### **Curriculum Vitae**



### **Personal Data:**

Name: Salam J. Ayoub

Date of birth: Nov. 11, 1965. Place of birth: Zarqa' Nationality: Jordanian. Marital status: Married

#### **Postal Address:**

National Agricultural Research Center (NARC).

P.O. Box 639 Baqa', 19381 Jordan.

Tel. 00962 6 4725071, Ext.: 330, Fax. 00962 6 4726099

Mobile: 00962 777 492541

E-mail: salam.ayoub@narc.gov.jo, salamayoub@hotmail.com

URL: www.narc.gov.jo

#### **Languages:**

English: excellent; Arabic: native language.

#### **Education:**

2001: Ph.D. in Horticulture / Olive tree physiology and propagation.

Faculty of Agriculture, University of Jordan, Amman.

1995: M.Sc. in Horticulture

Faculty of Agriculture, University of Jordan, Amman.

1987: B.Sc. in Plant Production

Faculty of Agriculture, University of Jordan, Amman.

1983: General Secondary Education Certificate / Scientific Stream

#### **Areas of Interest:**

- Fruit trees cultivation.
- Olive cultivars and genetic resources.
- Olive irrigation and orchard management.
- Management of olive mills by-products.
- Organic farming.

#### **Experience:**

July, 2023 – till present: Horticulture Consultant for the Director General of NARC January, 2018 – June, 2023: Director of Horticulture Research Directorate at NARC. October, 2012 – December, 2017: Director of Olive Research Department at NARC. June, 2001 – September, 2012: Senior Researcher;

Deputy Director of Olive Research Department at NARC

## **Responsibilities:**

- Writing research proposals for external funding.
- Management of olive research projects.
- Training of researchers on writing research proposals.
- Training of extension agents and farmers.

- National coordinator for the Project "Cross Border Living laboratories for Agroforestry (LIVINGAGRO)" funded by ENI CBC Med Programme (2019 2023).
- National coordinator for the Project "Improving olive oil quality in the Eastern Middle countries" funded by USAID, MERC Programme (2019-2023).
- National coordinator for the Project "Bioresources for Oliveculture (BEFORE)", funded by EU-Horizon 2020-MSCA-RISE (2015-2018).
- Project Coordinator: "Characterization of East Mediterranian traditional olive cultivars for the development of PDO brands for local and export markets", funded by USAID. 2012-2016.
- Principal investigator for the project "Utilization of Reclaimed Wastewater for Olive Irrigation", funded by USAID. 2012-2016
- Principal investigator for the project "Effect of olive mill wastewater land-spreading on olive tree performance, oil quality and soil properties" funded by the Scientific Research Support Fund, Jordan. 2010-2013.
- Project Coordinator: "Molecular, morpho-agronomic characterization and evaluation of olive landraces and wild types", funded by The Higher Council for Science and Technology, Jordan. 2008-2011.
- National Coordinator for the project "Conservation, Characterisation, Collection and Utilization of Genetic Resources in Olive (RESGEN)", funded by the International olive council, Spain. 2007-2008.

### October, 1994 – September, 1998: Fruit Tree Researcher at NCARE

**Responsibilities:** Designing, conducting, and analyzing fruit tree research experiments.

#### **Professional Improvement and Training Experience:**

- 10-14 September, 2023: The IX International Olive Symposium, University of California, Davis, USA.
- 15-19 October, 2018: 6<sup>th</sup> International Conference on Olive Tree and Olive Products, OliveBioteq-2018, Seville, Spain.
- 12-16 August, 2018: International Horticultural Congress, Istanbul, Turkey.
- 10-14 October, 2016: The 8<sup>th</sup> International Olive Symposium, Split, Croatia.
- 13-16 March 2016: USAID, PEER/MERC Participants Forum, Amman, Jordan.
- 15-16 December 2015: National Agricultural Conference, Utilization of olive mill wastewater, Irbid, Jordan.
- 18-22 October 2015: Workshop on olive oil quality improvement. Capacity building of personnel in Jordan olive industry. Amman, Jordan.
- 3-6 November, 2014: OLIVEBIOTEQ-2014 International Conference, Amman, Jordan
- 11-13 June, 2014: Training and Capacity Building on Horizon 2020 for Mediterranean NCPs, Research Managers and Researchers. Marackech, Morocco.
- 24-26 February 2014: Workshop on "Sustainable olive oil: Clean production and waste management", HORIZON 2020 Initiative, Amman, Jordan.
- 16-17 May, 2012: Participate in the Regional Organic Agriculture Conference, Jordan.
- 1-4 Nov. 2011: Participate in the 4<sup>th</sup> International Conference 'Oliviculture, Biotechnology and Quality of Olive Tree Products' (OLIVEBIOTEQ 2011), Chania, Crete, Greece.
- 2-27, May 2010: Management leadership training course, Amman, Jordan.
- 10-21, May 2009: SPSS Statistical analysis training course, Amman, Jordan.
- 15-19, December 2009: Participate in the Third International Seminar on OliveBioteq. Sfax, Tunis.

