Production, University of Mutah, June, 2000 - June, 2005 .
- Director of Agricultural Research Station. Faculty of Agric., University of Mutah. Sept., 2001- Aug., 2002.
- Dean assistant for students affairs, Faculty of Agriculture. Univ. of Mutah. Sept., 2002- Aug., 2003.
- Associate Prof. at Dept. of Plant Production, June, 2005 – June 2010
- Professor at Dept. of Plant Production, June 2010 – Present.

### Refereed publications

1. **Al-Absi, K.M.** 2023. Salinity stress in date palm (*Phoenix dactylifera* L.): tolerance, mechanisms and mitigation (REVIEW ARTICLE). *Horticulture, Environment, and Biotechnology* 64 (5), 695–708. <https://doi.org/10.1007/s13580-023-00511-4>
2. Al-Tarawneh, M. S. **Al-Absi K.M.** and Al Asasfa, M. A. 2023. Pollen grain efficiency of two date palm (*Phoenix dactylifera* L.) genotypes as influenced by exogenous application of GA<sub>3</sub> and NAA; in vitro and field study. *Journal of Survey in Fisheries Sciences*. 10(3S) 971-988.
3. **Al-Absi, K.**, Qrunfleh, M. and Abu-Sharar, T. 2003. Mechanism of salt tolerance of two olive (*Olea europea* L.) cultivars as related to electrolyte concentration and toxicity. *Acta Horticulturae*. 618:281-290. (Impact factor: 0.204).
4. **Al-Absi, K. M.** 2009. Growth and ionic relations in 'Nabali' olive during salinity stress as affected by salicylic acid and relief treatments. *Advances in Horticultural Science (Italy)*. 23(2): 101-107.
5. **Al-Absi, K.** and Archbold, D. 2016. Apple tree responses to deficit irrigation combined with periodic applications of particle film or abscisic acid. *Horticulturae*. 2(4): 1-12.
6. Al-Shurafa, W., Mahadeen, A., and **Al-Absi, K.** 2014. Evaluation for salt stress tolerance in two strawberry cultivars. *American Journal of Agricultural and Biological Sciences*. 9(3) 334-341.
7. Ayoub, S., **Al-Absi, K.**, Shdeifat, S., Majali, O and Hijazeen, D. 2014. Effect of olive mill wastewater land-spreading on soil properties, olive tree performance and oil quality. *Scientia Horticulturae*. 175:160–166. (Impact factor: 2.01).
8. **Al-Absi, K.** and Al-Ameiri, N. 2015. Physiological responses of tomato to inoculation with *Piriformospora indica* under smotic stress and chloride toxicity. *International Journal of Agriculture and Forestry*, 5(4): 226-239.
9. **Al-Absi, K. M.**, Al-Nasir, F.M and A.Y. Mahadeen. 2009. Mineral content of three olive cultivars irrigated with treated industrial wastewater. *Agricultural Water Management*. 96: 616-626. (Impact factor: 2.506).
10. **Al-Absi, K. M.** and Mohawesh, O. E. 2009. Olive oil mineral content of two local genotypes as influenced by recycled effluent irrigation under arid environment.

