

hala ardekani

From: Elias Baydoun [eliasbay1@yahoo.com]
Sent: Thursday, September 10, 2015 6:51 AM
To: abadran12@gmail.com
Cc: Rola Alnashashibi; hala ardekani
Subject: Adjunct Professors CV
Attachments: Choudhary CV.doc; Murad CV.pdf; Elias CV 2015.docx

Dear Dr Badran

It was greast meeting you in Amman again.

Thanks for everything.

As we discussed yesterday, please find attached the CVs of Dr Choudhary, Dr Murad and mine. the CV of Dr Hillman is with Hala as he was supposed to be one of the Editors of the Triangle.

With my warmest personal regards

Elias

CURRICULUM VITAE

Elias Baydoun

PRESENT ADDRESS

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EDUCATION

- PhD* Biochemistry, University of Cambridge, Cambridge, United Kingdom, 1980
MPhil* Biochemistry, University of Cambridge, Cambridge, United Kingdom, 1978
MS Biology, American University of Beirut, Beirut, Lebanon, 1977
BS Biology, University of Jordan, Amman, Jordan, 1971 (with distinction)
*Under the supervision of the late Professor Donald Northcote, FRS

PROFESSIONAL EXPERIENCE

- 1991- Professor, Department of Biology, American University of Beirut, Beirut, Lebanon
2003- Secretary General, Arab Academy of Sciences, Beirut, Lebanon
2001-2002 Sabbatical leave, Institute of Biomedical & Life Sciences, University of Glasgow, United Kingdom
1987-1993 Chairman, Department of Biology, American University of Beirut, Beirut, Lebanon
1986-1991 Associate Professor, Department of Biology, American University of Beirut, Beirut, Lebanon
1986-1988 Part-time Lecturer, Department of Natural Sciences, The Lebanese University, Beirut, Lebanon
1985-1986 Associate Professor, Department of Biological Sciences, Yarmouk University, Irbid, Jordan
1985-1986 Director of Personnel, Yarmouk University, Irbid, Jordan
1983-1986 Assistant to the President, Yarmouk University, Irbid, Jordan
1984-1985 Director, Department of Planning and Development, Yarmouk University, Irbid, Jordan
1980-1985 Assistant Professor, Department of Biological Sciences, Yarmouk University, Irbid, Jordan

- 1980-1981 Part-time Lecturer, Department of Biology, American University of Beirut, Beirut, Lebanon
- 1978-1980 Supervision of Laboratory Courses in Biochemistry to final-year honours students at the University of Cambridge, Cambridge, United Kingdom
- 1976-1977 Lecturer, Department of Biological Sciences, Yarmouk University, Irbid, Jordan
- 1971-1974 Instructor, Department of Biological Sciences, University of Jordan, Amman, Jordan

TEACHING EXPERIENCE

- Taught the following courses: General Biology, General Science, Plant Physiology, Plant Biochemistry, Biochemistry, Advanced Biochemistry, Cell Biology, Membrane Biology, Histology and Microtechnique, Plant Anatomy, Research Techniques in Biology, Graduate and Undergraduate Seminars and Graduate and Undergraduate Tutorials.
- Supervised MS biology students.
- Served on the thesis committees of MS students.
- Supervised PhD biology students.

