## Curriculum vitae DR. ABDUL HAMEED

Associate Professor Dr. Muhammad Ajmal Khan Institute of Sustainable Halophyte Utilization University of Karachi, Karachi-75270 Pakistan



## PERSONAL INFORMATION

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Website: http://www.halophyte.org/htmls/abdulhameed.htm
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Web of Science ResearcherID: O-5214-2019

Web of Science Author Profile: https://www.webofscience.com/wos/author/record/1629471

Religion: Islam Nationality: Pakistani

Languages: Urdu (Mother Tongue) and English

## **EDUCATION**

Thesis Title: Salinity induced oxidative stress and Ph. D. protective antioxidant activities in halophytes. Adviser: (Plant Eco-physiology) Prof. Dr. M. Ajmal Khan, University of Karachi, Karachi, Pakistan. Admission: December 13<sup>th</sup> 2004; Completion: March 28<sup>th</sup> 2012 University of Karachi, Karachi, Pakistan. Thesis Title: M.Sc. (Botany - Plant Ecology) Effects of L-ascorbic acid (Vitamin C) pretreatments on seed germination of subtropical perennial halophytes. Adviser: Prof. Dr. M. Ajmal Khan. Admission: January 1<sup>st</sup> 2003; **Completion**: December 31<sup>st</sup> 2003 University of Karachi, Karachi, Pakistan. Admission: **B.Sc. - Honors** (Botany) January 1<sup>st</sup> 2000; **Completion**: December 31<sup>st</sup> 2002

## **MAJOR RESEARCH INTERESTS**

- Salt induced oxidative stress tolerance in halophytes
- Roles of reactive oxygen species and antioxidants during seed germination of halophytes
- Identification and expression analysis of stress tolerance genes of halophytes
- Improving stress tolerance and seed quality of cash crop halophytes by exploiting ROS signaling and antioxidant defense.

#### PROFESSIONAL EXPERIENCE

| 2023 – Present: Associate Professor (BPS 20 – Regular) at Dr. Muha  |         |
|---|---------|
| Ajmal Khan Institute of Sustainable Halophyte Utilis                | zauon,  |
| University of Karachi, Karachi-75270, Pakistan                      |         |
| 2013 – 2023: Assistant Professor (BPS 19 – Regular) at Dr. Muha     | ımmad   |
| Ajmal Khan Institute of Sustainable Halophyte Utilis                | zation, |
| University of Karachi, Karachi-75270, Pakistan                      |         |
| 2007 – 2013: Research Officer (BPS 17 – Contract) at Dr. Muha       | ımmad   |
| Ajmal Khan Institute of Sustainable Halophyte Utili                 | zation, |
| University of Karachi, Karachi-75270, Pakistan.                     |         |
| 2004 – 07: <b>Teaching/Research Assistant</b> of Prof. Dr. M. Ajmal | Khan,   |
| Halophyte Biology Laboratory, Department of B                       | otany,  |
| University of Karachi, Karachi-75270, Pakistan.                     |         |

#### RESEARCH EXPERIENCE

- Postdoctoral Research (December 2021 November 2022): Elucidation of reactive oxygen species signaling and its downstream targets for improving salinity tolerance of plants Through Fulbright Visiting Scholar Program (2021-2022) at Department of Microbiology & Molecular Biology, Brigham Young University, Provo, UT-84602, USA.
- **Split-Ph.D. Research** (April 1<sup>st</sup> 2010 March 21<sup>st</sup> 2011): Identification of genes expressive under salt stress in *Panicum turgidum*. University of Tsukuba, Tsukuba, Japan (HEC funded collaborative project entitled International Linkages of Pakistani Universities with Foreign Universities).
- **Ph.D. Research** (2004 2012): Salinity induced oxidative stress and protective antioxidant activities in halophytes. Adviser/Supervisor: Prof. Dr. M. Ajmal Khan. University of Karachi, Karachi, Pakistan.
- M.Sc. Thesis (2003): Effects of L-ascorbic acid (Vitamin C) pretreatments on seed germination of subtropical perennial halophytes. Adviser/Supervisor: Prof. Dr. M. Ajmal Khan. University of Karachi, Karachi, Pakistan.

