

CURRICULUM VITAE

Mohammad Souheil Al-Zein

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Education

2009: ABD, Department of Biological Sciences, Old Dominion University, Norfolk, Virginia, USA

2003: M.Sc. in Biology, American University of Beirut, Beirut, Lebanon

2000: B.Sc. in Biology, American University of Beirut

1996: Lebanese Baccalaureate, Experimental Sciences Section (Ranked sixth nationwide)

Professional Experience

Teaching Experience

September 2017-present: Instructor (Full-time), Department of Biology, American University of Beirut, Beirut Lebanon

Courses taught:

- BIOL 201: General Biology I

Laboratories taught:

- BIOL 201: General Biology I
- BIOL 202: General Biology II
- BIOL 244L: Neurobiology Laboratory (in part)
- BIOL 246: Marine Biology
- BIOL 252: Ecology
- BIOL 290BA: Marine Ecology Laboratory
- BIOL 310: Advanced Biostatistics

Other duties:

- Coordinator of BIOL 201: General Biology I laboratory
- Coordinator of BIOL 202: General Biology II laboratory
- Coordinator of BIOL 246: Marine Biology laboratory
- Coordinator of BIOL 252: Ecology laboratory

2000-2003; 2009-2017: American University of Beirut (AUB), Beirut, Lebanon

2009-2017: Instructor (Part-time)

Department of Biology, Faculty of Arts and Sciences

Courses taught:

- BIOL 201: General Biology I

Laboratories taught:

- BIOL 201: General Biology I
- BIOL 202: General Biology II
- BIOL 252: Ecology
- BIOL 310: Advanced Biostatistics

Other duties:

- Coordinator of BIOL 201: General Biology I laboratory
- Coordinator of BIOL 202: General Biology II laboratory
- Coordinator of BIOL 252: Ecology laboratory

Department of Landscape Design and Ecosystem Management, Faculty of Agricultural and Food Sciences

Courses taught:

- LDEM 218: Landscape Ecology

Department of Agricultural Sciences, Faculty of Agricultural and Food Sciences

Courses taught:

- AGSC 204: Natural Science for Agribusiness

Laboratories taught:

- AGSC 204: Natural Science for Agribusiness
- AGSC 220: Plant Physiology

2002-2003: Assistant Instructor (Part-time), Department of Biology

Laboratories taught:

- BIOL 241: Biology of Invertebrates
- BIOL 246: Marine Biology
- BIOL 252: Ecology

2000-2001: Graduate Teaching Assistant, Department of Biology

Laboratories taught:

- BIOL 201: General Biology I
- BIOL 252: Ecology
- BIOL 270: Plant Physiology
- BIOL 286: Entomology

2015: Lecturer, Institut d'Urbanisme, Académie Libanaise des Beaux-Arts, University of Balamand, Beirut, Lebanon

Courses taught:

- PBPL 7101: Plant Biology and Protection

2012-2017: Lecturer, Division of Natural Sciences, Haigazian University, Beirut, Lebanon

Courses taught:

- Biology 101: Introductory General Biology
- Biology 201: General Biology I
- Biology 215: Ecology

Laboratories taught:

- Biology 215: Ecology laboratory

2009-2017: Instructor, Department of Natural Sciences, Lebanese American University (LAU), Beirut

Courses taught:

- BIO 203: Introduction to Ecology
- BIO 331: Ecology
- BIO 499: Senior Study
- ENV 200: Introduction to Environmental Science

Laboratories taught:

- BIO 331: Ecology

Other duties:

- Coordinator of BIO 331: Ecology laboratory

2004-2008: Teaching Assistant, Department of Biological Sciences, Old Dominion University, Norfolk, Virginia, United States of America

Courses taught:

- BIOL 109N: Life Science II (in part)
- BIOL 291: Ecology
- BIOL 303: Genetics
- BIOL 308: General Botany (in part)
- GEN 101: New Portals to Appreciating the Global Environment (NewPAGE)

Laboratories taught:

- BIOL 108N: Life Science I
- BIOL 109N: Life Science II
- BIOL 250: Human Anatomy and Physiology
- BIOL 308: General Botany

Other duties:

- Theme teaching assistant for GEN 101: New PAGE
 - Co-authored one of seven themes in textbook (Kilburn and Al-Zein in Allen *et al.* 2007)
 - Assisted in developing test bank and instructor resources for two of seven themes
 - Trained teaching assistants

2003: Instructor, Department of Biological and Environmental Sciences, Beirut Arab University, Beirut, Lebanon

Laboratories taught:

- General and Medical Entomology (Fall 2003)

Research Interests

Plant Systematics, ecology and conservation; Ethnobotany; Ecology of green urban spaces and their potential in plant biodiversity conservation; Ecology and conservation of rare endemic plants; Biology and ecology of non-frugivorous fruit flies; Historical botany (including Holy botany and the history of botanical explorations); History of natural history collections; Science education

Professional Services

Current Services

January 2024-present: Red List Coordinator, International Union for the Conservation of Nature (IUCN) Species Survival Commission (SSC) Crop Wild Relative Specialist Group

September 2023-present: Member of the Biocultural Collections Group (<http://ceeb.econbot.org/>)

March 2023-present: Library liason, Department of Biology, AUB

June 2022-present: Member of the IUCN Sustainable Use and Livelihoods (SULi) Specialist Group and Plant Use Group (PUG)

September 2021-present: Academic adviser, Department of Biology, AUB

September 2021-present: Deputy safety warden, Department of Biology, AUB

March 2021-present: Vetting officer, Department of Biology and Natural History Museum, AUB

2018-present: Member of the American University of Beirut Natural History Museum (AUB-NHM) Committee; Curator, Natural History Museum (including the Post Herbarium)

2018-present: Member of the National Key Biodiversity Areas Coordinating Committee

2013-present: Member of the IUCN SSC Mediterranean Plant Specialist Group

2011-present: Member of the scientific board of Lebanon Flora: <http://lebanon-flora.org/>

Past Services

2023: Consultant, Genetic Resources Section, International Center for Agricultural Research in the Dry Areas (ICARDA), Terbol, Lebanon

2020-2021: Reviewer, Lebanese Science Journal

2020: Plant biodiversity and conservation expert, Project Legacy (Saudi Arabia): High Level Environmental Analysis, Art and Science for Environment (ASE)

2020: Plant biodiversity and conservation expert, Project Line (Saudi Arabia), Art and Science for Environment (ASE)

2020: Flora specialist, Ecological and Marine Surveys for Oval Island Development Project, Saudi Arabia. Dar al-Handasah (Shair and Partners), Riyadh, KSA

2019: Lebanon Biodiversity Analysis - 2019 Update. ECODIT Liban, Lebanon

2019: Flora specialist, Rapid Ecological Survey for the Al-Mashaer Al-Muqaddasah Comprehensive Development Plan, Saudi Arabia. Dar al-Handasah (Shair and Partners), Riyadh, KSA