EXTERNAL RESEARCH EXPERIENCE

- Summer 1990 Collaboration with Dr SC Fry at the Institute of Cell and Molecular Biology, University of Edinburgh, to study the chemical differences between epidermal and mesophyll cell wall in expanding leaves of *Kalanchoe diargremontiana*
- Summer 1987-1998 Collaboration with Dr CT Brett at the Institute of Biomedical and Life Sciences, University of Glasgow, to study the synthesis of the cell wall polysaccharides
- Summer 1986 Collaboration with Dr SC Fry at the Institute of Cell and Molecular Biology, University of Edinburgh, to study the *in vivo* fate of the biologically-active xyloglucan-nonasaccharide
- Summer 1985 Collaboration with Dr SC Fry at the Institute of Cell and Molecular Biology, University of Edinburgh, to study the chemistry of the polymers containing L-galactose and D-mannose in the primary cell walls
- Summer 1984 Collaboration with Dr SC Fry at the Institute of Cell and Molecular Biology, University of Edinburgh, to study the pectic oligosaccharides as new plant hormones
- Summer 1982-1985 Collaboration with Dr CT Brett at the Institute of Biomedical and Life Sciences, University of Glasgow, to study the role of calcium and hydrogen ions in the control of growth in plants
- Summer 1981 Collaboration with Dr Bircheimer at the Swiss Federal Institute of Technology (ETH) to study the role of coated vesicles in the secretion of glycoproteins in chicken embryo fibroblasts

RESEARCH INTERESTS

- Membrane fusion *in vitro*
- Plant cell wall biosynthesis and assembly
- Biologically active oligosaccharides
- Applications of nanoparticles in biological systems
- Biological activities of medicinal plants
- Biotransformation of drugs

GRANTS

- FEBS short-term fellowship (1983, 1988 & 1992)
- National Planning Council, Amman, Jordan: Health education in Jordan (1984)
- Ministry of Planning, Amman, Jordan: Health education in Jordan (1985)
- Yarmouk University, Irbid, Jordan
 - Secretion of glycoproteins (1981)
 - The role of calcium ions in the control of growth (1983 & 1984)
 - Pectic wound hormones (1985)
 - Chemistry of cell wall polymers (1986)
- University Research Board, American University of Beirut, Beirut, Lebanon
 - Mobilization of reserve materials during germination of cabbage seeds (1987)
 - Inhibitors of glucose transport in plant foods (1988)
 - Enzyme interaction in plant cell wall biosynthesis (1987, 1990-1999)
 - Purification and significance of assemblins, proteins controlling plant-cell-wall assembly (2000 – 2004)
 - Control of pectin biosynthesis and assembly in plants (2005-2008)
 - Histochemical analysis of the cell walls during the somatic embryogenesis of date palm calli (2009)
 - New aspects of the proto-oncoprotein c-Cbl in cancer: molecular analysis of cCbl in contributing to the generation of reactive oxygen species and protecting malignant cells (2010-2011)
 - Synthesis of novel anti-inflammatory agents by biotransformation (2013-2015)
 - Investigating the role of NFATC1 and HAND2 and their interaction in heart morphogenesis using *Drosophila melanogaster* as a model (2011-2012). Co-investigator
- K. Shair CRSL Research Grants, FAS, AUB
 - Synthesis of new anabolic compounds through biotransformation with safe and non-toxic properties (2014)
 - Large-scale synthesis of novel metabolites of anabolic Steroids by biocatalysis and study of the their mechanism of action (2015)
- UNESCO Short-Term Fellowship in Biotechnology (1998 & 2001)
- Lebanese National Council for Scientific Research (LNCSR), Beirut, Lebanon
 - Incorporation of newly-synthesized matrix polysaccharide into the plant cell wall (1998 & 1999)

- Control of phenolic cross-linking in cell walls of food plants (2000)
- The effect of nanoparticles on the anti-proliferative and pro-apoptotic potential of a specific nutrient synergy (2007 & 2008)
- The effect of *Ruscus aculeatus* and *Pleurotus ostreatus* extracts on proliferation and apoptosis in human cancer cell lines (2010 & 2011)
- Synthesis of libraries of anti-cancer agents by biotransformation - a novel approach towards anti-cancer agents (2013 & 2014)
- Discovery of new contraceptive agents using biotransformation (2015)
- Microbial biodiversity of Lebanese mineralized aquatic habitats (2010 & 2011). Co-investigator
- An ecological and physiological study of the montane viper *Montevipera bornmuelleri* including venom composition and effects (2009 & 2010). Co-investigator
- Host-microbe interactions: Effect of *Wolbachia* endosymbionts on their insect hosts (2012-2013). Co-investigator
- The Academy of Sciences for the Developing World (TWAS) Trieste, Italy
 - Distribution and characterization of cell-wall synthesizing enzymes in the Golgi apparatus of flax and pea (1998)
 - Purification and significance of assemblins, proteins controlling plant-cell-wall assembly (2000)
- CEDRE
 - New aspects of the proto-oncoprotein c-Cbl in cancer: molecular analysis of cCbl in contributing to the generation of reactive oxygen species and protecting malignant cells (2011-2012)
 - Search for new entomopathogenic fungi of Lebanon and biotechnological improvement of the fungus *Beauveria bassiana* (2014-2015). Co-investigator