- Journal of the Science of Food and Agriculture (Wiley)**. 89: 2082–2087. (Impact factor: 1.436).
11. **Al-Absi, K. M.** 2010. Growth and biochemical constituents of olives as influenced by irrigation with treated industrial wastewater. **Journal of Plant Nutrition**. 33(1): 1-14. (Impact factor: 0.641).
  12. Mohawesh, O.E. and **Al-Absi, K.M.** 2009. Physiological Response of Two Apple Genotypes to Different Water Regimes under Semiarid Conditions. **Advances in Horticultural Science (Italy)**. 23(3) :158-165.
  13. Al-Maaitah, M. I., **Al-Absi, K. M.** and Al-Rawashdeh, A. 2009. Oil Quality and Quantity of Three Olive Cultivars as Influenced by Harvesting Date in the Middle and Southern Parts of Jordan. **International Journal of Agriculture and Biology**. 11(3): 266- 272. (Impact factor: 0.94).
  14. Mahadden. A.Y., Mohawesh, O. E., **Al-Absi, K.M.** and Al-Shareef, W. 2011. Effect of irrigation regimes on water use efficiency and tomato yield (*Lycopersicon esculentum* Mill.) grown under an arid environment. **Archives of Agronomy and Soil Science**. 57(1): 105 - 114.
  15. **Al-Absi, K. M.** 2010. Effect of different pre-sowing treatments on breaking dormancy of *Prunus mahaleb* L. **Seed Science and Technology**. 38: 332-340. (Impact factor: 0.631).
  16. **Al-Absi, K. M.** 2009. Gas exchange, chlorophyll and growth response of three orange genotypes (*Citrus sinensis* [L.] Osbeck) to abscisic acid under progressive water deficit. **Jordan Journal of Agricultural Sciences**. 5(4) : 421- 433.
  17. **Al-Absi, K. M.** 2005. Response of Grapevines to Irrigation with Multicomponent Electrolyte Solutions in Presence of Chloride Salinity. **Pakistan Journal of Biological Sciences**. 8(2): 318-325.
  18. Al –Nasir, F. M. and **K. M. Al-Absi.** 2005. Diagnosing the nutritional status of apple orchards at south of Jordan. **Arab Universities Journal of Agricultural Sciences**. 13 (2): 459-469.
  19. **Al-Absi, K.M.,** Mohawesh, O.E. and Tadros, M.J. 2010. Effect of antitranspirant application on physiological and biochemical parameters of three orange cultivars grown under progressive water deficit. **Advances in Horticultural Science. Italy**. 24(3): 183-194.
  20. **Al-Absi, K. M.,** 2008. Effect of irrigation with treated industrial effluent on growth and biochemical constituents of olives. **Bulgarian Journal of Agricultural Sciences**, 14: 564-575.

21. **Al-Absi, K. M.** and I. A. Al-Twissi. 2003. Performance and alternate bearing of seven pistachio cultivars grown under rainfed and marginal conditions at south of Jordan. **Zagazig Journal of Agricultural Research**. 30(6): 2145- 2153.
22. **Al-Absi, K. M.;** A. Mahadeen and W. Al-Shareef. 2003. Yield performance of ‘Williams’ banana as influenced by irrigation water level and K fertilization rate. **Zagazig Journal of Agricultural Research**. 30(4): 1491-1503.
23. **Al-Absi, K. M. ;** A. Al-Twissi and M. Al-Talhouni. 2003. Evaluation of quality features of seven pistachio cultivars grown under rainfed and marginal conditions in south of Jordan. **Minufia Journal of Agricultural Research**. 28(4): 1193-1199.
24. **Al-Absi, K.M.,** Qrunfleh, M. and Abu-Sharar, T. 2002. Mechanism of salt tolerance of two olive cultivars (*Olea europaea* L.) as related to electrolyte concentration and toxicity. XXVI **International Horticultural Congress**. Toronto. Ontario. Canada: 151.
25. A. AlSaed, A. Carretero, K. Allsmail, H. Aldomi, **K. Al-Absi,** T Rababa, R. Ajo, H Bachouche, J Lozano sanchez. 2017. Chemical composition of Nabali Jordanian olive oil. **Rivista Italiana delle Sostanze Grass**. 93 (1): 42.
26. **Al-Absi, K. M.** 2009. Thinning intensity of ‘Ace Spur Delicious’ and 'Idared' apples with ethephon, benzyladenine and their combination. **Jordan Journal of Agricultural Sciences**. 5(3): 237-250.
27. **Al-Absi, K. M.** 2003. Rooting response of ‘Nabali’ and ‘Improved Nabali’ olive cuttings to Indole Butyric Acid concentration and collection season. **Pakistan Journal of Biological Sciences**. 6( 24 ): 2040-2043.
28. Abdel-Ghani, A., **Al-Absi, K.,** Thaher, N., Al-Dalain, S., Al-Rabadi, G. and Al-Nasir, F. 2020. Phenotypic response of barley landrace and its wild progenitor *Hordeum spontaneum* from Jordan to salt stress. **Australian Journal of Crop Science**. 14(07):1109-1120.
29. Alfrriyeh, H., **Al-Absi, K.** and Ayoub, S. 2022. Oil Quantity, Chemical and Organoleptic Properties of Three Olive Cultivars Grown under Irrigation at a Typical Arid Region in Jordan as Influenced by Harvesting Method and Date. **Jordan Journal of Agricultural Sciences**, 18 (4): 424-440.
30. **Al-Absi, K.M.** 2023. Salt tolerance of olives: effects, resistance mechanisms, and amelioration strategies. Submitted.

