## **Curriculum Vitae**



Dr. Heba Al-Fares



## Consultant and expert in proposal writing and evaluation

**Plant biotechnologist:** Competence in molecular fingerprinting, marker-assisted selection, QTL mapping, molecular plant breeding, stress tolerance (salinity, drought), and tissue culture.

#### **General Details**

Name: Heba Mu'een Abd El Raouf Al-Fares

Nationality: Palestinian, USA residence

Membership in professional Societies: Member of the Jordan agricultural Engineers

**Association** 

Email Address: <a href="mailto:heba-alfares@najah.edu">heba-alfares@najah.edu</a>

Mobile: 00972597097069

#### **Education**

PhD and Master Degree in Horticulture and Crop Science, 2010
The University of Jordan
Dissertation Title Identification of QTL Associated with Drought Tolerance in Barley (*Hordeum vulgare* L.). GPA (Excellent)

Master Degree in Environmental protection & science, 2002 An-Najah National University. University. Thesis Title Comparative Study of Genetic Diversity in Durum Wheat in Palestine. GPA (Good)

B.SC. Degree in Plant Production & Protection, 1999 An-Najah National University GPA (Good)

## **Research interests**

Plant molecular biology

Plant breeding for salinity and drought tolerance

Gene mapping, DNA analysis and QTL analysis

Marker assisted selection and abiotic stress response

Environmental impact assessment

## **Employment Record**

Job Title: **Dean of the Faculty of Agriculture and Vet. Med.** 

Name of Employer: An-Najah National University

From - To: July / 2018 - Until now

#### **Main duties**

 Lead the faculty to develop and maintain strong, relevant research, teaching, and extension programs.

- Foster strong working relationships between the faculty and its alumni, employers, community and news media.
- Develop and manage budgets, project and research activities.
- Represent the Faculty and the university at national and international levels;
- Have a strong commitment towards faculty development, growth and success.

# Job Title: Steering committee member for the Palestinian Agricultural Academic Cooperation Project

Name of Employer: An-Najah National University representative

From - To: July / 2018 - Until now

Palestinian Agricultural Academic Cooperation Project is funded by NUFFIC. The project aims to build new curriculum that is linked to industry, through capacity development of Palestinian academic staff and learning from the Dutch expertise in the academic and agricultural fields, transferring the knowledge to the Palestinian universities to develop the agricultural sector, and linking the university education with industry through conducting field visits to academic, agricultural and industrial Dutch institutions, training courses in eLearning and entrepreneurship.

# Job Title: Project coordinator for Green jobs and Sustainable Income Opportunities for Palestinian Female and Male Youth in the Agri-food Sector

Name of Employer: **An-Najah National University representative** 

From - To: June / 2020 - Until now

Green jobs and Sustainable Income Opportunities for Palestinian Female and Male Youth in the Agri-food Sector aims to building the capacities of the selected female and male youth through 14 days tailored knowledge and skills followed by eight month in the industry and farm company. The project is funded by Denmark, and in cooperation with the Ministry of Agriculture and four Local Palestinian Universities, namely; An- Najah National University, Palestine Technical University – Khadoorie, Al-Quds University and Hebron University, the Food and Agriculture Organization of the United Nations (FAO) to promote green jobs and green enterprise development for

Palestinian youth; while contributing to improving access to decent productive jobs and improved employment and income generation opportunities.

Job Title: external evaluator

Name of Employer: research executive agency

From - To: January / 2014 - Until now

Expert Evaluator for the European Commission on European projects submitted under the HORIZON 2020 program. The projects were in calls related to Sustainable food security and sustainable food production systems

Job Title: Head of Plant Production and Protection Department

Name of Employer: Department of Plant Production and Protection, Faulty of

Agriculture, An-Najah National University

From - To: July / 2012 - 2018

#### **Main duties**

- Lead the Department to develop and maintain strong, relevant research, teaching, and extension programs.
- Foster strong working relationships between the Department and its alumni, employers, community and news media.
- Develop and manage budgets.
- Represent the Department in communications with the Faculty and the university;
- Have a strong commitment towards faculty development and help promote the Department's growth and success
- Teaching Experiences

**Undergraduate students (BSc):** Principle of Genetics, Environment in Palestine, Plant biotechnology, Food Biotechnology, Organic Farming and seminar

**Graduate students (Master):** Soil, Water & Plant Relationship, Water - Plant - Soil System, Vegetable Production, Wildlife Protection and Management, **Plant** Biotechnology, Plant Breeding, and Advance Plant Physiology.

