



Jamal Sulieman Sawwan

PERSONAL INFORMATION

Name: Jamal Sulieman Sawwan
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E-mail: jsawwan@hotmail.com; jsawwan@illinois.edu; jsawwan@ju.edu.jo
Date of Birth: February 25th, 1955
Place of Birth: Anabta
Marital Status: Married
Citizenship: Jordanian /US permanent resident
Languages: Arabic and English

EDUCATION

1. Ph.D. May, 1987. Dept. of Horticulture, University of Illinois at Urbana-Champaign , Illinois, U.S.A.
- Dissertation title: A Study of Pothos (*Epipremnum aureum*) Water Requirements.
2. M.Sc. May, 1981. Horticulture, Plant Production Dept. , Faculty of Agriculture, University of Jordan, Amman - JORDAN.
- (I was ranked number one).
- Thesis title: Influence of cross-pollination on fruit set and quality of *Olea europea* L. CV. Nabali.
3. B.Sc. May, 1977. Plant Production and Protection Department , Faculty of Agriculture, University of Jordan, Amman - JORDAN.

OBJECTIVES

Jamal Sawwan had been in community service and teaching for more than thirty five years. During this period he has helped Jordanian farmers and poor families through several projects and trainings on home gardening . Teaching of both undergraduate and graduate programs have lead me to give and guide students to be efficiently productive. My objective is to lead and give in a renowned institute and crown my career in giving at the highest level of training, teaching research and community development and linking scientific knowledge with practicing beneficiaries.

Development of the institute is a dynamic process involving students, faculty , staff and administration . The shortcomings of any partner will impair the whole performance of the institution.

PROFESSIONAL EXPERIENCE

1. May 1977-May 1979: Research Station Supervisor, Faculty of Agriculture, University of Jordan, Amman - JORDAN. I gained a good training in Irrigation as I worked with Prof. Max Jensen; I have also gained an excellent opportunity to work with Prof. Shatat ,Prof, Fenton Larson , and Prof. Berry Crandall in fruit trees and vine yards. Soil and land reclamation was also among my main duties. Above all running the daily needs and follow up of the human resources was the best experience I gained.
2. Aug. 1979-May 1981: Teaching and Research Assistant, Plant Production Department, Faculty of Agriculture, University of Jordan, Amman - JORDAN. During this era I worked closely with researchers in planning and execution of field experiments and laboratory work.
3. May 1981-Aug. 1983: Full time Lecturer, Plant Production Department, Faculty of Agriculture, University of Jordan, Amman - JORDAN. This is the starting point in my academic pursuits as I started teaching some courses.
4. July 1987-July 1994: Assistant Prof. of Ornamental Horticulture and Plant Tissue Culture Director. Plant Production Department, Faculty of Agriculture, University of Jordan, Amman - JORDAN. During this period I started the first plant Tissue culture in the MENA region. I went to McGill university for training in plant tissue culture and started an extensive training programs in plant tissue culture which lead in two of our trainees started commercial business in plant tissue culture.
5. July, 1994-Aug. 2000: Associate Prof. of Ornamental Horticulture and Plant Tissue Culture Director. Plant Production Department , Faculty of Agriculture, University of Jordan, Amman – JORDAN .Besides being in the university ,I was entrusted to work as the Minister of youth consultant of turf grass to establish the athletic fields. We have established 13 soccer fields in the 13 governorates in Jordan.
6. August, 2000 till now: Professor of Ornamental Horticulture and Plant Tissue Culture Director. Horticulture and Crop Science Department, Faculty of Agriculture, University of Jordan, Amman- JORDAN.
7. Department head, Sept. 2002 –Sept 2006. A lot of administrative experience accumulated during these four years.
8. Vice-Dean, Faculty of Agriculture, Dec. 2009-Oct. 2010.
9. Dean , Institute of Agricultural Research, Training, Extension and Education. Oct. 2010-Sept.2012.