#### TEACHING ASSIGNMENTS

#### M.Phil./MS courses

ASR -701 – Research Methodology – I (In-charge)

ASR -702 – Research Methodology - II

ISHU 771 – Plant Responses to Abiotic stresses

ISHU 772 – Ecology of Saline Habitats

ISHU 776 – Functional Genomics

ISHU 778 – Biology of Mangroves

#### <u>Ph.D. course</u>

ISHU-801 – Research Seminars

#### PROFESSIONAL SOCIETIES

| 2023 – Present: | Pakistan-U.S. Alumni Network (PUAN) of Fulbright Program |
|-----------------|--|
| 2022 – Life:    | Utah Academy of Sciences, Arts and Letters (UASAL), USA  |
| 2022:           | Sigma Xi - The Scientific Research Honor Society         |

2017 – Life: Pakistan Biological Safety Association (PBSA)
 2013 – Present: Karachi University Teachers Society (KUTS)

2012 – Life: Pakistan Botanical Society (PBS).

2009 – Life: International Society for Halophyte Utilization (ISHU)

## ACADEMIC HOUNORS/AWARDS

- Fulbright Visiting Scholar Award 2021-2022
- Associate Editor (Plant Abiotic Stress Section), Frontiers in Plant Science (2022 Present; https://loop.frontiersin.org/people/283046/editorial)
- Cash Award of Research Productivity Allowance (RPA) 2011 from Pakistan Council for Science and Technology, Islamabad, Pakistan
- Invited lecture on "Water as an ecological factor". HEC Workshop on advances in Plant Ecology (July 3-6, 2006), Department of Botany, University of Karachi.
- First Position in B.Sc. Honors (2002), Department of Botany, University of Karachi, Karachi, Pakistan

## **ADMINISTRATIVE/ COMMUNITY SERVICES**

| 2018 - 2019:   | Member subcommittee for procurement of chemicals,               |
|----------------|---|
|                | glassware and spares under PC1 entitled "Improvement of         |
|                | Academic Facilities at University of Karachi" (Office order No. |
|                | P.A./2018-1166/C; dated Aug 03, 2018).                          |
| 2018 – 2019:   | Member "Campus Beautification Committee" of University of       |
|                | Karachi (Office order No. Esstt. N.T.I./2018-; dated April 09,  |
|                | 2018).  |
| 2018 – 2019:   | Member "Admission Committee" for the session 2018-2019 of       |
|                | the University of Karachi (Office order No. A.F. 8(1),          |
|                | 2(3)/2018-1144; dated June 27, 2018).                           |
| 2018:          | Member "Students' Presentation Committee" for the               |
|                | Convocation-2018.   |
| 2017 – 2018:   | Member "Admission Committee" for the session 2017-2018 of       |
|                | the University of Karachi.                                      |
| 2017:          | Member "Students' Presentation Committee" for the               |
|                | Convocation-2017.   |
| 2013- Present: | Member of Departmental Research Committee (DRC), Institute      |
|                | of Sustainable Halophyte Utilization (ISHU), University of      |
|                | Karachi.  |
|                |   |

#### CONFERENCES/WORKSHOPS/SEMINARS

The 3<sup>rd</sup> International Laayoune Forum on Biosaline and Arid Agriculture (May 20-22, 2025). Laayoune, Morocco. [Role: *Participant*; Mode of Presentation: *Oral*]

2023 International Conference on 'Blue Carbon Ecosystems for Sustainable Development with Special Emphasis to Mangrove Ecosystems' (11 – 13 January 2023). Venue: Yokohama National University, Yokohama, Japan [Role: *Participant*; Mode of Presentation: *Oral*]

2022 Gordon Research Conference entitled "Salt and Water Stress in Plants". May 22 - 27, 2022. Les Diablerets, Switzerland [Role: *Participant*; Mode of Presentation: *Poster*]