- 1-3, December 2008: International Seminar on olive genetic resources, Marrakech, Morocco.
- 7 Oct. 12 Nov. 2009: Participate in Research Proposal Writing Workshops, Higher Council for Science and Technology, Amman, Jordan.
- 16-20, November 2008. Workshop on Irrigation water management in the Middle East, Antalya, Turkey.
- 5-10 November, 2006: Participate in the Second International Seminar on Biotechnology and Quality of Olive Tree Products Around the Mediteranian Basin, Sicily-Italy.
- 1-3 November, 2006: Participate in the Third International Conference on Water Resources in Mediterranean Basin, Tripoli Lebanon.
- 14-17 June, 2006: Annual Meeting for Olive Genetic Resources Project, Florence, Italy.
- 21-23 March, 2005: The 3<sup>th</sup> Post-Harvest Training: Technologies and Marketing Aspects. Antalya, Turkey.
- 14-21 Dec. 2003: International course on the improvement of olive oil quality. Croatia.
- 31 May 5 June, 2003 and 27-30 July, 2003: Training Workshop As a Taster of Virgin Olive Oil. 'Olive Oil Tasting Physiological Fitness'. Amman, Jordan.
- 1-3 April, 2003: Workshop on management leadership. Jordan.
- 2-6 December, 2002: Euro–Mediterranean advanced training course on olive growing. Napoli, Italy.
- 2-13 September, 2001: Specialized training course on DNA molecular marker techniques for crop improvement. ICARDA / Aleppo, Syria.

### **Publications:**

- 1- **Ayoub, S.**, Bashabsheh, I., Abulaila, K., Damer, S., Khreisat, Z., Obeidat, I., Al-Jazazzi, S., Naser, Z., Quddoumi, S. and Abudalo, A. 2018. Land spreading of olive mill wastewater: Effects on soil chemical properties, microbial activity and weed biodiversity. **Acta Horticulturae**, 1199: 291-296.
- 2- **Ayoub, S.** 2020. Morphological characteristics and oil quality aspects of some Jordanian olive cultivars. **Acta Horticulturae,** 1297: 309-314. https://doi.org/10.17660/ActaHortic.2020.1297.42.
- 3- Sadder, M., Brake, M., **Ayoub, S.**, Abusini, Y., Al-Amad, I., Haddad, N. 2023. Complete mitochondrial genome sequence of historical olive (*Olea europaea* Linnaeus 1753 subsp. *europaea*) cultivar Mehras in Jordan. **Mitochondrial DNA Part B Resources.** VOL. 8, NO. 11, 1205–1208. https://doi.org/10.1080/23802359.2023.2275828
- 4- Haddad, N., Migdadi, H., Brake, M., **Ayoub, S.**, Obeidat, W., Abusini, Y., Aburumman, A., Al-Shagour, B., Al-Anasweh, E., and Sadder, M. 2021. Complete chloroplast genome sequence of historical olive (*Olea europaea* subsp. *europaea*) cultivar Mehras, in Jordan. **Mitochondrial DNA Part B**, VOL. 6, NO. 1, 194–195. https://doi.org/10.1080/23802359.2020.1860712.
- 5- Al-Kilani1, M., Taranto, F., D'Agostino, N., Montemurro, C., Belaj, A., **Ayoub, S.**, Albdaiwi, R., Hasan, S., and Al-Abdallat, A. 2024. Evaluation of genetic diversity among olive trees (*Olea europaea L.*) from Jordan. **Frontiers in Plant Science**, 15: 1-17, DOI 10.3389/fpls.2024.1437055
- 6- **Ayoub, S.**, Al-Shdiefat, S., Rawashdeh, H. and Bashabsheh I. 2016. Utilization of reclaimed wastewater for olive irrigation: Effect on soil properties, tree growth, yield and oil content. **Agricultural Water Management,** 176: 163-169.