AWARDS & PRIZES

- The Award of the Federation of Arab Scientific Research Councils for translating into Arabic the book entitled "Biochemistry and Physiology of the Cell, by Edwards and Hassall. McGraw Hill, London" (1986)
- The American University of Beirut Research Award in Natural Sciences for the academic year 1987-1988
- Abdul Hameed Shoman Prize for Young Arab Scientists in Biology (1987)
- The American University of Beirut Research Award in Natural Sciences for the academic year 1989-1990
- Distinguished Scholar Award of the Arab Fund Fellowship Program, The Arab Fund for Economic and Social Development (2001)
- Developing World Study Visit Award, The Royal Society, United Kingdom (2002)
- TWAS-ARO Regional Prize 2010 for Public Understanding and Popularization of Science

HONORS

- Fellow of the Institute of Biology, London, United Kingdom
- Fellow of The Academy of Sciences for the Developing World (TWAS), Trieste, Italy
- Founding Fellow and Secretary General, Arab Academy of Sciences, Beirut, Lebanon
- Honorary Research Fellow, Institute of Biomedical and Life Sciences, University of Glasgow, United Kingdom
- Listed in *Who's Who in the World*, New Providence, NJ, USA
- Listed in the *Dictionary of International Biography*, Cambridge, England
- Selected for inclusion in the AcademicKeys Who's Who in Science Higher Education
- Chosen as a potential candidate in the 2010 edition of Cambridge Who's Who

MEMBERSHIP OF SOCIETIES

- Cambridge Philosophical Society, United Kingdom
- The Biochemical Society, United Kingdom
- The Darwin Society, Darwin College, Cambridge, United Kingdom
- The Lebanese Association for the Advancement of Sciences, Lebanon

UNIVERSITY COMMITTEES

Yarmouk University, Irbid, Jordan

- Member of the University Council
- Member of the University Academic Advisory Committee
- Member of the Budget Committee
- Member and Convenor of the Planning and Development Committee
- Member of the Recruitment Committee
- Member of Contributions Fund
- Member of the Scholarships Committee
- Member of the Housing Committee
- Member of the Marine Sciences Station Committee
- Member of the University Catalogue Committee
- Convenor of the Agreements Follow-up Committee
- Chairman of the Savings Fund Committee
- Chairman of the Health Insurance Committee
- Chairman of the Landscape Committee
- Chairman of the Projects Follow-up Committee
- Chairman of the Selection of Outstanding Arts Students Committee

- Chairman of the Selection of Outstanding Sport Students Committee

American University of Beirut, Beirut, Lebanon

- Member of the following Committees of the Faculty of Arts and Sciences:
 - Admissions Committee (1988-1990, 1991-1993 & 1996-1998)
 - Advisory Committee (1992-1994, 1995-1997, 1998-2002 & 2003- 2005 and the Fall Semester 2012-2013)
 - Curriculum Committee (1987-1989)
 - Library Committee (1990-1992)
 - Research Committee (1989-1991)
 - Student Affairs Committee (1988-1990)
- Member of the Admissions Committee of the Faculty of Medicine (1987-1990)
- Member of the University Senate (1990-2002, 2003-2006, 2012-2014)
- Member of the Senate Steering Committee (1990-1991)
- Member of the University Publications Committee (1990-1993)
- Member of the University Research Board (1993-1996)
- Secretary of the University Research Board (1993-1994)
- Member of the Accreditation Working Group TWO on Planning, Resources and Institutional Renewal (2007-2008)
- Chair of an *ad-hoc* Committee to review the common courses between FAFS and the Biology Department
- Member of FAFS Departmental Committee for Faculty Promotion (2009)
- Member of an *ad-hoc* Committee to prepare the PhD proposal for the Department of Biology
- Member of an *ad hoc* committee to discuss the offering of a summer undergraduate research course in the Department of Biology
- Interim Secretary for the Biology Department during the First Semester of the Academic Year 2008-2009
- FAS-SRC Advisor for the Academic Year 2008-2009