- Invited Lecture in Graduate Seminar of Department of Molecular Biology and Microbiology, Brigham Young University (BYU), Provo, Utah, USA. February 24, 2022 [Role: *Participant*; Mode of Presentation: *Oral*]
- Annual Conference of Utah Academy of Sciences, Arts & Letters (UASAL). March 19, 2022. Brigham Young University (BYU), Provo, Utah, USA. [Role: *Participant*; Mode of Presentation: *Oral*]
- 2020 Halophytes for Science and Society. November 10, 2020. Organized by Dr. Muhammad Ajmal Khan Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan. [Role: *Member Organizing Committee*]
- 2020 The 3rd Mekong Mangrove Forum (Online Webinar). October 01, 2020. Organized by UNESCO, Bangkok, Thailand. [Role: *Participant*]
- 2019 2nd International Conference on Sustainable Development 'Halophytes for Green Revolution'. January 7-9, 2019. Organized by Dr. Muhammad Ajmal Khan Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan. [Role: *Member Organizing Committee*]
- 2017 International training course on desertification research and governance in developing countries". July 14 to August 2, 2017. Organized by Northwest Institute of Eco-Environment and Resources of Chinese Academy of Sciences (NIEER, CAS), Lanzhou, China [Role: *Participant*; Mode of Presentation: *Oral*]
- 2016 14<sup>th</sup> National and 5<sup>th</sup> International Conference of Botany Climate Change and phytodiversity: Challenges and Opportunities. January 15-18 2016. Organized by University of Karachi, Karachi, Pakistan [Role: *Member Organizing Committee*]
- 2016 "International Synergy Meeting on the Sustainable Utilization of Saline Resources In Support of United Nations Sustainable Development Goals with Special Emphasis on Renewable Energy based on Biofuels", at Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan, 5-7 December, 2016. [Role: *Member Organizing Committee*]
- 2016 "International Workshop on Sustainable Development and Environment Protection", December 3-4, 2016. Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan. [Role: *Member Organizing Committee*]
- 2015 2nd International Conference on "Physiological, Biochemical and Molecular Arguments for Salt Tolerance"; October 12-14, 2015; Qatar University, Doha, Qatar [Role: *Participant*; Mode of Presentation: *Oral*]
- 2014 International Conference on Halophytes for Food Security in Dry Lands, May 12-13, 2014, Centre for Sustainable Development (CSD), Qatar University, Doha, Qatar [Role: *Participant*; Mode of Presentation: *Oral*]
- HEC workshop "Hands on Training in Ecophysiological Techniques". April 12-14, 2014, Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan [Role: *Member Organizing Committee*]
- 2011 PAS workshop on "Physiological ecology of salt tolerance". April 27 to 29 2011, Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi, Pakistan [Role: *Member Organizing Committee*]
- 2010 Special seminar on "hazardous waste management". December 3<sup>rd</sup> 2010, University of Tsukuba, Tsukuba, Japan. [Role: *Participant*]
- Workshop on "Research Tools in Proteomics". November 16-18, 2009. National Center for Proteomics, University of Karachi, Karachi, Pakistan. [Role: *Participant*]
- 2009: Launching of ISAAA Brief 39 and Scientific Communication Workshop on "Implementation of the strategy for development of biotechnology in

- Pakistan" at LEJ University of Karachi, Karachi-75270, Pakistan. [Role: *Participant*]
- 2008: Workshop on Recent Trends in Plant Sciences: Impact on Biodiversity 16-18 April, 2008, organized by Institute of Sustainable Halophyte Utilization, University of Karachi, Karachi. [Role: *Participant*]
- 2006: International symposium on "Strategies for Crop Improvement against Abiotic Stresses". 18-20, Sep 2006. Department of Botany, University of Agriculture, Faisalabad, Pakistan. [Role: *Participant*; Mode of Presentation: *Poster*]
- 2006: 9th National Conference of Plant Scientists, Institute of Botany, University of Sindh, Jamshoro, Pakistan. [Role: *Participant*; Mode of Presentation: *Poster*]
- 2003: 8th National Conference of Plant Scientists, University of Karachi, Karachi, Pakistan. [Role: *Participant*; Mode of Presentation: *Poster*]

#### RESEARCH SUPERVISED

## M.Phil./MS

- 1. Parsa Soomro: Ameliorative Potential and Mechanistic Insights into *Trichoderma* Inoculation on Stress Tolerance of Some Halophyte Crop Candidates. (*M.Phil.*; 2025 ongoing)
- 2. Fatima: Elucidating the Potential of Redox Seed Priming in Improving Germination and Salinity Tolerance of Conventional and Halophytic Fodder Plants. (*M.Phil.*; 2025 ongoing)
- 3. Sahar Abbas: Longevity, salinity tolerance and physio-chemical attributes of the seeds of two potential cash crop halophytes *Haloxylon stocksii* and *Panicum antidotale* under different storage conditions. (*M.Phil.*; 2019-2023 *Completed*)
- 4. Sadiq Hussain: Studies on efficacy of redox priming in improving salinity tolerance of potential cash crop halophytes *Zygophyllum simplex* and *Urochondra setulosa*. (*M.Phil.*; 2019-2023 *Completed*)