### **Scholarships and Awards**

- DAAD scholarship. Humboldt University in Berlin. Leibniz-Institute of Vegetable and Ornamental Crops, Großbeeren. June, 15- September 21, 2013. Germany.
- Fulbright scholarship, University of Kentucky, USA, September 2010 – July 2011.
- Award from Vice President of Mutah University. 2003. (Scientific day).

- Scholarship of PhD study from Mutah University (1997-2000).

### **Granted projects**

1. Capacity Building of Personnel in Jordanian Olive Oil Industry. **TEMPUS**. European Commission. 2014-2017. 4 years. (750,000 euro).
2. Physiological responses of tomato to inoculation with *Piriformospora indica* under osmotic stress and chloride toxicity. DAAD scholarship. June – September 2013, Humboldt University in Berlin. Germany.
3. Apple Tree Responses to Deficit Irrigation Combined with Periodic Applications of Particle Film or Abscisic Acid. Fulbright scholarship, University of Kentucky, USA, September 2010 – July 2011.
4. Effect of olive mill wastewater land-spreading on soil properties, olive tree performance and oil quality. Scientific Research Fund, Ministry of higher education. 3 years. (70000 \$).
5. The Effect of irrigation with treated wastewater on growth and fruiting of different olive cultivars. 2008-2010. Deanship of Scientific Research, University of Mutah, 3 years. (30,000 \$)
6. Growth, gas exchange and chemical composition of three orange genotypes grafted on sour orange under water deficit. Deanship of Scientific Research, University of Mutah, 2007-2009. 2 years (30, 000\$).
6. Effect of olive mill wastewater landspreading on olive tree performance, oil quality and soil properties. Scientific Research Fund. Jordan. 3 years. (90, 000\$)

### **Non-Refereed publications**

1. Al\_Absi, K. Al-Rawashdeh, I. and Al-Twissi, N. 1994. Inducing delay in the flowering of plum using ethephon. Annual report. National Center for Agricultural Research and Technology Transfer. Ministry of Agriculture.
2. Al\_Absi, K.; Al-Rawashdeh, I. and Al-Twissi, N. 1993. Comparison of performance of several apple and pear cultivars on different rootstocks. Annual report. National Center for Agricultural Research and Technology Transfer. Ministry of Agriculture.
3. Al\_Absi, K.; Al-Rawashdeh, I. and Al-Twissi, N. 1993. Comparison of performance of several stone fruit cultivars on different rootstocks. Annual report. National Center for Agricultural Research and Technology Transfer. Ministry of Agriculture.