2019: Rapid Ecological Assessment of Qiddiya City Project, Saudi Arabia. Dar al-Handasah (Shair and Partners), Riyadh, KSA

2019: Plant biodiversity and conservation expert, Prince Mohammed Bin Salman Royal Reserve (MBSRR; Saudi Arabia) High Level Ecological Assessment, Art and Science for Environment (ASE)

2018-2019: Coordinator of Bio-LiFE and member of the scientific committee of Observatoire Libano-Français de L'Environnement (O-LiFE), Lebanese National Council for Scientific Research (CNRS-L)

2018: Reviewer, Jordan Journal of Biological Sciences

2018: Homat Al Hima curriculum development. Society for the Protection of Nature in Lebanon (SPNL), Beirut, Lebanon

2017: Flora specialist, Assessing Biodiversity of Buraimi and Al-Batinah North Governorates, Oman. Dar AlHandasa, Shair and Partners. Beirut, Lebanon

2017: Plant biodiversity and conservation expert, Orienting the Rehabilitation of Limestone Quarries in Lebanon: Insights for Mediterranean Environments (ORQUIMED), Mada Association

2017: Plant biodiversity and conservation expert, Rehabilitation of Quarries in Mdoukha and Aaita El Foukhar, Rashaya District, Beqaa, Lebanon, Mada Association

2017: Co-supervised the senior thesis of Mr. Daniel Zeitouni, Department of Natural Sciences, Faculty of Arts and Sciences, Lebanese American University (Title: Diversity and *in situ* conservation of *Aegilops* (Poaceae) in Lebanon)

2016-2018: Focal point, Biodiversity sub-committee, *Observatoire Libano-Français de L'Environnement* (O-LiFE), Lebanese National Council for Scientific Research

2016: Plant biodiversity and conservation expert, Wadi as-Sulai Development Project in Saudi Arabia (KSA): Ecological Assessment Services, Dar Al-Handasah: Shair and Partners

2016: Plant systematics, ecology and conservation expert, Updating the 2002 SAP-BIO National Report for the Country of Lebanon, Market Policy and Legislative Development for Mainstreaming the

Sustainable Management of Marine and Coastal Ecosystems in Lebanon, Ministry of Environment (Lebanon) and Global Environment Facility (GEF)

2014-2015: Member of Committee on Mutual Cooperation between Researchers and Protected Areas in Lebanon, UNESCO Regional Bureau – Beirut

2014: Member of the MS thesis committee of Mr. Moustapha Itani, Interfaculty Graduate Program in Environmental Sciences, American University of Beirut

2014: Beit Misk Environmental Impact Assessment; Lebanon Waterfront City Ecological Assessment (BREEAM standards)

2013-2021: Member of Bio-LiFE (previously Biodiversity subcommittee), *Observatoire Libano-Français de L'Environnement* (O-LiFE), Lebanese National Council for Scientific Research

2012: Thum Biodiversity Assessment; Yarze 1561 Ecological Assessment (BREEAM standards)

2011: Yarze 1674 Ecological Assessment (BREEAM standards); Consultant on landscape design and implementation of two projects: Al Taqwa, Jouaiya, Lebanon and UCG Syria Labor Community, Damascus, Syria, Atelier Hamra, Lebanon

2010: Member of the Important Plant Areas (IPA) team, working on the identification of IPAs and priority sites for conservation in Lebanon

2008: Reviewer, Systematic Botany

2007-2008: Treasurer, Biology Graduate Student Organization (BGSO), and representative of BGSO in the House of Representatives, Student Government Association, Old Dominion University

2007: Member, New Portals to Appreciating the Global Environment Committee

2006-2008: Graduate student representative, Curriculum Committee, Department of Biological Sciences, Old Dominion University

2006-2009: Member, Preparing Future Faculty, Steering Committee, Old Dominion University

2006-2007: Chair, Preparing Future Faculty Certificate *Ad Hoc* Committee, Old Dominion University

Honors, Grants and Awards

2024: Grant to participate in the summer course, Professional Development in University Teaching and Learning, Central European University Foundation of Budapest and Open Society University Network, 1341 USD

2024: Award to attend the 2024 Fly School III (<https://dipteracourse.com/>), North American Dipterists Society, 850 USD

2023: Nominated to AUB Teaching Excellence Award (declined)

2023: Inducted into Sigma Xi

- 2023:** Erasmus+ Staff Mobility Grant (Herbarium, Botanischer Garten und Botanisches Museum, Freie Universität Berlin, June 26-30, 2023)
- 2023:** Towards the conservation of non-charismatic plant species in Lebanon: The case of *Isoetes libanotica* and *I. olympica*, Species Survival Commission (SSC) Internal Grant, IUCN, 3500 USD
- 2022:** Nominated to AUB Teaching Excellence Award (declined)
- 2008 – 2009:** Dominion Scholarship, Old Dominion University
- 2006:** Virginia S. Bagley Endowed Scholarship in Biological Sciences, Old Dominion University
- Outstanding Laboratory Graduate Teaching Assistant, College of Sciences, Old Dominion University
- Inducted into the Honor Society of Phi Kappa Phi
- 1996 – 2000:** The Karim Rida Said Foundation (Currently the Said Foundation, UK) Scholarship
- 1996 – 1997:** American University of Beirut, Faculty of Arts and Sciences, Dean's Honor List

Publications

*Peer-reviewed Journals (*corresponding author)*

1. Maxted, N., J. Magos Brehm, K. Abulaila, **M. S. Al-Zein**, Z. Kehel, and M. Yazbek. 2024. Review of Crop Wild Relative Conservation and Use in West Asia and North Africa. *Plants* 13(10): 1343. <https://doi.org/10.3390/plants13101343>
2. El Zein, H., J. Stephan, C. Khater, **M. S. Al-Zein** and M. Bou Dagher-Kharrat. 2022. Aligning terrestrial habitat typology of Lebanon with EUNIS habitat classification. *Phytocoenologia* 51 (3): 233-244.
3. Abi-Said, M.R. and **M. S. Al-Zein**. 2022. Rodents Diversity in Wadi As Sulai, Riyadh Province, Kingdom of Saudi Arabia. *Jordan Journal of Natural History* 9(1): 83-88.
4. Itani M., **M. Al Zein**, N. Nasralla, and S. N. Talhouk. 2020. Biodiversity conservation in cities: Defining habitat analogues for plant species of conservation interest. *PLoS ONE* 15(6): e0220355. <https://doi.org/10.1371/journal.pone.0220355>
5. Abi-Said, M. R., **M. Al Zein**, M. A. Abu Baker, and Z. S. Amr. 2020. Diet of the Desert Eagle Owl, *Bubo ascalaphus*, in Eastern Saudi Arabia. *Pakistan Journal of Zoology* 52(3): 1169-1171.
6. **Al-Zein, M.**, E. Azzurro and M. Bariche. 2019. Local knowledge reveals the sudden population increase of several invasive fish species in the Eastern Mediterranean sea. *Rapp. Comm. int. Mer Médit.* 42: 260.
7. Al-Beyrouthy, J., N. Karam, **M. S. Al-Zein** and M. Yazbek. 2019. Ecogeographic survey and gap analysis for *Medicago* L.: recommendations for in situ and ex situ conservation of Lebanese species. *Genetic Resources and Crop Evolution* 66: 1009-1026.