#### Ph.D.

- 1. **Zaheer Shah**. Spatial and temporal variations in seed germination, longevity and antioxidant responses of a cash crop halophyte *Suaeda fruticosa* to various abiotic stresses (**PhD**; 2014-2021 Status: **Completed**)
- 2. *Farah Nisar*. Role of Antioxidant defense system in high salinity tolerance of two succulent halophytes *Arthrocnemum macrostachyum* and *Arthrocnemum indicum* (*PhD*; 2014-2019 Status: *Completed*)

## **RESEARCH PROJECTS**

- Development of Stress-tolerant 'Primed' Seeds of Fodder Crops for Saline and Flooded Lands to Achieve Food Security in Sindh. Funded by Sindh Higher Education Commission, Sindh, Pakistan (Rs. 0.8 Million) Status: *Ongoing*
- 2018 Elucidation of salinity-induced alterations in ROS homeostasis of the chloroplasts of an extreme halophyte *Arthrocnemum macrostachyum*. Funded by DFS University of Karachi (Rs 0.125 Million) Status: *Completed*
- 2017 Agronomic and physio-chemical studies to Improve seed quality of potential cash crop halophytes. Funded by Higher Education Commission of Pakistan (Rs 2.70 Million) Status: *Completed*
- 2016 Elucidation of Spatial and temporal variation in Morphology, germination ROS Scavenging and longevity of Halophyte seeds. Funded by Higher Education Commission of Pakistan (Rs 2.87 Million) Status: *Completed*

2014 Exploiting the potential of exogenously applied ascorbic acid in improving salinity tolerance of a cash crop candidate *Atriplex stocksii*. Funded by DFS University of Karachi (Rs 0.075 Million) – Status: *Completed* 

# **LIST OF 'SELECTED' PUBLICATIONS**

(As on Nov 30 2025)

[Note: For updated list of publications please visit: either <a href="https://scholar.google.com/citations?user=LJNSXa4AAAJ&hl=en">https://scholar.google.com/citations?user=LJNSXa4AAAJ&hl=en</a> or <a href="https://www.researchgate.net/profile/Abdul-Hameed-46">https://www.researchgate.net/profile/Abdul-Hameed-46</a>)

#### **BOOKS EDITED**

- Gul, B., Böer, B., Clüsener-Godt, M., Hameed, A., Loughland, R.A. 2024. Blue Crbon Mangrove Ecosystems – A Concept-Based Approach. Blue Carbon Ecosystems for Sustainable Development (Volume 1). Springer. ISSN: 2730-5430.
- Gul, B., B.B. Boer, M. A.Khan, M. -C. Godt, and A. Hameed. 2019. Sabkha Ecosystems Volume VI: Asia/Pacific, Tasks for Vegetation Science 49, DOI 10.1007/978-3-030-04417-6, Hardcover ISBN 978-3-030-04416-9; Springer International Publishing, Springer Nature Switzerland AG.

#### PEER REVIEWED ARTICLES IN JOURNALS (Last 5 Years)

- 3. Nisar, F., Hussain, S., El-Keblawy, A., Gairola, S., & Hameed, A. (2025). Population-specific germination and physiochemical responses of *Aeluropus lagopoides* seeds to salinity under controlled conditions. Plant Species Biology, 1–13. DOI: https://doi.org/10.1111/1442-1984.70038. (Impact Factor = 1.3)
- 4. Gul, B., Ahmed, M.Z., **Hameed, A.,** Yu, M. and Shalaba, S., 2025. Root-to-shoot signaling in plant adaptation to soil salinity. Journal of Experimental Botany, p.eraf458. (Impact Factor = 5.7)
- 5. Shah, S.Z., Rasheed, A., El-Keblawy, A., Gairola, S., Dadach, M. and **Hameed, A., 2025.** Provenance matters: Unraveling the provenance-dependent responses of *Suaeda fruticosa* seeds to abiotic stresses. Plant Species Biology, 40(3), pp.206-216. (Impact Factor = 1.3)
- 6. Dadach, M., Nedjimi, B. and **Hameed, A.,** 2025. Effect of metallic stress on seed emergence and early seedling development of *Cistus monspeliensis* (L.): Involvement in restoration of the Mediterranean contaminated soils. Vegetos, 38(2), pp.768-779. ((Scopus Indexed))
- 7. **Hameed, A.,** Hussain, S., Nisar, F., Rasheed, A. and Shah, S.Z., 2025. Seed Priming as an Effective Technique for Enhancing Salinity Tolerance in Plants: Mechanistic Insights and Prospects for Saline Agriculture with a Special Emphasis on Halophytes. Seeds, 4(1), p.14. (Scopus Indexed)
- 8. Nisar, F., **Hameed, A.,** Gul, B., Aziz, I. and Nielsen, B.L., 2024. Insights into the salinity tolerance of the succulent halophyte *Arthrocnemum macrostachyum*: comparative ecophysiology of plants from heteromorphic seeds. Frontiers in Plant Science, 15, p.1504540. (Impact Factor = 4.1)
- 9. Gul, B., Manzoor, S., Rasheed, A., **Hameed, A.,** Ahmed, M.Z. and Koyro, H.W., 2024. Salinity Stress Responses and Adaptation Mechanisms of *Zygophyllum propinquum*: A Comprehensive Study on Growth, Water Relations, Ion Balance, Photosynthesis, and Antioxidant Defense. Plants, 13(23), p.3332. (Impact Factor = 4.0)
- 10. Hussain, S., Nisar, F., Gul, B. and **Hameed, A.,** 2024. Seed priming with melatonin improved salinity tolerance of halophytes during early life-cycle stages. Plant Growth Regulation, 103(2), pp.351-368. (Impact Factor = 3.5)