10. Visiting Professor. University of Illinois at Urbana - Champaign , Jan., 2013- Jan. 2014.
11. . Visiting Professor. American University of Beirut. Beirut, Lebanon Jan.2014 –Jan.2016
12. Professor of Horticulture , University of Jordan, Amman -JORDAN.

Administrative Experience:

Just after graduation in 1987, I was entrusted to be the Canadian counterpart in its cooperative project in plant tissue culture. During this project which lasted 6 years , I mentored many graduates and trained Tens of trainees in plant tissue culture and reached out the community and two plant tissue culture facilities were established after their owners were trained in our facility.

I started formulation of a multidisciplinary Biotechnology group in the Faculty of Agriculture and crowned it by establishing a Master degree in Biotechnology. I was appointed by the PA consultants (an American consoling corporation) as a Horticulturist to oversee the use of reclaimed waste water in Agriculture, I managed to form a farmer cooperative from the nomads and train them on agricultural practices in view of reclaimed waste water in Petra Jordan. Several consultations were offered to the farmers during this period. I was also involved in a community development project dealing with home gardening. This 2 years project was funded by the university of Jordan and executed in southern Badia of Jordan.

During my service as a Department Head I put the plans (curricula, Space and Staff) to create new program in Horticultural landscaping and was able to start and mentor this program since 2008.

As a Dean , I started the international cooperation to train Agricultural Professionals from neighboring countries . This has come fruitful through JICA funds.

PUBLICATIONS:

During His long career Jamal has authored and/or co-authored more than 45 publications in different disciplines. (Please note that some are in Arabic language and I am ready to furnish an English summary upon request)

1. Sawwan, J. and F. Shatat. 1983. Influence of cross-pollination on fruit set in *Olea europea* L. C.V. Nabali. Dirasat. Vol. X: 129-134.
2. Shatat, F. and J. Sawwan. 1985. Effect of promaline and gibberellic acid (GA₃) on germination of Mahaleb cherry seeds. Dirasat. Vol. XII: 7-12.
3. Shatat, F. and J. Sawwan. 1986. Effect of inflorescence position on the tree and on shoots on flower development and flower type in the olive. Dirasat. Vol. XIII: 171-185.
4. Spomer, L.A., M.A.L. Smith and J. S. Sawwan. 1988. Rapid, non-destructive measurement of chlorophyll content in leaves with non-uniform chlorophyll distribution.

Photosynthesis Research 16: 277-284. Kluwer Academic Publisher, Dordrecht. Printed in the Netherlands.

5. Sawwan, J.S. 1992. Response of *Chrysanthemum morifolium* Ramat to Drip Irrigation with Treated Wastewater and Fresh Water at Different Planting Densities. Dirasat, 19B. No. 1: 279-295.
6. Sawwan, J.S. 1993. Propagation of *Gypsophila paniculata* "Bristol Fairy" by Stem-tip Cuttings. Advances in Horticultural Sciences 7: 103-104.

7. صوان ، جمال سليمان ومصطفى قرنفة. 1992. الحدائق المنزلية (3216) ، برنامج البيت والتنمية الاسرية. جامعة القدس المفتوحة ، دولة فلسطين.

8. Sawwan, J.S. 1992. Response of *Chrysanthemum morifolium* Ramat to Drip Irrigation with Treated Wastewater and Fresh Water at Different Planting Densities. Dirasat, 19B. No. 1: 279-295.
9. Sawwan, J.S. 1993. Propagation of *Gypsophila paniculata* "Bristol Fairy" by Stem-tip Cuttings. Advances in Horticultural Sciences 7: 103-104.
10. Juboory, K.H., J. S. Sawwan and D.J. Williams. 1994. Effect of dikegulac- sodium and BA plus GA4+7 to enhance lateral branching of golden pothos (*Epipremnum aureum*). The Iraqi Journal of Agricultural Science. Vol. 25, No. 1: 28-33.