8. Al-Akl, N. M., E. N. Karaan, **M. S. Al-Zein** and S. Assaad. 2018. The landscape of urban cemeteries in Beirut: Perceptions and preferences. *Urban Forestry & Urban Greening* 33: 66-74.
9. Chami, M., A. Hajj, J. Kahwaji, H. Youssef, S. Ghaith, L. Fakih, M. Smaha, R. Nabbout, M. El Riachy, F. As-Sadi, **M. Al Zein**, FJ Ruiz Gomez, G. Palacios-Rodriguez, R. Navarro-Cerillo, J. Tous, and L. Chalak. 2018. Assessment of Ancient Carob Germplasm of Lebanon by Morphological Traits. *Journal of the American Pomological Society* 72(4): 260-278.
10. Sabra, J., Imad, R., Miri, H., Yehia, Y. and **M. S. Al-Zein***. 2017. Restoration against all odds: the case of coastal sand dunes in Ouzai. *Plant Sociology* 54 (Supplement 1): 67-71.
11. Haddad, S. G., Smith, C. S., **Al-Zein, M. S.** and K. M. Knio. 2017. Genetic and morphometric variations in the Lebanese populations of the flower-head-infesting fruit fly, *Terellia serratulae* (Diptera: Tephritidae). *The Canadian Entomologist* 149(1): 73-88.
12. Addam, K., **M. S. Al-Zein**, M. Bou-Hamdan and H. Naous. 2016. A New Record: *Cyclamen persicum* Mill. var. *autumnale* Grey-Wilson was Added to the Native Lebanese Flora. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)* 26(4): 186-194.
13. Yazbek, M. M. and **M. S. Al-Zein**. 2014. Wild almonds gone wild – Revisiting Darwin’s statement on the origin of peaches. *Genetic Resources and Crop Evolution* 61(7): 1319-1328.
14. Korfali, S. I., M. Mroueh, **M. Al-Zein** and R. Salem. 2013. Metal concentration in commonly used medicinal herbs and infusion by Lebanese population: Health impact. *Journal of Food Research* 2(2): 70-82.
15. Machaka-Houri, N., **M. S. Al-Zein**, D. B. Westbury and S. N. Talhouk. 2012. Reproductive success of the rare endemic *Orchis galilaea* in Lebanon. *Turkish Journal of Botany* 36: 677-682.
16. Musselman, L. J. and **M. S. Al-Zein**. 2009. *Isoetes duriei* new to Lebanon. *American Fern Journal* 99 (4): 333-334.
17. Smith, C. A., **M. S. Al-Zein**, N. P. Sayar and K. M. Knio. 2009. Host races in *Chaetostomella cylindrica* (Diptera: Tephritidae): genetic and behavioral evidence. *Bulletin of Entomological Research* 99: 425-432.
18. Knio, K. M., I. M. White and **M. S. Al-Zein**. 2007. Host-race formation in *Chaetostomella cylindrica* (Diptera: Tephritidae): morphological and morphometric evidence. *Journal of Natural History* 41(25-28): 1697-1715.
19. Bariche, M., R. Sadek, **M. Al-Zein** and M. El – Fadel. 2007. Diversity of juvenile fish assemblages in the pelagic waters of Lebanon (eastern Mediterranean). *Hydrobiologia* 580: 109-115.
20. (Invited) **Al-Zein, M. S.*** and L. J. Musselman. 2004. *Michauxia* (Campanulaceae): A Western Asian genus honoring a North American pioneer botanist. *Castanea: Occasional Papers in Eastern Botany* 2: 200-205.

Publications (in Peer-reviewed Journals) Contributing to Sustainable Development Goals (SDGs)

Publication	SDGs Matched to Publication
Maxted, N., J. Magos Brehm, K. Abulaila, M. S. Al-Zein , Z. Kehel, and M. Yazbek. 2024. Review of Crop Wild Relative Conservation and Use in West Asia and North Africa. <i>Plants</i> 13(10): 1343. https://doi.org/10.3390/plants13101343	SDG 2, SDG 13, SDG 15, SDG 17
El Zein, H., J. Stephan, C. Khater, M. S. Al-Zein and M. Bou Dagher-Kharrat. 2022. Aligning terrestrial habitat typology of Lebanon with EUNIS habitat classification. <i>Phytocoenologia</i> 51 (3): 233-244.	SDG 14, SDG 15
Itani M., M. Al Zein , N. Nasralla, and S. N. Talhouk. 2020. Biodiversity conservation in cities: Defining habitat analogues for plant species of conservation interest. <i>PLoS ONE</i> 15(6): e0220355. https://doi.org/10.1371/journal.pone.0220355	SDG 11, SDG 15
Al-Beyrouthy, J., N. Karam, M. S. Al-Zein and M. Yazbek. 2019. Ecogeographic survey and gap analysis for <i>Medicago</i> L.: recommendations for in situ and ex situ conservation of Lebanese species. <i>Genetic Resources and Crop Evolution</i> 66: 1009-1026.	SDG 2, SDG 14
Al-Akl, N. M., E. N. Karaan, M. S. Al-Zein and S. Assaad. 2018. The landscape of urban cemeteries in Beirut: Perceptions and preferences. <i>Urban Forestry & Urban Greening</i> 33: 66-74.	SDG 11
Chami, M., A. Hajj, J. Kahwaji, H. Youssef, S. Ghaith, L. Fakih, M. Smaha, R. Nabbout, M. El Riachy, F. As-Sadi, M. Al Zein , FJ Ruiz Gomez, G. Palacios-Rodriguez, R. Navarro-Cerillo, J. Tous, and L. Chalak. 2018. Assessment of Ancient Carob Germplasm of Lebanon by Morphological Traits. <i>Journal of the American Pomological Society</i> 72(4): 260-278.	SDG 7
Sabra, J., Imad, R., Miri, H., Yehia, Y. and M. S. Al-Zein* . 2017. Restoration against all odds: the case of coastal sand dunes in Ouzai. <i>Plant Sociology</i> 54 (Supplement 1): 67-71.	SDG 6, SDG 9, SDG 11, SDG 13, SDG 14, SDG 15
Yazbek, M. M. and M. S. Al-Zein . 2014. Wild almonds gone wild – Revisiting Darwin’s statement on the origin of peaches. <i>Genetic Resources and Crop Evolution</i> 61(7): 1319-1328.	SDG 2

Books/ Booklets/ Book Chapters

1. **Al-Zein, M. S.**, M. Semaan and M. Yazbek. 2018. State of knowledge of the south and east Mediterranean flora: Lebanon. pp. 16-17. In: M. Valderrabano, T. Gill, V. Heywood and B. de Montmollin (Editors). *Conserving Wild Plants in the South and East Mediterranean Region*. Gland, Switzerland: International Union for the Conservation of Nature.

