

**Personal Information**

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| <b>Name</b>                    | NIHAD G. ALSMAIRAT  |
| <b>Place and date of birth</b> | September,11,1962 /Fuheis-Jordan  |
| <b>Faculty</b>                 | School of Agriculture/The University of Jordan<br><a href="http://eacademic.ju.edu.jo/drnihad/default.aspx">http://eacademic.ju.edu.jo/drnihad/default.aspx</a> |
| <b>Department</b>              | Department of Horticulture and Crop Science   |
| <b>e-mail</b>                  | <a href="mailto:drnihad@ju.edu.jo">drnihad@ju.edu.jo</a><br><a href="mailto:drnihad2@yahoo.com">drnihad2@yahoo.com</a>  |

**Qualifications**

| <b>Qualification</b> | <b>Specialization</b> | <b>University of donor rank</b> | <b>Date</b> |
|----------------------|-----------------------|---------------------------------|-------------|
| B.Sc.,               | Plant Production      | The University of Jordan        | 1985        |
| M.Sc.,               | Horticulture          | The University of Jordan        | 1988        |
| Ph.D.,               | Horticulture          | The University of Jordan        | 2002        |

**Specialization and domain of interest**

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|---------------------------|---|
| <b>Specialization</b>     | Horticulture  |
| <b>Domain of interest</b> | Postharvest Physiology and Technology of Fresh Fruits |

**Title and abstract of the doctoral thesis (within 150 words)**

This study was carried out to compare root ability of terminal , median and basal stem cutting (15 cm long) of two apple clone rootstocks; the hard-to-root East Malling 9 (M.9) and the easy -to-root Malling - Merton 106 (MM.106) during November and December (2000) , January and February (2001) and again during November and December (2001) , January and February (2002). Total phenol, auxin, carbohydrate, nitrogen and C/N ratio determined at each sampling date. In addition , the anatomical structure of the stem cutting was studied at time of preparing the cuttings and again six weeks later .For each sampling date , rooting experiments were carried out in a glasshouse of Al-Hussein Agriculture station , Baqa'a , Jordan. The results indicated that the anatomical structure of MM.106 and M.9 was basically the same for terminal, median and basal stem cutting. Groups of brachysclereids built in MM.106 and M.9 stem cuttings on the periphery of phloem. For the two rootstocks, the cambial activity was highest in November to be declined gradually and to remain low through February.

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| <b>Career Experience</b> |
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| <b>Job Title</b>   | <b>Place of work</b>   | <b>Date</b> |
|--|--|-------------|
| Assistance in Plant Propagation and Floriculture lab   | Faculty of Agriculture, University of Jordan   | 1985-1986   |
| Agricultural Engineering in the Martyr Memorial  | Force army, Amman , Jordan   | 1988-1990   |
| Fruit Trees orchards   | Private sector   | 1990-1992   |
| Quality Control in Al-Qastal Cold Stores for Fruits and Vegetables   | Agricultural Marketing and Processing Company of Jordan , Jordan                                       | 1992-1995   |
| Fruit Trees Researcher   | National Center for Agricultural Research and Technology Transfer (NCARTT) , Almshagar center , Jordan | 1996        |
| Cold stores Consultant   | Private sector   | 1996-1998   |
| Devoted my-self to get the Ph.D. degree  | The University of Jordan   | 1998-2002   |
| Manager of Agricultural Integrated Input Management Project in the Jordan valley hosted by Strategic Studying Center/ The University of Jordan | Jordan valley  | 2003-2004   |
| Team leader for Technology Transfer Specialist. Horticultural Export Promotion and Technology Transfer project "HEPTTP" hosted by NCAR.        | World bank , Amman , Jordan  | 2004-2007   |

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|--|---|-------------------|
| Manager of agricultural research stations.   | Faculty of Agriculture, The University of Jordan, Jordan. | 2008-June,2009    |
| Post doctorate – Postharvest lab / College of Plant and Soil Science / Horticultural Department/ Michigan State University, MI,USA | Michigan State University , MI, USA                       | June 2009-2010    |
| Lecturer / Department of Horticulture and Crop Science / Faculty of Agriculture – University of Jordan                             | Faculty of Agriculture/The University of Jordan           | June 2010-2011    |
| Assistant prof / Department of Horticulture and Crop Science / Faculty of Agriculture – The University of Jordan                   | Faculty of Agriculture/The University of Jordan           | October,2011-2014 |
| Associate prof. / Department of Horticulture and Crop Science / School of Agriculture –The University of Jordan                    | The University of Jordan                                  | March, 2014       |
| Prof. / Department of Horticulture and Crop Science / School of Agriculture –The University of Jordan                              | The University of Jordan                                  | March, 2019       |

### Administrative works and committees

| Administrative work and committee  | Date          |
|--|---------------|
| Assistant Dean for Quality and Development Affairs                         | 2013-2017 .   |
| The University of Jordan Learning Outcome Committee                        | 2016 till now |
| Founder The Botanical Garden in the Agricultural Research Station in Ghour | 2014-2018     |