11. اشتات ، فهمي ، مصطفى قرنفة وجمال صوان. 1994. انتاج اشجار الفاكهة (2324) ، برنامج البيت والتنمية الريفية. جامعة القدس المفتوحة ، دولة فلسطين.

12. صوان ، جمال سليمان. 1994. تحسين نسبة نجاح نقل اشجار الدراق سلتا باستخدام حمض الاندول بيوتيرك. دراسات العلوم البحتة والتطبيقية 21 ب (5): 7-15.

13. Sawwan, J.S. and N.I. Haddad. 1996. Lentil Seed Germination as a Technique .a for Early Selection for Drought Tolerance. Damascus University Journal, Vol. 12, No. 1: 28-41.

14. Sawwan, J. 1996. Auxin Pretreatment Effects on Root Regeneration of Transplanted Pistachio Seedlings. Dirasat, Agricultural Sciences, Vol. 23, No. 3, 237-242.

15. Al-Juboory, K.H., J.S. Sawwan, R.A. Shibli, R.M. Skirvin and D.J. Williams. 1997. Influence of Auxins and Commercial Rooting Powder on Rooting of Algerian Ivy (*Hedera canariensis* L.). Plant Growth Regulation Society of America (PGRSA). Vol. 25, No. 1: 23-31.
 16. D.Donnely, Y. Leclere, J.S. Sawwan, and N.A. Hadidi. 1997. Performance and yield of potato grown in the Jordanian desert. Hort. Science. 32(3): 475-476.
 17. Sawwan, J., T. Abu-Zahra, S. Khader and E.A. Basher. 1999. Effect of Different Nitrogen Amounts and forms on Growth and Flowering of *Chrysanthemum morifolium* Ramat. Under Glass House Conditions. Dirasat. Vol. 26, No. 3. 364-370.
 18. Sawwan, J. S. and R. Ghuneim. 1999. Light acclimatization of *Schefflera aroboricola*. Advances in Hort. Sci. Vol. 13 (4): 151-155.
 19. Sawwan, J., H. Abu Qaoud and M.I. Hozain. 1998. Effect of Sucrose Level on *In-Vitro* and *Ex-Vitro* Growth of African Violet (*Saintpaulia ionantha* Wendl). Advances in Horticultural Science. Vol. 12, No. 1: 8-10.
 20. Abu Qaoud, H. and J. Sawwan. 1998. *In Vitro* Micropropagation of *Yucca elephantipes* Regel. Plant. Islamic University Journal. Vol. 6, No. 2: 55-65.
 21. Qasem, J., Sawwan, J., Al-Mattary, A., and A. Al-Zain. 1998. Medicinal plants: prospects for production in the 100-200 mm rainfall zone. Final report 1995-1998, University of Jordan.
 22. Sawwan, J.S. and F.M. Shraim. 1999. Improving Rooting Efficiency of Creeping Juniper (*Junipers horizontals* Munch.) Stem Cuttings. Direst. Vol. 26, No. 3.: 371-376.
 23. Sawwan, J.S., I.M. Qrunfleh and E.A. Basher. 2000. Effect of Growth Regulators on Bulbet Formation of *Lilium longiflorum* "White American". Dirasat, Vol 27:No 1. 20-25.
 24. Sawwan, J.S. 1998. Carnation Production and Quality of Three Cultivars as Affected by Plant Density. Dirasat, Vol. 25, No. 3: 375-379.
 25. M. Bino, O. Al-Jayyousi, J.S. Sawwan, and S. Al-Beirut. 2000. Evaluation of permaculture and greywater reuse project in Tafila. Inter-Islamic Network.
- 25.صوان، جمال وماجد سماوي. 2000. اثر التطويش على الانتاجية وتوزيع الانتاج في القرنفل متعدد الازهار (ملحوظة علمية) 26 (106-111).
26. Al Sayed, B., Omari, M., and J. Sawwan. 2000. Effect of BA and IBA application on in vitro adventitious bud induction and rooting of *Picea abies*. Dirasat, Vol. 27 No. 2. 137-148.