2. **Al-Zein, M. S.**, S. Baydoun, M. Bou Dagher-Kharrat, S. Bou Fakhreddine, L. Chalak, H. El-Zein, M. Itani, N. Machaka-Houri, L. Samaha, M. Semaan, J. Stephan, S. N. Talhouk and M. Yazbek. 2018. Status of threatened flora: Lebanon. pp. 33-34. In: M. Valderrabano, T. Gill, V. Heywood and B. de Montmollin (Editors). *Conserving Wild Plants in the South and East Mediterranean Region*. Gland, Switzerland: International Union for the Conservation of Nature.
3. Elzein, H., M. Itani, S. N. Talhouk, M. Bou Dagher-Kharrat, M. Yazbek and **M. S. Al-Zein**. 2018. Key Biodiversity Areas (KBAs) for plants in the Mediterranean Region: Lebanon. pp. 77-84. In: M. Valderrabano, T. Gill, V. Heywood and B. de Montmollin (Editors). *Conserving Wild Plants in the South and East Mediterranean Region*. Gland, Switzerland: International Union for the Conservation of Nature.
4. Chikhali, M., A. Shehadeh, A. Almasri and **M. S. Al-Zein**. 2018. Key Biodiversity Areas (KBAs) for plants in the Mediterranean Region: Syria. pp. 85-92. In: M. Valderrabano, T. Gill, V. Heywood and B. de Montmollin (Editors). *Conserving Wild Plants in the South and East Mediterranean Region*. Gland, Switzerland: International Union for the Conservation of Nature.
5. Talhouk, S.N., M. Itani and **M. Al-Zein**. 2018. Biodiversity in Lebanon. In: Pullaiah, T. *Global Biodiversity: Volume 1: Selected Countries in Asia*. Oakville, Canada: Apple Academic Press Inc.
6. Talhouk, S. N., M. Itani, H. El Zein, R. Al Malti, **M. S. Al-Zein**. 2017. Important Plant Areas in Lebanon: Priority Areas for Plant Conservation. Beirut, Lebanon: Nature Conservation Center, American University of Beirut.
7. Talhouk, S. N., M. M. Yazbek, K. Sleem, A. J. Sarkissian, **M. S. Al-Zein** and S. Abo Eid. 2014. *Trees of Lebanon*. Beirut: Nature Conservation Center, American University of Beirut.
8. Kilburn, K. and **M. Al-Zein**. 2007. Theme three: Environmental resources. pp. 101-162. In: Allen, D. W., **M. Al-Zein**, C. Colburn, C. Drake, A. J. English, Jr., M. Erten-Unal, K. Kilburn, T. Mathews, C. McLewin, B. McMillan, R. Runte, A. Schwarz-Miller and G. R. Whittecar. *NewPAGE: New portals to appreciating our global environment*. Boston: Pearson Custom Publishing.
9. **Al-Zein, M. S.** and M. A. Itani. Is a plant native or alien? In: Makhzoumi, J. *Beirut gardens: greening places, engaging communities* (in press).
10. **Al-Zein, M. S.**, M. A. Itani and B. Hamzeh. Assyrian plums and sycomores: two neglected trees in Beirut. In: Makhzoumi, J. *Beirut gardens: greening places, engaging communities* (in press).

Conference Proceedings

1. Sadek, R., L. Chehab, K. Knio, N. Sinnu-Saoud and **M. Al Zein**. 2023. The Indigenization of Ecological and Environmental Education in the MENA Region: The Role of a Natural History Museum. *INTED2023 Proceedings*. p. 6517 (abstract only).
2. Al-Akl, N. M. and **M. S. Al-Zein**. 2018. Urban cemeteries in Beirut: Re-questioning the landscapes of death. pp. 9-10. In: *The Place that Remains: Recounting the Un-built Territory Conference Proceedings*. Lebanese American University, Beirut, Lebanon.

3. **Al-Zein, M. S.**, L. J. Musselman, T. R. Sampson and K. U. Tennakoon. 2013. Cultural and religious keystone species: The need to re-sacralize nature. pp. 525-528. In: Amri, A. and A. Damania (Editors). Proceedings of the International Conference on Promoting Community-driven Conservation and Sustainable Use of Dryland Agrobiodiversity. International Center for Agricultural Research in the Dry Areas, Beirut, Lebanon.

Selected Technical Reports

1. Itani, M., El Zein, H. and **Al-Zein, M.S.** 2020. *Matthiola crassifolia*. The IUCN Red List of Threatened Species 2020: e.T79146871A79146873.
<https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T79146871A79146873.en>
2. Khoury, R., M. Nader, S. El Indari, M. Abou Dagher, **M. S. Al-Zein**, J. Finianos, C. Khater, R. Ghoussainy, T. Tabaja. 2019. Sixth National Report of Lebanon to the Convention on Biological Diversity. United Nations Development Programme and Ministry of Environment, Lebanon.
3. **Al-Zein, M. S.** 2017. Flora of the Quarry Rehabilitation Site at Aaita el Foukhar (Rashaya District, Beqaa, Lebanon). Report submitted to Mada Association.
4. **Al-Zein, M. S.** 2017. Flora of the Quarry Rehabilitation Site at Mdoukha (Rashaya District, Beqaa, Lebanon). Report submitted to Mada Association.
5. **Al-Zein, M. S.** and H. El-Zein. 2017. Magne Seed Collection Project: Final Report. Report Submitted to Mada Association.
6. **Al-Zein, M. S.** and M. Itani. 2017. Lebanon Waterfront City (LWFC): Five Year Landscape and Habitat Management Plan. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) for Lebanon Waterfront City.
7. Abi-Said, M. R., **M. S. Al-Zein**, M. Bariche, R. Sadek and G. Ramadan-Jaradi. 2016. Wadi as-Sulai Development Project in Saudi Arabia (KSA): Ecological Assessment Services. Report submitted to Dar Al-Handasah: Shair and Partners.
8. **Al-Zein, M. S.** and H. El-Zein. 2015. Bkerzay Ecological Assessment Report: Ecological Value of Site, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) for Bkerzay, Lebanon.
9. Itani, M. A., M. M. Yazbek and **M. S. Al-Zein**. 2014. Notes on the Flora of Dalieh. Report submitted to the Civil Campaign to Protect the Dalieh of Raouche. 8 pp.
10. **Al-Zein, M. S.** and M. A. Itani. 2014. Lebanon Waterfront City (LWFC) SP3 Ecological Assessment Report: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of LWFC SP3 project, Lebanon.
11. **Al-Zein, M. S.** (With contributions by M. A. Itani, M. Zeidan and Y. Chamaa). 2014. Beit Misk Ecological Assessment Report: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial

fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of Beit Misk project.