### **Teaching experience**

#### **A. Graduate**

- Fruit science
- Stress physiology
- Advanced plant physiology
- Plant nutrition (Advanced)
- Plant growth regulators (PGR)
- Experimental design and analysis
- Advanced protected agriculture
- Selected topics
- Seminar in plant production

## **B. Undergraduate**

- Evergreen fruit trees
- Plant physiology (undergraduate)
- Plant propagation and nurseries
- Principles of plant science
- Postharvest physiology
- Agricultural statistics
- Plant tissue culture
- Scientific research methods
- Deciduous fruit trees
- Floriculture and landscaping
- Seminar in plant production
- Selected topics
- Plant anatomy and morphology (Practical)

## **Scientific meetings, presentations and conferences**

- Second management meetings for "Capacity Building of Personnel in Jordanian Olive Oil Industry" project in University of Verona-Italy during February 25-28 2015.
- Third management meetings for "Capacity Building of Personnel in Jordanian Olive Oil Industry" project in University of Aristotle at Thessaloniki-Greece during May 30- June 1 2016.
- Staff exchange. Scientific visit included lectures and visit to olive orchards and pickling plants) to University of Aristotle at Thessaloniki-Greece during June 23-29 May 2016.
- Scientific visit to University of Granada and Centre for Functional Food Research and Development, Italy (invitation from Prof. Carretero Antonio) during 5-14 June 2015.
- Kentucky Fruit and Vegetables conference. Lexington, Kentucky, USA. January 2011.
- Living Sustainably: Innovation in Food and Energy, Burlington, Vermont, USA, April, 2011.
- Spatial Regression Workshop, Lexington, Kentucky, USA. May 2011.
- Euro Mediterranean Advanced Training course on olive growing: "Strategies of sustainable management of water resources for yield and quality enhancement in olive growing", CNR – ISAFOM, IOOC, Naboli, Italy, Dec., 2 – 6, 2002.
- American University of Beirut (AUB). Lebanon . Establishment of an olive oil mill at Mutah Universty . Creative Foundation. June 2003.
- Roundtable on the olive oil sector in Jordan. United Nations Industrial Development Organization. Amman. June, 3, 2001.
- The 2<sup>nd</sup> Arab Conference on Perspective of Modern Biotechnology. Higher Council of Science and Technology. Jordan, 1993.
- Tissue culture workshop. National Center for Research and Technology Transfer (NCARTT). 1994.
- The first scientific week for Faculty of Agriculture, Univ. of Mutah. Jordan, 1995.
- The second agricultural scientific conference. University of Science and Technology. Jordan. April, 29-30. 1997.

- Proceeding of the regional seminar on irrigation research in the Mediterranean region. University of Jordan. Jordan. 1998.
- The third agricultural scientific conference: The scientific research in service of agricultural development. Mutah University. Jordan. April, 27-29, 1999
- Irrigation management and saline conditions. University of Science and Technology. Jordan. June, 21-23, 1999.

### **Ph.D supervision**

Maaitah. S. M. 2019-2021. Alleviation of Salinity Stress in Gerbera (*Gerbera jamesonii* L.) By Silicon Supplementation.

### **M. Sc. Supervision**

1. Maaitah. S. M. 2016. Physiological Responses of Seed Germination, Seedling Growth, and Seed Yield Traits to Seed Pretreatment in Tomato.
2. Al-Dmour. S. J. 2017. Effect of the olive fruit fly *Bactrocera oleae* and insecticides' applications on quantity and quality of olive oil
3. Al-Farayeh. H. K. 2017. Oil quality and organoleptic properties of three olive cultivars as influenced by harvesting method and date.
4. Al-Maaitah, M. A. 2007. Olive oil quality and quantity of three olive cultivars as influenced by harvesting date at the middle and southern part of Jordan. M. Sc. Thesis. Faculty of Graduate Studies. University of Mutah.
5. Abu-Samra, O. A. 2007. Salt tolerance of two pistachio rootstocks as influenced by salicylic acid. M. Sc. Thesis. Faculty of Graduate Studies. University of Mutah.
6. Al-Sabayleh, H. M. 2007. Reducing bitter bit incidence of two apple cultivars by calcium chloride application. M. Sc. Thesis. Faculty of Graduate Studies. University of Mutah.
7. Al-Shurafa, W. A. 2008. *In vitro* propagation and evaluation for salt tolerance of two strawberry cultivars. M. Sc. Thesis. Faculty of Graduate Studies. University of Mutah.
8. Altarawneh. R. 2010. Physiological responses of olive tress to interactive effect of irrigation deficit and salinity.
9. Kanag. R. 2010. Effect of different treatments of thinning on grape performance.
10. Al-Tarawneh,. 2022. Pollen grain efficiency of two date palm (*Phoenix dactylifera* L.) genotypes as influenced by exogenous application of GA3 and NAA; in vitro and field study.
11. Al-Hasanat, 2023. Morphological and physiological responses of “Sweet William” carnation to polyacrylamide polymer under water deficit.
12. Al-Sheimat, L. Studies on Comparative Rooting Response of Carnation (*Dianthus Caryophyllus* L.) Cuttings to Natural Compounds and Indole Butyric Acid
13. Al-Salahat, N. 2023. Effect of Different Water Regimes on Growth and Biochemical Content of two Panicum Genotypes in Jordan valley (Cosdviser)..
14. Al-Slehat. S. 2023. Biology and parasitoids of the fall armyworm *Spodoptera frugiperda* (Lep., Noctuidae), and the role of oxalic acid as a chemical-resistant factor to the pest in selected host plants (Cosdviser).
15. Zedan, A. S. 2023. Effect of Salicylic acid on some Growth parameters and mineral content for two genotypes of strawberry (*Fragaria ananassa* Duch) under water deficit condition (Cosdviser).