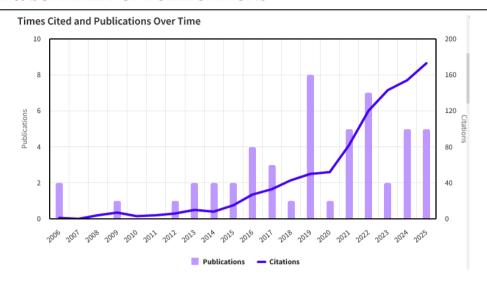
- 11. Gul, B., **Hameed, A.,** Ahmed, M.Z., Hussain, T., Rasool, S.G. and Nielsen, B.L., 2024. Thriving under salinity: growth, ecophysiology and proteomic insights into the Tolerance mechanisms of Obligate Halophyte *Suaeda fruticosa*. Plants, 13(11), p.1529. (Impact Factor = 4.0)
- 12. Dadach, M., Nedjimi, B. and **Hameed, A.,** 2024. Effect of metallic stress on seed emergence and early seedling development of *Cistus monspeliensis* (L.): Involvement in restoration of the Mediterranean contaminated soils. Vegetos, pp.1-12. (Impact Factor = 0.207)
- 13. **Hameed, A.,** Hussain, S., Rasheed, A., Ahmed, M.Z. and Abbas, S., 2024. Exploring the potentials of halophytes in addressing climate change-related issues: a synthesis of their biological, environmental, and socioeconomic aspects. World, 5(1), pp.36-57. (Impact Factor = 2.0)
- 14. Dadach, M., Gairola, S., **Hameed, A.** and El-Keblawy, A., 2023. Effects of different chloride salts on seed germination and early seedling performance of *Ceratonia siliqua*: A multipurpose tree of the Mediterranean region. South African Journal of Botany, 158, pp.8-17. (Impact Factor = 3.111)
- 15. Dadach, M., **Hameed, A.** and El-Keblawy, A., 2023. Differential effects of chloride salts on seed germination and seedling growth of *Cistus monspeliensis*: Towards revegetation of the Mediterranean salt-contaminated soils. Flora, 299, p.152209. (Impact Factor = 1.9)
- 16. Rasheed, A., Rasool, S.G., Soriano, P., Estrelles, E., Gul, B. and **Hameed, A.,** 2022. Ecophysiological and Biochemical Responses Depicting Seed Tolerance to Osmotic Stresses in Annual and Perennial Species of *Halopeplis* in a Frame of Global Warming. Life, 12(12), p.2020. (Impact Factor = 3.253)
- 17. Rasheed, A., Ali, H., Gul, B. and **Hameed, A.,** 2022. Stage-specific changes in hydrogen peroxide, membrane damage and antioxidant defense of a xerohalophyte fodder grass *Panicum antidotale* under increasing salinity. South African Journal of Botany, 151, pp.1025-1034. (Impact Factor = 3.111)
- 18. Gairola, S., **Hameed, A.,** Rasheed, A., AlKetbi, A., Aljasmi, M. and El-Keblawy, A., 2022. Seed germination and salinity tolerance of habitat-indifferent halophytes as associated with geographical distribution. Seed Science and Technology, 50(2), pp.125-140. (Impact Factor = 0.797)
- 19. Rasheed, A., Koyro, H.W., **Hameed, A.** and Gul, B., 2022. Physiological responses of the xero-halophyte *Salsola drummondii* to seasonal alterations of environmental conditions in a salt desert. Ecological Research, 37(6), pp.738-752. (Impact Factor = 2.0)
- 20. Shah, S.Z., Rasheed, A., El-Keblawy, A., Gairola, S., Phartyal, S.S., Gul, B., **Hameed, A.** 2022. Inter-provenance variation in seed germination response of a cash crop halophyte *Suaeda fruticosa* to different abiotic factors. Flora, p.152079. DOI: https://doi.org/10.1016/j.flora.2022.152079. (Impact Factor = 1.9)
- 21. Abbas, S., Rasheed, A., Soriano, P., Estrelles, E., Gul, B., **Hameed, A.** 2022. Moisture content and oxidative damage determine longevity of the seeds of potential cash crop halophyte *Haloxylon stocksii*. Plant Biosystems, pp.1-7. DOI: https://doi.org/10.1080/11263504.2022.2065378 (Impact Factor = 2.0)
- 22. Hussain, S., Nisar, F., Bhatt, A., Nielsen, B.L., Gul, B., **Hameed, A.** 2022. Redox priming alleviates dormancy and improves salinity tolerance of seeds and seedlings of medicinal halophyte *Zygophyllum simplex* L. Journal of Applied Research on Medicinal and Aromatic Plants, 30, p.100384. DOI: https://doi.org/10.1016/j.jarmap.2022.100384 (Impact Factor = 3.9).
- 23. **Hameed, A.,** El-Keblawy, A., Aljasmi M., Gairola S., Phartyal, S.S., Mosa, K.A., Soliman, S. 2021. Seed provenance, thermoperiod, and photoperiod affect low water potential tolerance during seed germination of the multipurpose exotic tree *Prosopis juliflora*. Journal of Arid Environments, 195, 104627, https://doi.org/10.1016/j.jaridenv.2021.104627 (Impact Factor = 2.759).
- 24. Rasool, S.G., Ahmed, M.Z., **Hameed, A.** and Gul, B. 2021. Altered water relations, selective nutrient uptake, and reduced Na<sup>+</sup> flux make *Halopeplis perfoliata* an obligate halophyte. Turkish Journal of Botany, 45(SI-1), 701-712, https://journals.tubitak.gov.tr/botany/abstract.htm?id=30411 (Impact Factor = 1.8).