### Publications

| Name of researcher   | Research title, Publisher, Date   |
|--|---|
| VanNocker,S.;Berry,G.,Najdowski,J.;Michelutti,R.;Luffman,M.;Forsline,P;Alsmairat,N.;Beaudry,R.;G.Nair,M. and Ordidge ,M. | Genetic diversity of red-fleshed apples (Malus), <b>Euphytica . (2012)</b>  |
| Contreras , C. Alsmairat, N. Beaudry ,R.,  | Prestorage conditioning and diphenylamine improve resistance to controlled -Atmosphere- Related injury in 'Honeycrisp' apple. <b>HortScience</b> , 49(1):76-81 <b>(2014)</b>  |
| Alsmairat,N., N., El-Assi ,A.,Alabdallat and G.,Mehyar   | Enhancement of edibility of “Barhi” and “Medjool” Date Palm cultivars at Khalal mature stage <b>.Inter.J.Botany .9(3),123-132 .(2013)</b>   |
| Mansour,A., Al-Bana ,L., Salem, N., Alsmairat, N.,   | Disease Management of organic tomato under greenhouse conditions in the Jordan valley. <b>Crop Protection. 60:48-55.(2014)</b>  |
| Mehyar ,G.,El Assi, N., Alsmairat,N., Holley , R.,   | Effect of edible coating on fruit maturity and fungal growth on Berhi dates. <b>International J. Food Sci. Tech.</b> 49,2409-2417. <b>(2014)</b>  |
| Alsmairat, Nihad Al-Ajlouni,Malik Ayad,Jamal Othman,Yahia St.Hilaire,Rolston   | Composition of soilless substrates affect the physiology and fruit quality of two strawberry (Fragaria × ananassa Duch.) cultivars. Journal of Plant Nutrition. <b>Online. http://www.tandfonline.com/loi/lplazo .2018.</b> |
| Salah-Eddin Araj, Mahmoud Kasrawi, Nihad Alsmairat, Yahia Othman, Nida Salem and Mohammad Tabieh                         | Influence of greenhouse shading techniques on pests numbers, leaf-level physiology, fruit yield and quality of cucumber.Fresenius Env. Bull. 27:5721-5726,2018.   |
| Alsmairat,N., Engelgau,P., and Beaudry, R.   | Changes in free amino acid content in the flesh and peel of 'Cavendish' banana fruit as related to branched-chain ester production, ripening, and senescence. <b>Amr J. Hort. Scie.</b> 143(5),1-11.                        |

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| Jamal Y. Ayad, Yahia A. Othman, Malik G. Al-Ajlouni, and Nihad G. Alsmairat   | Photosynthesis, Gas exchange and yield of two strawberry ( <i>Fragaria X ananassa</i> Duch.) cultivars in response to gibberlic acid. <i>Fresenius Env. Bull.</i> 29:2018.  |
| Nihad Alsmairat, Tamara Al-Qudah, Najib El-Assi, Ghadeer Mehyar, Issa Gammoh, Yahia Othman, Salah-Eddin Araj, Tawifiq Al-Antary.    | Effect OF DRYING PROCESS ON PHYSICAL AND CHEMICAL PROPERTIES OF 'MEDJOOL' DATE PALM FRUITS. <i>Fresenius Environmental Bulletin</i> , 28(2A/2019),2019.   |
| Yahia Othman, Khaled Bataineh, Malik Al-Ajlouni, Nihad Alsmairat, Jamal Ayad, Safwan Shiyab, Basam Al-Qarallah, Rolston St Hilaire. | Soiless culture: Management of growing substrate, water,nutrient, salinity, microorganism and product quality. <i>Fresenius Environmental Bulletin</i> , 28(4A/2019);3249-3260,2019   |
| Safwan Shiyab , Mohamad Shatnawi , Rida Shibli , Nihad Alsmairat , Jamal Ayad , and Muhanad Akash .                                 | Growth,Nutrient Acquisition, and Physiological Responses Of Hydroponic Growth Tomato To Sodium Chloride Salt Induced Stress. <i>Journal of Plant Nutrition</i> 36:665-676 , Taylor & Francis Group,2013.  |
| Nihad G. Alsmairat,Najib M. El Assi,Ayed M. Al Abdallat and Gadeer F. Mehyar  | Enhancement of Edibility of "Barhi" and "Medjool" Date Palm Cultivars at Khalal Mature Stage. <i>International Journal of Botany</i> , 9(3): 123-132 Asian Network for Scientific Information, 2013.  |
| Nihad Alsmairat,Carolina Contreras,James Hancock,Pete Callow,and Randolph Beaudry.  | Use of Commercially-Relevant O <sub>2</sub> and CO <sub>2</sub> Partial Pressures to Evaluate the Sensitivity of Nine Highbush Blueberry Fruit Cultivars to Controlled Atmospheres. <i>HortScience</i> , 46(1):74-79., American Society for Horticultural Science 2011. |
| Najib M. El Assi, Nihad Al smeirat, and Nazeer Al hadidi.   | Determination of the Optimum Harvest Date for "Magenta" Charentais Melon( <i>Cucumis melo</i> L.) Fruit in Jordan. <i>Jordan Journal of Agriculture Sciences</i> , 7(1),32-42, The university of Jordan,2011.   |
| N.Alsmeirat and N.M.El Assi   | Changes in Esters,Alcohols and Acetaldehyde in Two Cultivars of Charentais Melon as Influenced by Harvest Date and Storage. <i>International Journal of Botany</i> , 6(2) : 81-88, Asian Network for Scientific Information,2010.                                       |
| N. El-Assi and N. Alsmeirat   | Total Aroma and other Quality Factors of Hugo Charentias Melons as Affected by Harvest Date and Refrigeration. <i>International Journal of Botany</i> , 6(1): 21-27. Asian Network for Scientific Information, 2010.  |
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### Scientific conferences and symposia