### **Theses defense committee's membership**

I was a member of Ph. D and M.Sc thesis defense committee for many Ph. D and MSc students at University of Mutah (MU), University of Jordan (JU), Balqa Applied University and Jordan University of Science and Technology (JUST)).

### **Languages**

Arabic (Native)

English (Very good)

### **Training courses:**

- Scientific writing
- Building the Capacity of Jordanian Researchers Project
- Greenhouses Technology
- Experimental design and analysis: SAS, MSTAT
- ICDL- Mutah CDL.
- Plant tissue culture
- Chromatographic application ( GC, HPLC)
- Educational Portal

### **Computer**

Level of computer command: excellent

Microsoft office, SAS, MSTATC.

### **Referee**

- Journal of Plant Nutrition and Soil Science
- Scientia Horticulturae
- Malaz Research Center, King of Saud University
- Jordan Journal of Agricultural Sciences
- Jordan Journal of Biological Sciences
- Mutah Journal for Research & Studies
- The Scientific Research Support Fund, Ministry of higher Education and Scientific Research.
- The Accreditation and Quality Assurance Commission, Ministry of Education. Palestinian National Authority.
- Open Al-Quds University
- Al-Qaseem University, Saudi Arabia
- National Al-Najah University

### **References**

- Prof. Dr. Douglas Archbold. Prof. of Fruit Trees. Department of Horticulture, University of Kentucky. USA. E. mail: darchbol@uky.edu. Tel. +91 36201 785 217
- Prof. Dr. Omar Kafawin. Prof. of Plant Breeding and Genetics. Acting Vice-President for Scientific faculties and Institutes, Department of Horticulture and Crop Science. Faculty of Agriculture- University of Jordan. E. mail : [kafawin@ju.edu.jo](mailto:kafawin@ju.edu.jo). Tel. 00962795315760
- Dr. Sameer Masoud. Associate Professor in Biotechnology. Philadelphia University, Amman, Jordan. Tel. 00962795521037

## **Membership**

- Scientific and organizing committee / The 5<sup>th</sup> International Olive Conference "OLIVEBIOTEQ 2014", Amman, Jordan.
- National committee of fruit trees
- Scientific research committee at University
- Head, Higher studies committee
- Bachelor and Master plan committee
- Head of scientific tenders committee
- Investigation committee with students – Head and member
- Referee in international journals
- Preparation committee for agricultural scientific conference/Mutah University
- Member of university council
- Member of faculty council
- Member of Scientific Research Society
- Member of the editorial board of Mutah Journal for Researches and Studies, Natural and Applied Sciences.
- Member in Master defence committees in Jordan Universities.
- Member - Agricultural Engineers Association.