Job Title: **Assistant Professor** 

Name of Employer: Department of Plant Production and Protection, Faulty of

Agriculture, An-Najah National University

From - To: January / 2011 - Until now

**Teaching Experiences** 

Job Title **Environmental specialist** 

Name of firm Consolidated Consultants for Engineering and Environment

From - To Feb-2009 - Mar- 2010

## **Main duties**

- Provide technical expertise in Occupational Safety and Health-related (OSH) areas
- Designing, writing and editing environmental reports and permit applications

- Research and collecting data
- Responsible for compliance management of construction project
- Conducting field inspection and report
- Working onsite at utility/construction project
- Follow up for environmental impact for project t, dealing with all environmental and safety issues.
- Conduct awareness campaigns regarding environmental issues for workers and surrounding societies for all projects.
- Inspect and make decision concerning reduction of environmental impact on surrounding wildlife, water resources and people.

Job Title: Research assistant

Name of Employer: The University of Jordan

From - To: 2006-2008

**Preparing and participating in teaching during courses** related to Sustainable Agriculture, Good Agricultural Practices (GAP), GIS, Food Security, Bioinformatics, Tissue Culture, Plant Breeding, Biodiversity, Plant Ecology, Plant Nutrition, and Soil Fertility.

## Laboratory and field work

Plant propagation and Vegetables production lab courses

**Laboratory works:** Molecular marker (SSR, AFLP and RAPD), Using PCR, DNA sequencer, electrophoresis, and manual silver staining.

**Field works:** Planting and planning field experiments, Hand pollination of cereal crops, Data gathering and measurement

## **Data analysis:**

- QTL analysis: mapmaker, QTL Cartographer V2.5
- Statistical analysis using SAS and SPSS

# Job Title: **Technical Manager of Middle East - Regional Agricultural Program, Head of Planning and Extension Programs**

Name of Employer: Ministry of Agriculture

From - To: **2002 - 2003** 

### **Main duties**

- Assist the project coordinator in all project activities.
- Ensures regular activity progress.
- Preparing and finalize the daily, monthly and annual reports.
- Organizing workshops "Training, Meeting".
- Designing and proceeding yearly extension programs for the extension agents.

## Job Title Head of Agricultural Rural Development

Name of Employer Ministry of agriculture

From - To: **2000 - 2002** 

#### **Main duties**

Assessing and analyzing local communities' needs. Developing needed activities.

- Rapid rural appraisal in the target area to collect information about the villagers life concentrating on social and economic life investigating the women and its rule that she play in the management of enterprises and project.
- Training courses related to extension for national resources.
- Preparing and organizing the field days.
- Organizing training program co-operating with UNDP and NGOs.

#### **Publications**

https://orcid.org/0000-0002-6246-8560 ResearchGate

Shtaya MJY, H Abu-Qaoud, Abdallah J, Al-Fares H, Effect of municipal treated wastewater on soil and wheat growth and yield (BSSC-2020-0154) Submitted

QAOUD, HASSAN ABU, IHSAN ABU ALI, HEBA. AL-FARES, TAWFIQ QUBBAJ, and MUNQEZ JY SHTAYA. "EFFECT OF SALINITY ON THE GROWTH AND SOME MORPHOLOGICAL TRAITS OF PEARL MILLET." *Pak. J. Bot* 55: 3.

Qaoud, Hassan Abu, Munqez Shtaya, Numan Mizyed, Heba Al-Fares, and Ahmed Lebdi. "Effect of Short-term Irrigation of Treated Wastewater on Vetch (Vicia sativa L.) and Alfalfa (Medicago sativa L.) Growth." *Legume Research-An International Journal* 45, no. 5 (2022): 626-630.

Shtaya MJY, Abdallah J, Al-Fares H, H Abu-Qaoud, OA Baker, MV Korf, M Haddad.(2015).Detecting genetic diversity among barley landraces grown in the West-Bank, Palestine in 2010-2011. JAPS, Journal of Animal and Plant Sciences 25 (5), 1365-1370.

Shtaya, M. J., Al-Fares, H., Qubbaj, T., Abu-Qaoud, H., & Shraim, F. (2021). Influence of Salt Stress on Seed Germination and Agromorphological Traits in Chickpea (Cicer arietinum L.). *Legume Research: An International Journal, 44*(12).