| Conference Title   | Place and date of conference  | Type of participation  |
|--|---|--|
| ASHS, American Society for Horticultural Science   | USA/2011  | Use of Combinations of Commercially-Relevant O <sub>2</sub> and CO <sub>2</sub> Partial Pressures to Evaluate the Sensitivity of Nine Highbush Blueberry Cultivars to Modified Atmospheres |
| 28 <sup>th</sup> International Horticultural Congress in Lisbon                                | Portugal – Lisbon , 2012 28th International Horticultural Congress in <b>Lisbon</b> | "Kinetics of Volatile Synthesis Following Cellular Disruption Associated with Masticated and Cut Fresh Apple Fruit".Beaudry, R.M.;Al Smairat, N. ;and Contreras, C.                        |
| XI International Controlled & Modified Atmosphere Research Conference .                        | <b>Italy</b> ,2014  | Use of Modified Atmosphere Packaging to Measure and Model Respiration and Ethylene Production at Superatmospheric O <sub>2</sub> Concentrations .  |
| XII International Controlled and Modified Atmosphere Research Conference CAMA                  | <b>Warsaw</b> (Poland) June 18-22,2017  | Attendance   |
| ASHS 2018 Annual Conference - Washington, DC   | <b>Washington/USA</b> ,30-3/8/2018  | Changes in Free Amino Acid Content in the Flesh and Peel of ‘Cavendish’ Banana Fruit As Related to Branched-Chain Ester Production, Ripening, and Senescence                               |
| XIII <sup>th</sup> International Controlled and Modified Atmosphere Research Conference (CAMA) | <b>Leuven/ Belgium</b> : 17 to 20 May 2020 .  | <b>Inhibition of 1-MCP action by low O<sub>2</sub></b>   |

### Training courses

| Name of course  | Date            |
|---|-----------------|
| Evaluation of students' learning without tests/Accreditation & quality assurance center | March 9,2017    |
| Quality assurance procedures and models/Accreditation & quality assurance center        | April 26,2016   |
| Advanced targeted learning outcomes/Accreditation & quality assurance center            | October 5,2016  |
| Exception detection/Accreditation & quality assurance center                            | March 3,2016    |
| Designing national qualifications frameworks/Accreditation & quality assurance center   | October 20,2016 |

**Teaching activities**

| Taught Courses   | Bachelor | Graduate                 |
|--|----------|--------------------------|
| Harvesting , Handling and Storage of Horticultural Crops           | √        | <input type="checkbox"/> |
| Basics of Fruit Trees  | √        | <input type="checkbox"/> |
| Fruit Trees Production   | √        | <input type="checkbox"/> |
| Practical Training in Horticulture and Field Crops/<br>Fruit Trees | √        | <input type="checkbox"/> |
| Principles of Plant Production                                     | √        | <input type="checkbox"/> |
| Agriculture in Jordan  | √        | <input type="checkbox"/> |
| Home Gardening   | √        | <input type="checkbox"/> |

**Membership in scientific and professional bodies and societies**

| Name and place of scientific body and society                               | Date          |
|---|---------------|
| Jordan Exporters and Producers Association for Fruits and Vegetables (JEPA) | 2005 tell now |
| Jordan Society for Scientific Research (JSSR)                               | 2006 tell now |
| American Society for Horticultural Science (ASHS)                           | 2017 tell now |
| International Society of Horticulture Science (ISHS)                        | 2017 tell now |

**Awards**

| Name of Award   | Donor and place of award  | Date |
|---|---|------|
| Gold Prize<br>"Kinetics of<br>Volatile Synthesis<br>Following Cellular<br>Disruption<br>Associated with<br>Masticated and Cut<br>Fresh Apple Fruit" | 28 <sup>th</sup> international Horticultural Congress in<br>Lisbon/Portugal | 2012 |
| Distinguished<br>Researcher prize   | Presidency of The University of Jordan/Jordan                               | 2012 |