- 25. Nisar, F., Gul, B., Aziz, I., **Hameed, A.,** Egan, T. 2021. Increasing salinity leads to differential growth and H<sub>2</sub>O<sub>2</sub> homeostasis in plants produced from heteromorphic seeds of the succulent halophyte *Arthrocnemum indicum*. Plant Physiology and Biochemistry, 166, 225-234, https://doi.org/10.1016/j.plaphy.2021.05.029. (Impact Factor = 6.5)
- 26. **Hameed, A.,** Ahmed, M.Z., Hussain, T., Aziz, I., Ahmad, N., Gul, B., Nielsen, B.L. 2021. Effects of Salinity Stress on Chloroplast Structure and Function. Cells, 10, 2023, https://doi.org/10.3390/cells10082023 (Impact Factor = 6.0).
- 27. El-Keblawy, A., Aljasmi, M., Gairola, S., Mosa, K. A., **Hameed A.** 2021. Provenance determine salinity tolerance and germination requirements of the multipurpose tree *Prosopis juliflora* seeds. Arid Land Research and Management, DOI: https://doi.org/10.1080/15324982.2021.1889713 (Impact Factor = 1.4)
- 28. Shah, S. Z., Rasheed, A., Gul, B., Khan, M. A., Nielsen, B. L., **Hameed, A**. 2020. Maternal salinity improves yield, size and stress tolerance of *Suaeda fruticosa* seeds. Journal of Arid Land, 12(2): 283-293. (Impact Factor = 3.0).
- 29. Nisar F, Gul B, Khan M.A., **Hameed A.** 2019. Heteromorphic seeds of coastal halophytes *Arthrocnemum macrostachyum* and *A. indicum* display differential patterns of hydrogen peroxide accumulation, lipid peroxidation and antioxidant activities under increasing salinity, Plant Physiology and Biochemistry, 144, 58-63; doi: https://doi.org/10.1016/j.plaphy.2019.09.031. (Impact Factor = 6.5)