12. **Al-Zein, M. S.** and M. A. Itani. 2014. Lebanon Waterfront City (LWFC) Phases 1 and 1A Ecological Assessment Report: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of LWFC Phases 1 and 1A project.
13. **Al-Zein, M. S.** and M. A. Itani. 2014. Dbayeh Waterfront City SP5 and SP6 Ecological Assessment Report: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of LWFC Phases SP5 and SP6 project.
14. **Al-Zein, M. S.** (With contributions by M. A. Itani, M. Zeidan and Y. Chamaa). 2014. Biodiversity Survey, Restoration Measures and Landscaping Recommendations. Report submitted to Beit Misk.
15. **Al-Zein, M. S.** and M. Yazbek. 2012. Ecological Assessment Report – Yarze 1561: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of Yarze 1561 project.
16. Machaka-Houri, N., **M. S. Al-Zein** and M. Yazbek. 2012. Biodiversity Assessment Report – Thoum 331. Report submitted to The Other Dada.
17. **Al-Zein, M. S.**, N. Machaka-Houri and M. Yazbek. 2011. Ecological Assessment Report – Yarze 1674: Ecological Report on Land Use, Protection of Ecological Features and Enhancement of Site Ecology. Report submitted to EcoConsulting in partial fulfillment for the BREAAAM (Building Research Establishment Environmental Assessment Method) of Yarze 1674 project.
18. Yazbek M., N. Machaka-Houri, **M. S. Al-Zein**, S. Safi, N. Sinno and S. N. Talhouk. 2011. Lebanon. pp. 53-57. In: E. A. Radford, G. Catullo and B. de Montmollin. Important Plant Areas of the South and East Mediterranean Region: Priority Sites for Conservation. International Union for the Conservation of Nature (IUCN), Gland, Switzerland and Malaga, Spain.

Conferences, Workshops, Posters and Presentations

Organization

Co-organized, co-developed and co-taught a training course on Crop Wild Relatives Identification and Conservation in West Asia, International Center for Agricultural Research in the Dry Areas (ICARDA), Terbol, Lebanon, May 2023

Co-organizer, “National meeting on the conservation of plants and important plant areas (IPAs) in Lebanon,” January 21, 2017, American University of Beirut, Beirut, Lebanon

“The environment in children’s literature” (panel discussion), August 30, 2012, Lebanese American University, Beirut, Lebanon

“Horsh Beirut: An urban park for people or a sanctuary for life?” (panel discussion), August 20, 2010, Lebanese American University, Beirut, Lebanon

Participation (Without Presentations)

The Quest in the Question: Crafting Prompts for Writing-Based Learning, Bard College Institute for Writing and Thinking (IWT), New York, United States of America, February 7, 2025 (on-line); tuition covered by Open Society University Network (OSUN)

Professional Development in University Teaching and Learning, Central European University (CEU) Summer University, Budapest, Hungary, July 22-26, 2024

Panelist, Perspectives on Extinction: An Interdisciplinary Panel, Department of Critical Humanities for the Liberal Arts, American University of Beirut, April 3, 2024, Beirut, Lebanon

Advancing Equity and Access through Open Educational Resources, Bard College IWT Center for Liberal Arts and Sciences Pedagogy (CLASP) Spring 2024 Workshop Series, Bard College, New York, United States of America, March 5, 2024 (on-line)

Introduction to Reflective Writing, Bard College IWT, New York, United States of America, February 23, 2024 (on-line); tuition covered by Open Society University Network (OSUN)

Introduction to Writing and Thinking, Bard College IWT, New York, United States of America, February 9, 2024 (on-line); tuition covered by OSUN

Debate in the Classroom: Writing, Speaking, Teaching, OSUN Global Debate Network and OSUN CLASP, Bard College, New York, United States of America, July 9-14, 2023; funded by OSUN

Universal Design for Learning (UDL) in Higher Education around the World, OSUN Developing Teaching Professionals Inclusive Teaching Workshop Series, April 14, 2023 (blended)

Reading Climate, Writing Change: Octavia E. Butler's "Parable of the Sower" and Christiana Figueres and Tom Rivett-Carnac's "The Future We Choose: Surviving Climate Crisis", Bard College IWT, New York, United States of America, March 3, 2023 (on-line); tuition covered by OSUN

Introduction to Writing to Learn in the STEM Disciplines, Institute for Writing and Thinking, Bard College IWT, New York, United States of American, February 3, 2023 (on-line); tuition covered by OSUN

Central and West Asia and North Africa (CWANA) Workshop on Conservation and Use of Plant Genetic Resources, ICARDA, December 5-16, 2022, Terbol, Lebanon

Higher Education in the Arab World: E-Learning and Distance Education (20th International Conference of the Arab Academy of Sciences), November 11-12, 2022, Beirut, Lebanon

The Philosophy of Biological Systematics, course taught by Dr. Kirk Fitzhugh, Curator of Polychaetes, Natural History Museum of Los Angeles County, California, United States of America, May 16-June 27, 2022 (on-line)

Teaching Innovation through Design Thinking Bootcamp, Interdisciplinary Design Practice Program, Maroun Semaan Faculty of Engineering and Architecture, American University of Beirut, May 5-6, 2022, Beirut, Lebanon

Communicating Science: Research-Media Nexus (Trainer: Rami G. Khouri), The Portal for Social Impact of Scientific Research in/on the Arab World (Athar), Issam Fares Institute for Public Policy and International Affairs (IFI), American University of Beirut, April 4, 6 and 8, 2022, Beirut, Lebanon

Diversity and Inclusion (EDU-US), EverFi, Inc., December 2020 (On-line)

Animator, Thematic Session: Biodiversity and Agroecosystems, Webinar on Nahr Ibrahim, O-LiFE, Lebanese National Council for Scientific Research (CNRS-L), October 26, 2020

Science-Policy Dialogue on the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Asia-Pacific Regional Assessment for South Asia and West Asia, Ministry of Forests and Environment, Government of Nepal, February 27-28, 2019, Kathmandu, Nepal

COP 14 – Fourteenth meeting of the Conference of the Parties to the Convention on Biological Diversity, November 17-29, 2018, Sharm El-Sheikh, Egypt

Research that Matters: Developing Effective Science and Engineering Communication, Maroun Semaan Faculty of Engineering and Architecture, Faculty of Arts and Sciences and Science and Math Education Center, American University of Beirut, June 26, 2018, Beirut, Lebanon