The Future University, Khartoum, Sudan

- Member of the Board of Trustees (2011- present)

PROFESSIONAL ACTIVITIES

Consultancies

- Served as a consultant for UNESCO
- Served as a consultant for UNEP
- Served as a consultant for UNDP

- Served as a consultant for ISESCO
- Served as a consultant for ALECSO
- Served as a consultant for the Higher Council for Science and Technology, Jordan
- Served as a consultant for the University of Sharjah
- Served as a consultant amongst an international team to prepare a strategy for solar energy in Libya.

Service on International Scientific Committees and Projects

- Active participant in the International Union of Biological Sciences-Commission on Biological Education (IUBS-CBE), attending all its meetings during 1980-1986 and assisting in editing its Newsletter
- Member of the Middle East Science Fund (MESF) Regional Executive Committee
- Member of the Regional Advisory Committee of Ethics founded at the Egyptian Academy for Scientific Research and Technology in collaboration with UNESCO
- Member of the Arab Health Water Association (Affiliate-member of HWA)
- Founding Member of the Arab Network of Networks for Science and Technology
- Coordinated the ALECSO project on "Surveying and Identification of Date Palm Varieties in the Arab World"
- Prepared a project document on "Mitigating Water-Related Risks and Facing Social Challenges" for UNESCO
- Member of the TWAS Biology Committee
- Member of COSTED-AraBN
- Member of the Steering Committee for the project "Science and Technology Indicators in the Arab States" (UNESCO, ALECSO and AAS project)
- Coordinator for the production of the four volumes of the "Arabic Encyclopaedia on Knowledge for Sustainable Development" (UNESCO project)
- Expert consultant for the Arabic version of the Encyclopedia of Life (AEOL)

Service on National Scientific Committees and Projects

- Member of the Jordanian National Committee of Man and Biosphere (Jordan)
- Member of the Five-Year Plan (1986-1990) Committee on Science and Technology (Jordan)
- Led a project on health education in the schools of Jordan, the results of which were published in reputable international journals and books, in addition to contributing in writing books on health education
- Member of the Advisory Committee for the Establishment of the Faculty of Arts and Sciences at Al-Manar University (Lebanon)
- Evaluated the programmes of the Faculty of Sciences at the University of Balamand
- Interim Coordinator of the Lebanese TWAS Chapter

- Member of the Biology Group of the Lebanese Association for the Advancement of Science (LAAS)

Referee for Science Prizes

- Referee for “Abdul Hameed Shoman Prizes for Young Arab Scientists and Reseachers” during the years 1991, 1994, 1997, 1999, 2002, 2004 & 2009
- Referee for “Abdul Hameed Shoman Prizes for Teachers of Science in Jordanian Schools” during the years 1982-1986
- Referee for the TWAS-ARO Young Arab Scientist (YAS) 2010 Prize on “Biodiversity Conservation and Informatics”
- Referee for the TWAS-ARO Young Arab Scientist (YAS) 2011 Prize on “Chemistry for Sustainable Development in the Arab World”
- Referee for the ALECSO Technological, Innovation and Creativity Prize for Young Researchers in the Arab States, 2011
- Referee for the poster session of the TWAS-ARO 8th Annual Meeting, 2012
- Referee for the presentation proposals of the TWAS Young Affiliates that were presented in the TWAS-ARO 8th Annual Meeting, 2012