27. Sawwan, J., R. A. Shibli, I. Swaidat, and M. Tahat. 2000. Phosphorus regulates osmotic potential and growth of African violet under in vitro-induced water deficit. *J. of Plant Nutrition*, 23(6), 759-771.
28. Shibli R. A., J. Sawwan, I. Swaidat, and M. Tahat. 2001. Increased phosphorus mitigates the adverse effect of salinity in tissue culture. *Commu. Soil Sci. Plant Anal.*, 32(3 and 4), 429-440.
29. Al Sayed, B., Omari, M., and J. Sawwan. 2002. Effect of BA and pulsing time on bud induction of cotyledon explants of *Picea abies* L. *Krast. Dirasat*, Vol. 29 No. 1. 13-18.
30. كاتبة ، أحمد وجمال صوان. 2002. دراسة حول آفات أشجار الصنوبر المستوردة من إيطاليا الى الاردن. ندوة المنتزهات العامة والحدائق. سجل البحوث المحكمة. عمان – الأردن.
31. صوان ، جمال ، نبال قطان ومحمد قطيش وفاطمة أبو حمور. 2002. دراسة ميدانية لدور المنتزهات العامة والحدائق في الترويج وتشجيع السياحة الداخلية. ندوة المنتزهات العامة والحدائق. سجل البحوث المحكمة. عمان – الأردن.
32. Safi, M.I. & J.S. Sawwan. 2004. Growth and Flower Quality of Three *Rosa hybrida* Cultivars in Response to Rootstock. *Mu'tah Lil-Buhuth wad-Dirasat*, Vol.19.No.1,1004. pp11-24.
33. Safi, M.I. & J.S. Sawwan. 2004. Rose Vase Life and Water Relations in Response to Rootstock Type. *Mu'tah Lil-Buhuth wad-Dirasat*, Vol.19.No.1,1004. pp 25-36.
34. Ermias Abate, Mahamoud A. Kasrawi, Jamal S. Sawwan, (2004) Genotype and Donor Plant Growing Environment Affects Callus Induction in Tomato (*Lycopersicon esculentum* Mill) Anther Culture In: Asfaw et al (eds) Proceedings of the Eleventh Conference of the crop Science Society of Ethiopia. April 26-28 Addis Ababa Ethiopia.
35. Ermias Abate, Mahamoud A. Kasrawi, Jamal S. Sawwan, (2004) Effect Thidiazuron and IAA Concentration on Anther Culture Response of Fertile Tomato (*Lycopersicon esculentum* Mill) Genotypes. In: Asfaw et al (eds) Proceedings of the Eleventh Conference of the crop Science Society of Ethiopia. April 26-28 Addis Ababa Ethiopia.
36. Sawwan, Jamal Sulieman. 2006. Arabic-English English-Arabic biotechnology glossary. Dunwoody press, Springfield, U.S.A.
37. Creamer, Thomas and Jamal Sawwan. 2006. Disaster preparedness glossary Arabic-english English-arabic. Dunwoody press, Springfield, U.S.A.
38. Al-Bakhit, A., Al-Mahmoud, M.S., and Sawwan, J.S. 2007. *In vitro* propagation of two *Lavandula* species: *Lavandula angustifolia* and *Lavandula latifolia* L. *Medica. Jordan Journal of Agricultural Sciences (JJAS)*. Vol.3.No.1.:16-25.