Intersections: Supervisor Anti-Harrassment & Title IX (EDU-US), EverFi, Inc., June 23, 2018 (On-line)

Regional Workshop on Ecosystem Restoration, Community Involvement, and Better Management for Buffer and Development Zones, Shouf Biosphere Reserve, May 23-25, 2017, Maaser el Shouf, Lebanon

Critical Ecosystem Partnership Fund (CEPF) National Conservation Outcome Workshop, Faculty of Sciences, Sciences and Technology Campus, Saint Joseph University, May 22, 2017, Mar Roukoz, Mkalles, Lebanon

Workshop sur les KEV-ENVIMED et une journée vers une vision partagée de la collaboration IRD-CNRS-CNRS-L: Outils, structurés, poursuite de l'observatoire O-LiFE, Centre d'Etudes Spatiales de la Biosphère, April 18-19, 2017, Toulouse, France

Fifth Mediterranean Forest Week: Towards an enhanced regional cooperation to restore Mediterranean landscapes: improving resilience for the benefit of people and the environment, March 20-24, 2017, Agadir, Morocco

Regional Red List Assessment of the Trees of the Arabian Peninsula, Eighteenth Sharjah International Conservation Forum for Arabian Biodiversity, Breeding Centre for Endangered Arabian Wildlife, Environment and Protected Areas Authority, February 6-9, 2017, Sharjah, United Arab Emirates

Panelist, Panel 1: Mapping Plant Diversity; and moderator, Panel 3: Conservation in Action, National Meeting on the Conservation of Plants and Important Plant Areas in Lebanon, American University of Beirut, January 21, 2017, Beirut, Lebanon

The Stakeholders Engagement Workshop Related to the Preparation of the Third National Biosafety Report to the Cartagena Protocol on Biosafety, Lebanese Ministry of Environment (MoE) and the United Nations Environment Programme (UNEP), May 20, 2016, Beirut, Lebanon

Faculty Seminar on Learning and Teaching Excellence, Center for Teaching and Learning, American University of Beirut, February-April 2016, Beirut, Lebanon

Coping with Water Scarcity, Rafik Hariri Foundation and the UNESCO Office – Beirut, December 14-16, 2015, Beirut, Lebanon

Hima for Local Involvement in Landscape Management, European Neighborhood and Partnership Instrument (ENPI) Cross-border Cooperation in the Mediterranean (CBC Med), the American University of Beirut, Society for the Protection of Nature in Lebanon (SPNL) and MedScapes, December 10, 2015, Beirut, Lebanon

Conserving Wild Plants and Habitats for People in the South and East Mediterranean: Workshop on Habitat Mapping in Important Plant Areas (IPAs), International Union for the Conservation of Nature, Centre for Mediterranean Cooperation (IUCN-Med) and Centre for Middle Eastern Plants (CMEP), Royal Botanic Gardens, Edinburgh (RBGE), November 23-27, 2015, Malaga, Spain

Conserving Wild Plants and Habitats for People in the South and East Mediterranean: Species Field Data Collection Workshop, International Union for the Conservation of Nature, Centre for Mediterranean Cooperation (IUCN-Med) and the Scientific Institute of the Mohammed V University, March 22-26, 2015, Rabat, Morocco

Generating a Risk and Ecological Analysis Toolkit for the Mediterranean, Regional Involvement Event, Great Med Project, January 21, 2015, Beirut, Lebanon

The International Union for the Conservation of Nature (IUCN) Red Listing Lebanese Plants: A Comprehensive Workshop, Faculty of Sciences, Sciences and Technology Campus, Saint Joseph University, May 9-11, 2014, Mar Roukoz, Mkalles, Lebanon

“Ecological Footprint and Sustainability Options in Arab Countries” Consultation Meeting, Arab Forum for Environment and Development (AFED), April 27, 2012, Beirut, Lebanon

Zero Mercury: For a World Free of Mercury. IndyACT, March 29, 2012, Beirut, Lebanon

The Third Annual Build It Green – Lebanon Sustainability Solutions Conference, e-EcoSolutions, March 28, 2012, Beirut, Lebanon

Eco-building and LEED Green Associate Training (12 hours), EcoConsulting, November – December 2011, Beirut, Lebanon

Arab Environment 2010: Water: Sustainable Management of a Scarce Resource, Arab Forum for Environment and Development, November 4 – 5, 2010, Beirut, Lebanon

The Fifth Environmental Symposium of German-Arab Scientific Forum for Environmental Studies: Impact of Global Warming on Water Resources in the Middle East and North Africa, September 20 – 21, 2010, Beirut, Lebanon

Zero Waste Conference: From Waste Management to Material Management, July 26 – 27, 2010, Beirut, Lebanon

Arab Environment 2009: Impact of Climate Change on Arab Countries, November 19-20, 2009, Arab Forum for Environment and Development, Beirut, Lebanon

Spatial Heterogeneity in Biotic and Abiotic Environments: Effects on Species Ranges, Co-evolution and Speciation, February 6-10, 2006, Mathematical Biosciences Institute, Ohio State University, Columbus, Ohio, USA

The 52nd Annual Systematics Symposium: Reconstructing Complex Evolutionary Histories: Gene-Species Trees, Historical Biogeography, and Coevolution, October 7-9, 2005, Missouri Botanical Gardens, St. Louis, Missouri, USA

The Eighth Annual Science and Math Teachers' Conference (SMEC VIII), May 21-22, 2004, Beirut, Lebanon

The Sixth Annual Science and Math Teachers' Conference (SMEC VI), May 17-18, 2002, Beirut, Lebanon

International Conference on Economic Growth: The Involvement of Biotechnology and the Modern Bioindustries, November 10-11, 2001, Beirut, Lebanon

International Conference on Technology Transfer in Biotechnologies as a Catalyst for National Development, October 6-9, 1999, Beirut, Lebanon

Presentations (Presenter underlined)

1. Pasta, S., H. El Zein, O. Şentürk, S. Gücel, L. De Simone, M.H. Makhlof, M. Abu-Hadra, **M. S. Al-Zein**, M. Bou Dagher Kharrat, B. de Montmollin. 2023. Wide-ranged, highly disjunct, locally rare and severely endangered: the challenging risk assessment and a global conservation strategy of *Erica sicula* Guss. *sensu lato* (Ericaceae). Fourth Mediterranean Plant Conservation Week, 23-27 October, 2023, Valencia, Spain
2. Itani, M., H. El Zein, R. Al Malti, S.N. Talhouk, **M. S. Al-Zein**, P. Manzano, M. Cabeza and T. Monteiro-Henriques. 2023. Assessing the Impact of Pastoralism on Floral Diversity in the Sannine-Kneisseh Important Plant Area of Lebanon. Fourth Mediterranean Plant Conservation Week, 23-27 October, 2023, Valencia, Spain
3. Sadek, R., L. Chehab, K. Knio, N. Sinnu-Saoud and **M. Al Zein**. 2023. The Indigenization of Ecological and Environmental Education in the MENA Region: The Role of a Natural History Museum. INTED 2023: 17th Annual International Technology, Education and Development Conference, 6-8 March, 2023, Valencia, Spain.
4. **Al-Zein, M. S.**, H. Elzein, J. Stephan, M. Bou Dagher-Kharrat and C. Khater. Conservation of Lebanese Coastal Plants: Mission Impossible? Second Mediterranean Plant Conservation Week, 12-16 November, 2018, La Valetta, Malta.
5. Itani, M., S. N. Talhouk and **M. S. Al-Zein**. Employing species and life-form data to guide planting design and vegetation management in a Mediterranean city for plant species conservation. Second Mediterranean Plant Conservation Week, 12-16 November, 2018, La Valetta, Malta.