Textbooks

- Preparation of the biology curricula and textbooks for secondary schools and community colleges in Oman and writing seven Biology textbooks for these levels
- Helped in the writing of biology textbooks for secondary schools in Jordan
- Helped in the writing of the ALECSO biology textbooks for secondary schools

Translations

- Translated into Arabic a university-level textbook in biochemistry
- Reviewed the translation of various biological articles that appeared in *Aloloom*, the Arabic version of *Scientific American*
- Translated into Arabic some entries for the Arabic version of the Encyclopedia of Life (AEOL)

Editorial Boards

- Serving as an Editorial Board Member for Scientific Reports, a journal from Nature Publishing Group, the publishers of Nature (2014-)

General

- Attracted eminent scientists from prestigious overseas universities to deliver seminars
- Delivered public lectures and television presentations on cloning. Also participated in a seminar on the Human Genome Project organised by a local newspaper and was interviewed on the same subject by another newspaper
- Member of the Advisory Scientific Council of the Genetics Research Laboratory of the Chronic Care Centre

- Reviewer for international and regional scientific journals, research proposals, and reviewer of books intended for publication
- Evaluated faculty promotion documentation for regional universities
- Invited to join the E-reviews Database at King Fahd University of Petroleum and Minerals

MEETINGS, WORKSHOPS & CONFERENCES

I have travelled extensively in the region and beyond to participate actively in conferences, workshops and other types of meetings, thereby supplementing my knowledge and experience for the benefit of colleagues, students, and the University. For example, I was sponsored by the United States Information Agency (USIA) and the Bureau of Educational and Cultural Affairs to spend one month on the International Visitors Program inspecting several American educational institutions to analyze their arrangements and educational systems.

Moreover, my participation in an International Seminar on Management in Universities, which was organized by the British Council and attended by university heads from all over the world, provided profound insights into institutional leadership and development. It also reinforced my commitment to education in all its aspects, most notably science; technology; engineering; medicine; the humanities and cultural interfaces; fostering innovation and entrepreneurialism; deploying the range of teaching and learning methodologies such as lecturing, project supervision, seminars, discussion meetings, workshops, databases, the internet, etc.; connections with end-users, gender issues; the role of education in addressing environmental, social and economic sustainability including the Millennium Development Goals

I have presented the findings of my research in national, regional, and international conferences (see section on papers in international meetings) in USA, Canada, United Kingdom, Switzerland, Germany, Belgium, France, Italy, The Netherlands, Spain, Cyprus, China, The Philippines, Pakistan, India, Egypt, Tunisia, Morocco, Sudan, Senegal, Kuwait, Saudi Arabia, Bahrain, Oman, United Arab Emirates, Lebanon, and Jordan.

- Furthermore, I have initiated, organized, and chaired several international conferences, bringing together decision-makers, including university presidents from a wide range of countries in the Region and from Europe, the USA, and Far East. These Conferences were sponsored by international and regional agencies including UNESCO, ALECSO, ISESCO and TWAS, among others, and involved the production of summaries and recommendations that were widely circulated. The conferences include:
 - Cellular and Molecular Aspects of Plant Cell Differentiation. Beirut, Lebanon, 23-29 September, 1996
 - Technology Transfer in Biotechnologies as a Catalyst for National development. Beirut, Lebanon, 4-6 October, 1999
 - Scientific and Technological Entrepreneurship in Universities and Research Institutes. Beirut, Lebanon, 11 November, 2000