39. Al-Kilani, L., Sawwan, J.S., and Al-Asi N. 2007. Maintaining high quality roses by simple locally-made forced- air cooling unit. Jordan Journal of Agricultural Sciences (JJAS).3 (3):222-232.
40. صوان، جمال سليمان. 2010. دور الحديقة المنزلية في تحسين دخل الأسرة الريفية والحد من الفقر والبطالة في منطقة الحسينية. موقع إلكتروني.
<http://www.ju.edu.jo/community/community-development>
41. A.M. Al Abdallat, J. S. Sawwan, B. Al Zoubi. 2010. *Agrobacterium tumefaciens*-mediated transformation of callus cells of *Crataegus aronia*. Plant Cell Tiss Organ Cult. Vol. 102. DOI 10.1007/s11240-010-9798-1.
42. Ghaleb ,W.,Sawwan, J, S., Akash, M,W., and Ayed, Al-Abdallat. 2010, In Vitro Response of Tow Citrus Rootstocks to Salt Stress, International Journal of Fruit Science, 10:1,40-53.
43. Shibli, R., Duwayri, M.Sawwan, J. Shatnawi, M., and AL-Qudah, T. 2012. Regeneration via Somatic Embryogenesis of the Endangered Wild Arum (*Arum palaestinum*).
44. Afnan S Zuiteer, Jammal Sawwan and Ayed Al Abdallat Designing universal primers for the isolation of DNA sequences encoding Proanthocyanidins biosynthetic enzymes in *Crataegus aronia* BMC Research Notes 2012, 5:427 doi:10.1186/1756-0500-5-427.
45. Al Qurraan ,A.f.; J. S. Sawwan and A. M. Al Abdallat 2012. Analysis of *phenylalanine ammonia-lyase* gene expression in callus cells of hawthorn (*Crataegus aronia* L.) *Journal of Food, Agriculture & Environment Vol.10 (3&4): 572-576*
46. Zocoltu,M.;M. Kushad and J.Sawwan.2015. Bioactive compounds and quality characteristics of five apples cultivars" Accepted *Ciência Rural*,45(11):1972-1979.
47. Sawwan, J.S. A. M. Al Abdallat, T.S. Al Qudah M. Kushad, M. Zucoloto.2015. Hawthorn (*Crataegus aronia* L) callus growth dynamics and polyphenol production under different light intensities .*Journal of Food, Agriculture & Environment (JFAE) -Vol.13(2)*

CONSULTATION EXPERIENCES

1. International Agricultural Development Establishment. I served as a part time **consultant** for their nurseries and greenhouse for indoor plant production at Jerash (Iris nurseries) for 14 months.
2. Establishment of many orchards in Jordan; including site analysis, soil reclamation, selection of suitable plants and irrigation systems.
3. Ministry of Youth, **Consultant for turf grass** production and management of athletic fields including soil testing and modification from June 1993- August 1998
4. Turf grass **consultant**. Oman, 1999.
5. **Plant tissue culture director**. Jordan-Kuwaiti company for agricultural and food products. June, 1997- June, 1998. Planning and establishing the plant tissue culture unit.
6. The Inter-Islamic Network on Water Resources Development and Management (**INWARDAM**): Evaluation of CARE project on sustainable agriculture. May–Sept. 2000. Evaluation study supported by Canadian International Development Agency (CIDA).
7. **Horticulturist at INWARDAM**; The permaculture and Grey water Treatment and Reuse at Ein-Al Baida project- Tafila, Jordan. A two years(May 2001-April 2003) supported by CIDA.
8. Horticultural **consultant** at Greater Amman municipality, (Al-HUSSEIN Garden). March 2001-June 2006 . During this period I was in charge of AL-HUSSEIN garden establishment and care . I was among the experts reviewing the design plans and then I was in charge of implementing the design. We have introduced the Tree Farming into this project.
9. Agronomist, USAID Water reuse projects in Jordan. PA consulting group 2003-2004. Reclaimed water effluent from domestic water use was used in planting forage crops and ornamental plants .the project was outstanding as viewed by the American congress delegation.
10. Horticultural **consultant** at National Center for Agricultural Research and Technology Transfer, Ministry of Agriculture, Jordan. Since Sept. 2001. During this term I started an extension program to the farmers and helping resolving many cultural practices disorders in this new emerging sector.