Al-Fares H., Abu-Qaoud H., (2012) Molecular Characterization of Genetic Diversity in Durum Wheat Landraces in Palestine. Vol.11(66), pp. 12958-12963. AJB.

Nidal Amin Jaradat, Ph.D; Bassam Ali Abu-Shanab, MS; Abdel Naser Zaid, Ph.D; Heba M. Al-Fares, Ph.D (2019). Impact of Colchicine and Sucrose on the Phytoconstituents of Ocimum basilicum Grown in Hydroponic Conditions. Submitted

Al-Fares H., Akash M.W., Kafawin O. Identification of QTL Associated with Drought Tolerance of Barley (*Hordeum vulgare* L.)

### **Conferences Attended**

Second Palestinian International Water Forum 2020 (PWA)

The 10<sup>th</sup> Mediterranean Beekeeping Forum 30th November - 1st December 2019 Organic fertilizer

Al- Fares H., (2019) Biofertilizers types, uses and benefit 25 September

Healthy soil for healthy life .9/12/2015 An- Najah National University

The Second International Conference on Olive in Palestine (SICOP), 25-26 November 2013. PTUK

Scientific conference on Palestinian plant genetic resources. 21/9/2016.PTUK.

Healthy soil for healthy life .9/12/2015, An-Najah National University

Al-Fares H., Abu-Qaoud H. (2011) .Molecular Characterization of Genetic Diversity in Durum Wheat Landraces in Palestine. International Graduate Conference on Science, Humanities and Engineering.

Al-Fares H., Akash M.W., Kafawin O. (2012) Identification of QTL Associated with Drought Tolerance of Barley (*Hordeum vulgare* L.). In Jordan – Irbid. The Seventh Scientific Agricultural Conference SSAC-2012

Al-Fares H., Akash M.W., Kafawin O. (2012) Identification of QTL Associated with Drought Tolerance of Barley (*Hordeum vulgare* L.) in Palestine. Scientific Conference for Agricultural Research SCAR-2012

## **Conferences Organizing Committee**

The Second International Conference on Olive in Palestine (SICOP), 25-26 November 2013. PTUK

Scientific conference on Palestinian plant genetic resources. 21/9/2016.PTUK.

Healthy soil for healthy life .9/12/2015 An- Najah National University

## **Workshops Attended**

ARIJ and the MOA, Palestinian Forests Sustainability and Rehabilitation: Al Qarin Protected Area in the Southern West Bank and Umm Attut Area in the Northern West Bank within the Mediterranean Eco-system. 2012., Palestine- Bethlehem

ARIJ, Promoting socio-economic sustainable development through innovative technological actions in the field of cultural heritage conservation and protection of natural areas in Mediterranean Basin. 2012. Palestine, Nablus

Najah National University, Faculty of Agriculture Workshop titled "Improvement of olive oil production in Palestine. 5/10/2012.

ARIJ and the MOA, Palestinian Forests Sustainability and Rehabilitation: Al Qarin Protected Area in the Southern West Bank and Umm Attut Area in the Northern West Bank within the Mediterranean Eco-system. Final workshop 2013. Palestine- Ramallah

Najah National University, Faculty of Agriculture Workshop titled "Improvement of olive oil production in Palestine. 4/10/2013.

PAAC, Future Search Workshop titled "Innovation and sustainability of the agricultural sector in Palestine" held in Jericho Resort village from 30 August to September 1st, 2016.

Najah National University, Faculty of Agriculture Workshop titled "Improvement of olive oil production in Palestine. 13/10/2016.

Najah National University, Faculty of Agriculture Workshop titled "Oil production fact and future prospective". 4/10/2019.

## **Ongoing research**

- 1. Effect of Bacillus megaterium on barley grown under saline stress.
- 2. Growth enhancement and alleviation of deleterious effects induced by salt stress in Faba Bean (*Vicia faba*) by Growth promoting bacteria
- 3. The influence of plant hormones (IBA, IAA, BS, SA) on the secondary metabolites production in medicinal plants.