- Economic Growth: the Involvement of Biotechnology and the Modern Bioindustries. Beirut, Lebanon, 10 – 11 November, 2001
- Bioethics: How to Adapt Biotechnology to Culture and Values. Beirut, Lebanon, 1-2 March, 2003
- Drug Biotechnology and Medicinal Plants. Amman, Jordan, 9-11 October, 2004
- Nanoscience and its Impact on Renewable Energy and Medicine. Beirut, Lebanon, 5-6 December, 2005
- Integrated Water Resources Management in the Arab Region. Beirut, Lebanon, 14-16 December, 2006
- Science Parks for the Developing World: Engines of Economic and Social Growth. Amman, Jordan 14-17 December, 2007
- Bridging the Digital Divide in Developing Countries. Beirut, Lebanon, 14-15 November, 2008
- Training Managers of Science Parks. Beirut, Lebanon, 17-18 November, 2008
- Alternative & Renewable Sources of Energy. Beirut, Lebanon, 25-26 November, 2010
- Water and Energy in Sustainable Food Security. Beirut, Lebanon, 2-3 December, 2011
- Energy and Water Sustainability. Beirut, Lebanon, 7-8 December, 2012
- Water-Energy Nexus and Waste Management for a Sustainable Arab World. Beirut, Lebanon, 6-7 December, 2013
- Sustainable Energy and Water Resource Management for Food Security in the Arab Middle East. Beirut, Lebanon, 12-13 December, 2014
- Climate Change and Water-Energy-Food Nexus in the Arab Middle East. Amman, Jordan, 5-6 December, 2015
- Co-organised an international conference and workshop on “Herbal Drug Development for Socio-Economic Uplift in Developing Countries”. Amman, Jordan 5-8 December, 2015

PUBLICATIONS

Papers in Refereed Journals

1. Baydoun E, Northcote DH, 1980. Isolation and characterization of membranes from the cells of maize root tips. *Journal of Cell Science* **45**: 147-167
2. Baydoun E, Northcote DH, 1980. Measurement and characteristics of fusion of isolated membrane fractions from maize root tips. *Journal of Cell Science* **45**: 169-186
3. Baydoun E, Northcote DH, 1981. The extraction from maize root cells of membrane-bound protein with calcium-dependent ATPase activity and its possible role in membrane fusion *in vitro*. *Biochemical Journal* **193**: 781-792

4. Baydoun E, Brett CT, 1984. The effect of pH on the binding of calcium to pea epicotyl cell walls and its implications for the control of cell extension. *Journal of Experimental Botany* **35**: 1820-1831
5. Baydoun E, Brett CT, 1985. Comparison of cell wall compositions of a desert xerophyte and a related mesophyte. *Phytochemistry* **24**: 1595-1597
6. Baydoun E, Brett CT, 1985. Comparison of cell wall compositions of the rhizomes of three seagrasses. *Aquatic Botany* **23**: 191-196
7. Baydoun E, Fry SC, 1985. The immobility of pectic substances in injured tomato leaves and its bearing on the identity of the wound hormone. *Planta* **165**: 269-276
8. Hussein ST, Baydoun E, 1985. Cytochemical localization of 5'-nucleotidase in the frog (*Rana pipiens*) retina: A histochemical and cytochemical study. *Journal of Histochemistry and Cytochemistry* **33**: 1067-1072
9. Ahlawat KS, Baydoun E, 1985. Perceptions of health concept among the Jordanian high school students. *International Quarterly of Community Health Education* **5**: 129-147
10. Baydoun E, Ahlawat KS, 1986. Differential perceptions of health among eighth-grade girls and boys in Amman, Jordan. *International Quarterly of Community Health Education* **6**: 145-159
11. Baydoun E, Brett CT, 1988. Properties and possible physiological significance of cell wall calcium binding in etiolated pea epicotyls. *Journal of Experimental Botany* **39**: 199-208
12. Baydoun E, Fry SC, 1988. [2-³H]Mannose incorporation in cultured plant cells: Investigation of L-galactose residues of the primary cell wall. *Journal of Plant Physiology* **132**: 484-490
13. Hussein ST, Muwalla M, Hunaiti A-R, Baydoun E, 1988. Histochemical localization of 5'-nucleotidase activity in Awassi sheep (*Ovis asiatica*) placenta. *Biochemical Society Transactions* **16**: 1042
14. Ahlawat KS, Baydoun E, 1989. Influence of rural and urban environments on the health outlook of twelfth grade students in Jordan. *International Quarterly of Community Health Education* **9**: 151-171
15. Baydoun E, Waldron KW, Brett CT, 1989. The interaction of xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea (*Pisum sativum*) epicotyls. *Biochemical Journal* **257**: 853-858
16. Baydoun E, Fry SC, 1989. *In vivo* degradation and extracellular polymer binding of xyloglucan nonasaccharide, a naturally-occurring anti-auxin. *Journal of Plant Physiology* **134**: 453-459
17. Waldron KW, Baydoun E, Brett CT, 1989. Comparison of cell wall composition of tissues from the seagrasses *Halophila* and *Halodule*. *Aquatic Botany* **35**: 209-218
18. Baydoun E, Usta J, Waldron KW, Brett CT, 1989. A methyltransferase involved in the biosynthesis of 4-O-methylglucuronoxylan in etiolated pea epicotyls. *Journal of Plant Physiology* **135**: 81-85
19. Waldron KW, Baydoun E, Brett CT, 1989. The solubilization of a glucuronyltransferase involved in pea (*Pisum sativum* var. Alaska) glucuronoxylan synthesis. *Biochemical Journal* **264**: 643-649