6. Al-Akl, N. and **M. S. Al-Zein**. 2018. Urban Cemeteries in Beirut: Requestioning the Landscapes of Death. The Place that Remains: Recounting the Un-built Territory, 23-24 March, 2018, Lebanese American University, Beirut, Lebanon.
7. **Al-Zein, M. S.** 2017. The influence of Darwin's theory on renaissance (*nahdawi*) and nationalist thought in late 19th and early 20th century Levant (*mashreq*). University for Seniors, American University of Beirut, Beirut, Lebanon.
8. **Al-Zein, M. S.**, Itani, M. A., Yazbek, M., Beyrouthy, J., Malti, R., Karam N. and S. N. Talhouk. 2016. Towards the Conservation and Management of Mediterranean Coastal Sandy Ecosystems and Their Endemic Flora: The Lebanese Coast as a Case Study. Mediterranean Plant Conservation Workshop, First Mediterranean Plant Conservation Week, 24-29 October, 2016, Ulcinj, Montenegro.
9. Itani, M. A., **Al-Zein, M. S.** and S. N. Talhouk. 2016. Conserving Range- and Site-restricted Endemics in an Urban Setting: Beirut and Coastal Lebanese Endemics as a Case Study. Mediterranean Plant Conservation Workshop, First Mediterranean Plant Conservation Week, 24-29 October, 2016, Ulcinj, Montenegro.
10. Abi-Said, M. R., Karam, S. S., Itani, M. A. and **M. S. Al-Zein**. 2016. Altitudinal Distribution of Rodents Along Ibrahim River in Mount. Lebanon. First Regional Conference on Ecosystem Services in the MENA Region, October 10-12, 2016, Dead Sea, Jordan.
11. **M. S. Al-Zein**, Al-Akl, N. and M. Yazbek. 2016. Native Plant Species as Potential Ornamentals. Session IV: Landscape Ecology and Environment, Unfolding Middle Eastern Landscapes: Changing Forms, Evolving Tools, Transforming Meaning, International Federation of Landscape Architects (IFLA) and Lebanese Landscape Association (LELA), May 31-June 1, 2016, American University of Beirut, Beirut, Lebanon.
12. (Invited) **Al-Zein, M. S.** and M. A. Itani. 2016. Conservation Against All Odds: The Case of Plant Biodiversity Along the Lebanese Coast. Earth Day Concerns in Lebanon, Lebanese American University, April 15, 2016, Beirut, Lebanon.
13. Sabra, J., Miri, H., Yehia, Y., Imad, R., Madani, M. and **M. S. Al-Zein**. 2015. Restoration Against All Odds: The Case of Coastal Sand Dunes in Ouzai, Lebanon. ECOPLANTMED: Ecological Use of Native Plants For Environmental Restoration and Sustainable Development in the Mediterranean Region, Saint Joseph University, October 14-16, 2015, Beirut, Lebanon
14. (Invited) **Al-Zein, M. S.** 2015. The Significance of Nature Conservation. Stakeholder Engagement on the Subject of Orchid Sanctuary in Kfarhazir on Holcim Land, International Union for the Conservation of Nature – Regional Office of West Asia (IUCN-ROWA) and Friends of Nature in Lebanon (FoN), March 7, 2015, Alita, Byblos, Lebanon.
15. (Invited) **Al-Zein, M. S.** 2014. Global Climate Change: An Ecological Perspective. Climate Change and Sustainability Policy (CLIMASP) National Workshop, Notre Dame University – Louaize (NDU), March 17-18, 2014, Zouk, Lebanon.
16. Jammoul, A. H., M. B. M. Fayad and **M. S. Al-Zein**. 2013. Facebook© as an educational tool in university science courses: the case of ecology at the Lebanese American University. The

19th International Science Conference of the Lebanese Association for the Advancement of Science (New Frontiers in Science), Lebanese American University, Beirut, Lebanon.

17. **Al-Zein, M. S.** and L. J. Musselman. 2013. Secondary pollen presentation in bellflowers revisited: The curious case of the Eastern Mediterranean endemic, *Michauxia campanuloides* L'Her. The 19th International Science Conference of the Lebanese Association for the Advancement of Science (New Frontiers in Science), Lebanese American University, Beirut, Lebanon.
18. (Invited) **Al-Zein, M. S.** 2012. Mosaics, patches, edges and borders: an ecologist's perspective. Lecture in the context of a graduate course (URDS 601/602: Urban and Landscape Design Studio/ Planning and Design Workshop; Re-Envisioning Infrastructural Breaks: Urban and Landscape Design Strategies for the Southern Edge of Beirut's Central District) at the Department of Architecture and Design, Faculty of Engineering and Architecture, American University of Beirut, Lebanon.
19. (Invited) **Al-Zein, M. S.** 2012. When Promiscuity Begets New Worts. Research Seminar and Journal Club Series, Department of Natural Sciences, School of Arts and Sciences, Lebanese American University, Beirut, Lebanon.
20. **Knio, K. M., M. S. Al-Zein,** N. P. Sayar, S. G. Haddad and C. A. Smith. 2010. Host-race formation in flower-head infesting tephritids in Lebanon. The 14th Evolutionary Biology Meeting, Marseilles, France.
21. **Machaka – Hour, N., M. S. Al-Zein,** D. B. Westberry and S. N. Talhouk. 2010. A preliminary assessment of the conservation status of the genus *Orchis* (Orchidaceae) in Lebanon with emphasis on the biology of *Orchis anatolica*, *O. galilaea* and *O. syriaca*. Biorare 2010: International Symposium on the Biology of Rare and Endemic Plant Species, Fethiye, Turkey.
22. (Invited) **Al-Zein, M. S.** and M. A. Itani. 2009. Syrian street dogs, milk teeth, American missionaries and Levantine media: Darwin and his theory in 19th century Beirut. Commemorating Darwin, Lebanese American University, Beirut, Lebanon.
23. **Itani, M. A., H. Z. Abu-Ghazaleh, Z. K. Khayat and M. S. Al-Zein.** 2009. A preliminary study of the biology of *Alcea setosa* (Malvaceae) in Beirut. The 16th International Scientific Conference of the Lebanese Association for the Advancement of Science, Beirut Arab University, Beirut, Lebanon.
24. **Al-Zein, M. S.,** C. A. Smith, N. P. Sayar and K. M. Knio. 2008. Evidence for host-race formation in *Chaetostomella cylindrica* (Diptera: Tephritidae). First International Conference on Documenting, Analyzing and Managing Biodiversity in the Middle East. Aqaba, Hashemite Kingdom of Jordan.
25. **Musselman, L. J., J. F. Bolin and M. S. Al-Zein.** 2008. The genus *Isoetes* (Lycophyta) in the Middle East. First International Conference on Documenting, Analyzing and Managing Biodiversity in the Middle East. Aqaba, Hashemite Kingdom of Jordan.
26. (Invited) **Al-Zein, M. S.** 2007. Deception, promiscuity and transexuality in the plant kingdom. Natural History Seminar Series, Natural History Museum, Department of Biology, American University of Beirut, Beirut, Lebanon.