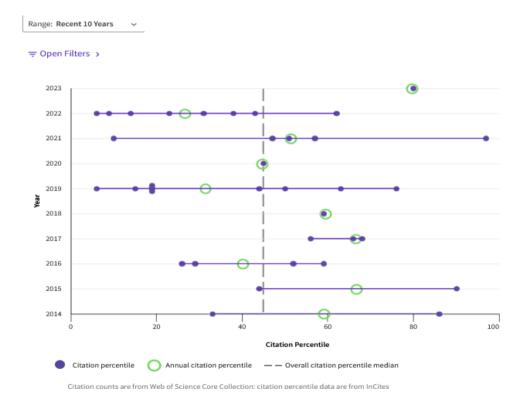
## **CHAPTERS IN INTERNATIONAL BOOKS (Last 5 Years)**

- 30. Hussain, S., Rasheed, A., Nisar, F., Gul, B. and **Hameed, A.,** 2025. Efficacy and mechanisms of seed priming with melatonin to enhance salinity tolerance. In Exogenous Priming and Engineering of Plant Metabolic and Regulatory Genes (pp. 137-156). Academic Press.
- 31. Hussain, S., Rasheed, A., Nisar, F., Gul, B. and **Hameed, A.,** 2025. Redox priming of seeds to ameliorate salinity tolerance in plants. In Exogenous Priming and Engineering of Plant Metabolic and Regulatory Genes (pp. 107-136). Academic Press.
- 32. Gulzar, S., Hussain, T., Gul, B., **Hameed, A.** 2020. Photosynthetic Adaptations and Oxidative Stress Tolerance in Halophytes from Warm Subtropical Region. In: Grigore, M.-N. (ed.) Handbook of Halophytes. Springer, Cham. (ISBN 978-3-030-17854-3; https://doi.org/10.1007/978-3-030-17854-3 52-1).
- 33. Rasheed A., Rasool S.G., Gul B., Ajmal Khan M., **Hameed A.** 2019. Reactive Oxygen Species Production and Scavenging During Seed Germination of Halophytes. In: Hasanuzzaman M., Nahar K., Öztürk M. (eds) Ecophysiology, Abiotic Stress Responses and Utilization of Halophytes. Springer, Singapore. (ISBN: 978-981-13-3761-1; DOI: https://doi.org/10.1007/978-981-13-3762-8 4) pp 63-81.
- 34. Rasheed, A., Nisar, F., Gul, B., Khan, M.A., and **Hameed, A.,** 2019. Ecophysiology of Seed Heteromorphism in Halophytes: An Overview. In: M. Hasanuzzaman, S. Shabala and M. Fujita (eds.), Halophytes and Climate Change: Adaptive Mechanisms and Potential Uses (ISBN-13:9781786394330; DOI: LCCN 2018037171). CAB International, UK. pp. 104-114.
- 35. Rasheed A, Ahmed MZ, Gul B, Khan MA and **Hameed A.** 2019. Comparative Seed Germination Ecology of Sabkha and Playa Halophytes of Pakistan. In: Gul, B. Gul, B.B. Boer, M.A. Khan, M.-C. Godt and A. Hameed (eds.), Sabkha Ecosystems, Volume VI: Asia/Pacific, Tasks for Vegetation Science 49. Springer Nature Switzerland AG. (ISBN: 978-3-030-04416-9; DOI: https://doi.org/10.1007/978-3-030-04417-6 4) pp. 41-54.
- 36. Rasool SG, Siddiqui H, **Hameed A,** Hussain T, Aziz I, Khan MA and Gulzar S. 2019. Temporal Variations in Water and Ion Relationships in Coastal Halophytes. In: Gul, B. Gul, B.B. Boer, M.A. Khan, M.-C. Godt and A. Hameed (eds.), Sabkha Ecosystems, Volume VI: Asia/Pacific, Tasks for Vegetation Science 49. Springer Nature Switzerland AG. (ISBN: 978-3-030-04416-9; DOI: https://doi.org/10.1007/978-3-030-04417-6 27) pp. 447-458.

## **IMPACT & SUMMARY OF PUBLICATIONS**



#### **Author Impact Beamplot**



Source: Web of Science Author Profile (Accessed on Dec 2, 2025)