20. Baydoun E, Hobbs MC, Delarge MH, Farmer MJ, Waldron KW, Brett CT, 1991. Formation of glucuronoxylan linked to protein in plant Golgi and plasma membranes. *Biochemical Society Transactions* **19**: 250
21. Hobbs MC, Baydoun E, Delarge MH, Brett CT, 1991. Interactions between a xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea epicotyls. *Biochemical Society Transactions* **19**: 245
22. Hobbs MC, Delarge MH, Baydoun E, Brett CT, 1991. Differential distribution of a glucuronyltransferase involved in glucuronoxylan synthesis within the Golgi apparatus of a pea (*Pisum sativum* var. Alaska). *Biochemical Journal* **227**: 653-658
23. Quota L, Waldron KW, Baydoun E, Brett CT, 1991. Changes in seed reserves and cell wall composition of component organs during germination of cabbage (*Brassica oleraceae*) seeds. *Journal of Plant Physiology* **138**: 700-707
24. Zaiter HZ, Baydoun E, Sayed-Hallak M, 1993. Genotypic variation in common bean in response to cold temperature stress. *Annual Report of the Bean Improvement Cooperative* **36**: 66-67
25. Crosthwaite SK, MacDonald FM, Baydoun E, Brett CT, 1994. Properties of protein-linked glucuronoxylan formed in the plant Golgi apparatus. *Journal of Experimental Botany* **45**: 471-475
26. Zaiter HZ, Baydoun E, Sayed-Hallak M, 1994. Genotypic variation in the germination of common bean in response to cold temperature stress. *Plant and Soil* **163**: 95-101
27. Nuwayri-Salti N, Baydoun E, Alema-Munoz MM, Kreutzer RD, 1994. Identification of *Leishmania* isolates from a Lebanese population. *American Journal of Tropical Medicine and Hygiene* **51**: 98-101
28. Kreydiyyeh S, Baydoun E, Churukian Z, 1994. Tea extracts inhibit intestinal absorption of glucose and sodium in rats. *Comparative Biochemistry and Physiology* **108C**: 359-365
29. Toufeili I, Baydoun E, 1995. Some selected physiochemical properties of buffalo gourd (*Cucurbita foetidissima* HBK) root starch. *Starch-Stärke* **47**: 413-415
30. Baydoun E, 1997. Cloning: Scientific background and prospects. *Healthy Living* **21**: 17-21 (in Arabic)
31. Brett CT, Healy SA, McDonald MS, Macgregor C, Baydoun E, 1997. Binding of nascent glucuronoxylan to the cell walls of pea seedlings. *International Journal of Biological Macromolecules* **21**: 169-173
32. Baydoun E, Brett CT, 1997. Distribution of xylosyltransferases and glucuronyltransferase within the Golgi apparatus in etiolated pea (*Pisum sativum* L.) epicotyls. *Journal of Experimental Botany* **48**: 1209-1214
33. Baydoun E, 1998. Cloning. *Bulletin of the Lebanese Association for the Advancement of Sciences* **10**: 17-22 (in Arabic)
34. Baydoun E, Rizk S, Brett CT, 1999. Localisation of methyltransferases involved in glucuronoxylan and pectin methylation in the Golgi apparatus in etiolated pea epicotyls. *Journal of Plant Physiology* **155**: 240-244