11. **Team leader** of the Royal Agricultural Committee for Floriculture Sector.
12. **Floriculture Project Director:** a government funded cut rose production project aimed to create jobs for new graduates.
13. **Head of Floricultural committee** at the Agricultural Engineers Association.
14. Biotechnology expert in the Arab World, Member.
15. **Consultant and technical director.** Horticulturist at Badia Research and Development Program (BRDP).**Jordan.**
16. AUB Urban Agriculture, مشروع من البيدر إلى المائدة.
17. Expert meeting ‘Cooperation in Sustainable Horticulture and Agriculture’
HAS Den Bosch University of Applied Sciences – Feb.2012. Netherland .
18. FAO consultant and expert in home gardening project in different governorates in Jordan.

RECOGNITION AND OUTSTANDING ACHIEVEMENTS

1. Scholarship from the University of Jordan towards my Master degree.
2. Scholarship from the University of Jordan towards my Ph.D.
3. Shoman Youth Scientists Award of Excellence in research. 1994.
4. Excellent researcher award 2011, University of Jordan

COMMETTIES:

I served in all departmental committees including social ,graduate, research, promotion and ethics .

I served in the deans council for two years.

I served in the university senate for four years.

I served in the higher education accreditation committee.

I served in the linking university with society committee.

I served in the editorial board of Dirasat(the university of Jordan journal of agricultural research.)

Member of Steering committee of the regional project of AOAD. December 2003. Cairo. Egypt.

Reviewer for many scientific journals.

GRADUATE STUDENTS

I served as the major advisor for more than 20 students , the research areas dealt with Ornamental Horticulture, and Biotechnology.

The following are some of the titles:

1. Yield and fruit quality of peaches as affected by summer and winter pruning. 2000.
2. Effect of water stress and growing media on growth of umbrella tree *Scheffera arboricola* and Scindapsus *Philodendron scandens*. 1994.
3. Effect of pinching plastic house grown spray-type carnation on yield and yield distribution. 1997.
4. Effect of different planting dates and densities on production of *Gladiolus grandiflorus* grown under plastic house conditions. 1997.
5. Propagation of eastern lily by scaly leaves. 1997
6. Preliminary investigation on grey water treatments. 2003.
7. *Gypsophila paniculata* L. micropropagation. 2003.
8. Regeneration of wild cyclamen (*Cyclamen persicum* L.) 2005.
9. *Several Biotechnology research projects on Crataegus and its secondary metabolites.*
10. Floricultural crops developmental technology .
11. Introduction of Argan (*Argania spinose*)to Jordan.

CONFERENCES

1. Study tour to McGill University, Canada. January 1993
2. First Ornamental Horticulture Conference. Presented three papers. 22-24 October 1994. Cairo University, Egypt.
3. Second International Conference on Laser in Science and Technology. 12-16 August 1994. Local Organizing Committee.
4. The Forth Jordanian Scientific Week. 27 August – 3rd September 1996. Higher council for science and technology. Amman- Jordan. Presented this summary of a funded research.
5. The Second Agricultural Congress. Member of the organizing committee and chair of the first session. 29-30 April 1997.
6. Biotechnology, Current Status and Future Prospects. 7-8 April 1997. Al-Albait University. Jordan.
7. Eighth Arab Conference of Biological Sciences 8-11 November 1997. University of Jordan, Amman-Jordan.

8. First National Agricultural Congress. Head of the organizing committee, Head of scientific committee and head of Ornamental committee. 16-17 June 1997. Agricultural Engineers Association, Amman-Jordan.
9. The Ninth Jordanian Scientific Week: Biotechnology and its Role in Jordanian Economy. 6-8 October 2003. Higher council of science and technology, Amman-Jordan.
10. Public Parks and Gardens: The role in recreation and environment protection. Member of the organizing committee, present two papers. 2002, Amman-Jordan.
11. Study Tour on Wastewater Reuse in Agriculture Organized by USAID. Tunisia and Morocco June- July 2003 .
12. Biotechnology perspectives in Arab Conference, present a paper during the meeting of AOAD. 27-29 October 2002. Egypt.