- 7- Ayoub, S., Al-Absi, K., Al-Shdiefat, S., Al-Majali, D., Hijazean, D. 2014. Effect of olive mill wastewater land-spreading on soil properties, olive tree performance and oil quality. **Scientia Horticulturae**, 175: 160–166.
- 8- Brake, M., Migdadi, H., Al-Gharaibeh, M., **Ayoub, S.**, Haddad, N., El Oqlah, A. 2014. Characterization of Jordanian olive cultivars (*Olea europaea* L.) using RAPD and ISSR molecular markers. **Scientia Horticulturae**, 176: 282–289.
- 9- Khdair, A., **Ayoub, S.**, and Abu-Rumman, G. 2015. Effect of pressing techniques on olive oil quality. **American Journal of Food Technology**, 10 (4): 176-183.
- 10- Ahmad, R. and **Ayoub, S**. 2018. Evaluation of four rejuvenation pruning methods on olive tree vegetative growth and yield. **Acta Horticulturae**, 1199: 379-384.
- 11- Naoum, S., Albalawneh, A., **Ayoub S.**, Diab, M., Amayreh, I., Ammoush, M., Kawaleet, B. and Daoud. L. 2018. Productivity of water, growth and yield of olive trees under deficit irrigation. **Acta Horticulturae**, 1199: 261-266.
- 12-Ahmad, R. and **Ayoub**, **S**. 2014. A comparative study of hand-held harvesting machine with traditional methods used for olive harvesting in Jordan. **Proceedings** of the 5th Int. Conf. Olivebioteq 2014, 206-211.
- 13-Ayoub, S., Al-Shdiefat, S., Rawashdeh, H. and Bashabsheh I. 2013. Chemical and sensory properties of olive oil as influenced by different sources of irrigation water. **Journal of Agricultural Science and Technology**, 3 (2):105-112.
- 14-Ayoub, S. Shdiefat, S., Ahmad, R., and Al-Hewian, M. 2009. Morphological and pomological characteristics of Jordanian olive cultivars. **Proceeding of the Third International Seminar on OliveBioteq. Sfax, Tunis.**
- 15-**Ayoub, S**. and Qrunfleh, M. 2008. A Study on Some Physiological and Anatomical Aspects of Rooting 'Nabali' and 'Raseei' olive Semi-Hardwood Stem Cuttings. International Symposium on Citrus and Other Tropical and Subtropical Fruit Crops **Acta Hort. (ISHS)** 773:221-226.
- 16-**Ayoub, S**. 2006. Olive Industry in Jordan, Second International Seminar on OliveBioteq, Recent Advances in Olive Industry, Italy, pp. 65-71.
- 17-Ayoub, S. and Qrunfleh, M. 2006. Anatomical Aspects of Rooting 'Nabali' and 'Raseei' Olive Semi-Hardwood Stem Cuttings. **Jordan Journal of Agricultural Sciences**, 2(1): 16-28.
- 18-**Ayoub, S**. and Qrunfleh, M. 2006. Seasonal Variation in Rooting 'Nabali' and 'Raseei' Olive Cuttings in Relation to Shoot Content of Endogenous Plant Hormones. **Jordan Journal of Agricultural Sciences**. 2(2): 119-131.
- 19-Shdiefat, S., **Ayoub, S**., and Jamjoum, K. 2009. Effect of Irrigation with Reclaimed Wastewater on Soil Properties and Olive Oil Quality. **Jordan Journal of Agricultural Sciences,** 5(2): 128-141.
- 20- Shdiefat, S., **Ayoub, S.**, Nusir, J., El-Kholy, M., and Al-Shoul, O. 2012. Following Olive Footprints in Jordan. In: Following Olive Footprints, Cultivation and Culture, Folklore and History, Traditions and Uses. **Joint publication of AARINENA, IOC and ISHS, pp.198-208.**
- 21-Alsaed, A., **Ayoub, S.**, Al-Ismail, A. and Ahmad, R. 2012. Influence of water quality used in irrigation on the sensory properties of olive oil. **La Rivista Italiana Delle Sostanze Grasse.** Vol. 89: 47-53.