35. Nuwayri-Salti, Baydoun E, El-Tawk R, Fakhoury-Makki R, Knio K, 2000. The epidemiology of leishmaniasis in Lebanon. *Transactions of the Royal Society of Tropical Medicine and Hygiene* **94**: 164-166
36. Rizk S, Abdel-Massih R, Baydoun E, Brett CT, 2000. Protein and pH-dependent binding of nascent pectin and glucuronoarabinoxylan to xyloglucan in pea. *Planta* **211**: 423-429
37. Knio K, Baydoun E, Tawk R, Nuwayri-Salti N, 2000. Isoenzyme characterization of *Leishmania* isolates from Lebanon and Syria. *American Journal of Tropical Medicine and Hygiene* **63**: 43-47
38. Baydoun E, Abdel-Massih R, Dani D, Rizk S, Brett CT, 2001. Galactosyl- and fucosyltransferases in etiolated pea epicotyls: Product identification and sub-cellular localisation. *Journal of Plant Physiology* **158**: 145-150
39. DaSilva E, Baydoun E, Badran A. Biotechnology and the Developing World. *EJB Electronic Journal of Biotechnology* [online]. 15 April 2002, vol.5, no.1. Available from: <http://ejb.ucv.cl/content/vol5/issue1/full/1/index.html> ISSN 07173458
40. Abdel-Masih R, Baydoun E, Brett CT, 2003. *In vitro* biosynthesis of 1,4- β -galactan attached to a pectin-xyloglucan complex in pea. *Planta* **216**: 502-511
41. Haladjian N, Fayad R, Toufeili I, Shadarevian S, Sidahmed M, Baydoun E, Karwe M, 2003. pH, temperature and hydration kinetics of faba beans (*Vicia faba* L.). *Journal of Food Processing and Preservation* **27**: 9-20
42. Baydoun E, Pavlencheva N, Cumming C, Waldron K, Brett C, 2004. Control of diferulate cross-linking in pectins from sugar-beet tissues. *Phytochemistry* **65**: 1107-1115
43. Ayoub G, Saikaly P, El-Fadel M, Baydoun E, 2004. The impact of step-feed on COD and BOD₅ removal in rotating biological contactors. *Environmental Engineering Science* **21**: 558-568
44. Brett CT, Baydoun E, Abdel-Masih R, 2005. Xyloglucan-pectin linkages in type I primary cell walls of plants. *Plant Biosystems* **139**: 54-59
45. Brett CT, Rizkallah HD, Abdel-Massih RM, Cumming CE, Baydoun E, 2005. Biosynthesis of the cell-wall matrix: A pectin-xyloglucan complex formed in the Golgi apparatus in pea. *Biochemical Society Transactions*. online: <http://www.biochemistry.org/meetings/abstracts/SA032/SA032P018.pdf>
46. Cumming CM, Rizkallah HD, McKendrick KA, Abdel-Masih RM, Baydoun E, Brett CT, 2005. Biosynthesis and cell-wall deposition of a pectin- xyloglucan complex in pea. *Planta* **222**: 546-555
47. Abdel-Masih RM, Seif El-Din R, Rizkallah HD, Baydoun E, Brett CT, 2007. Nascent pectin formed in Golgi apparatus of pea epicotyls by addition of uronic acids has different properties from nascent pectin at the stage of galactan elongation. *Journal of Plant Physiology* **164**: 1-10
48. Harakeh S, Diab-Assaf M, Khalife J, Abu-El-Ardat K, Baydoun E, Niedzwiecki A, El-Sabban M, Rath M, 2007. Ascorbic acid induces apoptosis in adult T-cell leukaemia. *Anticancer Research* **27**: 289-298

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