27. Musselman, L. J., M. S. Al-Zein, J. F. Bolin, W. C. Taylor and M. Keskin. 2007. The genus *Isoetes* in Southwest Asia. The Seventh Plant Life of Southwest Asia International Symposium, Anadolu University, Eskişehir, Turkey.
28. Al-Zein, M. S., K. M. Alarid, K. U. Tennakoon and L. J. Musselman. 2006. Floral development and style ontogeny in *Michauxia campanuloides* L'Hér. (Campanuloideae: Campanulaceae). Annual Meeting of the Association of Southeastern Biologists, Gatlinburg, Tennessee, USA.
29. Al-Zein, M. S. and K. M. Knio. 2006. Comparative life history and behavioral studies of two cryptic and sympatric *Chaetostomella* species (Diptera: Tephritidae). Annual Meeting of the Association of Southeastern Biologists, Gatlinburg, Tennessee, USA.
30. Al-Zein, M. S. and W. C. Taylor. 2006. A phylogeny of the endemic quillwort *Isoetes tennesseensis* using the second intron of a *LFY* homolog. Annual Meeting of the Association of Southeastern Biologists, Gatlinburg, Tennessee, USA.
31. Al-Zein, M. S., K. M. Alarid, K. U. Tennakoon and L. J. Musselman. 2006. Pollen development and the ontogeny of stylar hairs in *Michauxia campanuloides* L'Hér. Southeastern Ecology and Evolution Conference. Tuscaloosa, Alabama, USA.
32. Al-Zein, M. S., L. J. Musselman, T. R. Sampson and K. U. Tennakoon. 2005. Plant imagery in holy writings and its relation to preservation efforts: Examples from the Koran, Pustūn poetry, the Bible and Buddhism. International Conference on Promoting Community-driven Conservation and Sustainable Use of Dryland Agrobiodiversity. International Center for Agricultural Research in the Dry Areas, Aleppo, Syria.
33. Al-Zein, M. S. and L. J. Musselman. 2005. Phenology and pollen presentation in *Michauxia campanuloides* L'Hér. Botany 2005: Learning from Plants, Austin, Texas, USA.
34. Al-Zein, M. S. and K. M. Knio. 2005. Comparative morphometric studies of the cryptic and sympatric flower head-infesting tephritids, *Chaetostomella cylindrica* (Robineau-Desvoidy) and *C. lurida* (Loew). Annual Meeting of the Association of Southeastern Biologists. Florence, Alabama, USA.
35. Al-Zein, M. S., K. M. Knio and L. J. Musselman. 2005. A preliminary study of the floral biology of *Michauxia campanuloides* L'Hér. (Campanulaceae). Annual Meeting of the Association of Southeastern Biologists. Florence, Alabama, USA.
36. Al-Zein, M. S., K. M. Alarid, L. J. Musselman and K. M. Knio. 2005. A preliminary study of the pollination biology of *Michauxia campanuloides* L'Hér. (Campanulaceae). Southeastern Ecology and Evolution Conference. Athens, Georgia, USA.
37. Al-Zein, M. S. and L. J. Musselman. 2004. The Quranic *talh*: Banana or acacia? Botany 2004: Alpine Diversity Adapted to the Peaks. Snowbird, Utah, USA.
38. Al-Zein, M. S. and H. M. Yassine. 2003. Designing competency-based questions to test scientific reasoning in middle school life and earth sciences. Seventh Annual Science and Math Teachers' Conference. Beirut, Lebanon.

Posters

1. Calvo, L., M. Itani, J. Aldasoro, M. Alarcón, P. Manzano, **M. S. Al-Zein**, and A.S. Meseguer. 2024. Phylogenetic relationships of the *Campanula* group *Megalocalyx*, and assignment of a new species from Beirut, XX International Botanical Congress, 21-27 July, 2024, Madrid, Spain.
2. Itani, M., S. N. Talhouk, S. Pasta and **M. S. Al-Zein**. 2017. Assessing the impact of *Carpobrotus edulis* and *Lantana camara* on three Lebanese coastal endemic species. State of the World's Plants 2017, 25-26 May 2017, Royal Botanic Gardens-Kew, United Kingdom.
3. Karam, N., **Al-Zein, M. S.**, Noun, J., Beyrouthy, J., Mostafa, H. A. and M. M. Yazbek. 2016. Medicinal Plants of Lebanon: Diversity, Distribution, and Recommendations for Future Bioprospecting and Conservation. Mediterranean Plant Conservation Workshop, First Mediterranean Plant Conservation Week, 24-29 October, 2016, Ulcinj, Montenegro.
4. Karam, N., Noun, J., Yazbek, M., Soubra, N., **Al-Zein, M. S.** and R. S. Talhouk. 2016. Lebanese Medicinal Plants: Traditional Knowledge, Research Areas and Current Status. Ninth Conference on Medicinal and Aromatic Plants of Southeast European Countries (CMAPSEEC), May 26-29, 2016, Plovdiv, Bulgaria.
5. **Al-Zein, M. S.**, R. Hanna, M. Issa, M. A. Itani, A. Merehbi, Ramzi Mezher, Reem Mezher, T. Sarkissian. 2015. Take it or Leave it. A poster submitted to the competition: Revisiting Dalieh: A Call for Alternative Visions along Beirut's Coast. Short-listed.
6. **Al-Zein, M. S.**, C. A. Smith, N. P. Sayar and K. M. Knio. 2007. Host-race formation in *Chaetostomella cylindrica* (Diptera: Tephritidae). Initiative for Biodiversity Studies in Arid Regions Poster Forum, American University of Beirut, Beirut, Lebanon.

Countries Visited for Field Work

Armenia, Jordan, Lebanon, Morocco, Saudi Arabia, Syria, Turkey

References

Available upon request