## Adviser / committee member

## **Committee member:**

 Growth enhancement of bell pepper under saline condition using brassinosteroids and salicylic acid. 2020. ANU

Author: Mahmoud Droubi Supervisor: Heba Al-Fares

2. Salt Stress Response in Soilless Tomato Treated with Pseudomonas Fluorescens. 2020.

**ANU** 

Author: Taj Mater

Supervisor: Heba Al-Fares

3. Influence of Strigolactones on Growth and Productivity of Cucumber Plant Grown

Under Salt Stress. 2020. ANU Author: Sharhabeel Omar Jebrini

Supervisor: Heba Al-Fares

4. Variation of Quality Parameters in Local Palestinian Wheat Genotypes. 2020. ANU

Author: Soha ghzayel Supervisor: Heba Al-Fares

5. Natural Induction of Potato Crop Resistance by Plant Essential Oil Elicitors to Control Green Peach Aphid Myzus persicae (Sulzer) (Homoptera: Aphididae). 2020 PTUK

Author: Ru`ya Abu-Alfayah Supervisor: Rana Samara

External examiner: Dr. Heba Al-Fares

6. Assessment of Hybrid Constructed Wetland Efficiency using Different Substrates.

2019. ANU

Author: Raed Alary

Supervisor: Dr.Abdel Fattah Malah & Dr. Abdallah Omari

Internal examiner: Dr. Heba Al-Fares

7. Characterization of novel sources of Fusarium resistance in Fakous (Cucumis melo subsp. melo var. flexuosus), by phytopathgological approaches. 2019. ANU

Author: Imad Subhi Eid Supervisor: Mungez Shtaya

Internal examiner: Dr. Heba Al-Fares

8. Growth enhancement and alleviation of deleterious effects induced by salt stress in

Faba Bean (Vicia faba) by Growth promoting bacteria. 2017. ANU

Author: Ali Shaikh

Supervisor: Heba Al-Fares

9. The Effect of Bacillus megaterium on Barley Tolerance to Salinity. 2017. ANU

Author: Hana' Jardaneh Supervisor: Heba Al-Fares

10. Identification of Resistant Sources to Leaf Rust and Powdery Mildew Disease in Oats.

2011

Author: Omar Issam Abed Allah Abu Baker.

Supervisor : Dr. Munqez Shtaya

Internal examiner: Dr. Heba Al-Fares

11. Phenotypic Characterization of Faba Bean (*Vicia faba* L.) Landraces Grown in Palestine. 2012

Author: Talal Hassan Mosa Al Barri Supervisor: Dr. Munqez Shtaya Internal examiner: Dr. Heba Al-Fares

12. Morphological and Genetic Characterization of the main Palestinian olive (Olea

europaea L.) cultivars. 2012 Author: Ramiz Jawad Omar

Supervisor : Dr. Hassan Abu-Qaoud. Internal examiner : Dr. Heba Al-Fares

13. Salinity Management for Barley Production in Brackish and Treated Effluent Irrigated

Agricultural Systems

Author: Maher Abd Allah Ahmed Salahat

Supervisor: Prof. Dr. Marwan Haddad / Supervisor

Dr. Numan Mizyed /Co-Supervisor

Internal examiner: Dr. Heba Al-Fares

14. Evaluation of the Performance Indicators for Safety reuse of Treatment Greywater in Northern West Bank

Author: Abeer Jomah

Supervisor: Prof. Dr. Marwan Haddad

Co-Advisor: Heba Al-Fares

15. Environmental risk assessment and modeling of growth yield and uptake of various non local barley cultivars irrigated with simulated wastewater.

student: Zakiyeh Namrotee Advisor: Prof Marwan Haddad Co-Advisor: Dr. Munqez Shtaya

Internal examiner: Dr. Heba Al-Fares

## Languages

Language	Mother Tongue	Read	Write	Speak	Understand
Arabic	Yes	Easily	Easily	Easily	Easily
English	No	Easily	Easily	Easily	Easily

## References

Name	Occupation or Business	Telephon e Number	Country	Email Address
Dr. Mahmud Duwayri	Professor of Plant Breeding / The University of Jordan	(00962) 6- 5355000	Jordan	duwayri@ju.edu.jo
Dr. Mahmud Kasrawi	Professor of Plant Breeding / The University of Jordan	(00962) 6- 5355000	Jordan	Kasrawi@ju.edu.jo
Dr. Muhanad W. Akash	Associate Professor of Plant Breeding / The University of Jordan	(00962) 7969559 58	Jordan	makash@ju.edu.jo
Dr. Saida Affouneh	Assistant president for digitalization and elearning	0097259 8245925	Palestin e	s.affouneh@najah.e du