22- Al-Ismail, A., Alsaed, A., Ahmad, R. and **Ayoub, S**. 2010. Influence of the quality of water used in irrigation on the chemical properties of olive oil. **La Rivista Italiana Delle Sostanze Grasse,** Vol. 87: 82-88.

## **Other Publications:**

- 1- Ayoub, S. 2024. Olive Calendar 2024.
- 2- Ayoub, S. 2022. Editor of several articles for the OLIVAE Journal no. 129, IOC.
- 3- Ayoub, S. 2018. Book: Technical Guideline for Olive and Olive Oil Production in Jordan. p. 127.
- 4- Ayoub, S. 2022. Extension Brochure: Olive oil Sensory Assessment
- 5- Ayoub, S. 2022. Extension Brochure: Olive oil a friend to your health.
- 6- Ayoub, S. 2022. Extension Brochure: Olive oil in the kitchen.
- 7- Ayoub, S. 2022. Extension Brochure: Olive harvesting and milling guidelines.
- 8- Ayoub, S. and others. 2010. Booklet; Principles of organic farming, p. 53.
- 9- Ayoub, S. 2009. Booklet; Guideline for Grafting Fruit Trees, NCARE, p. 24.
- 10-Ayoub, S. 2007. Booklet; Olive Oil Production, NCARE, p. 56.
- 11- Ayoub, S. 2007. Booklet: Apple cultivars and Rootstocks, NCARE, p. 40.

### **National Cooperation:**

- Member in the Jordanian Olive Oil Tasting Panel.
- President of the Jordanian Society for Organic Farming from 2009 till 2011.
- Member of the Jordanian Society for Sensory Evaluation of Foods.
- Member in the Jordan Agricultural Engineering Association.

#### **International Cooperation:**

- Coordinator of the AARINENA Olive Network.
- Organizer of the 5<sup>th</sup> International Olive Conference (OLIVEBIOTEQ-2014) which was held in Amman, Jordan, 3-6 November, 2014.
- Member in the International Society for Horticultural Science (ISHS).
- Olive oil expert for the International Olive Council / Madrid, Spain.

## **Co-adviser for Master student:**

Hala Al-Farayeh, 2017, Effect of harvesting dates on olive oil quality. Mutah University, Al-Karak, Jordan.

#### Thesis defense committee's membership for the following Master students:

- Co-adviser for Master Student, 2018. Effect of cultivar and harvesting dates on olive oil quality. Faculty of Graduate Studies, Mutah University, Jordan.
- Ajlouni, Mohamad. 2017. Effect of olive mill wastewater on soil physical properties. Faculty of Graduate Studies, Jordan University of Science and Technology.
- Nusair, Jeehan. 2016. Effect of olive mill wastewater irrigation treatments on broadbean, weed and the environment. Faculty of Graduate Studies, Jordan University of Science and Technology.
- Masad, Isra. 2014. The impact of lime treated olive mill wastewater on forest and forage crops growth, and potential use by the local community in northern of Jordan. M. Sc. Thesis. Faculty of Graduate Studies, Jordan University of Science and Technology.

■ Tarawneh, Rasha. 2010. Physiological and biochemical aspects of "Manzanilo" olives as influenced by deficit irrigation and water salinity. M. Sc. Thesis. Faculty of Graduate Studies, Mutah University.

# **Reviewer for the following international Scientific Journals:**

- 1. Agricultural Water Management
- 2. Environmental Science and Pollution
- 3. The Egyptian Journal of Horticulture
- 4. Jordan Journal of Agricultural Sciences
- 5. OLIVAE Journal
- 6. Land Degradation and Development
- 7. Journal of Agricultural Science and Technology
- 8. Journal of the Science of Food and Agriculture
- 9. Water, Air and Soil Pollution