

IRFAN RASHID

Associate Professor

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EDUCATION

Post Doc	Purdue Climate Change Research Center & Department of Forestry and Natural Resources Purdue University, Indiana, USA Advisor: Prof Jeffrey S. Dukes	Jan 2017 – Jan 2018
Ph D	Department of Botany, University of Kashmir, Srinagar, Jammu and Kashmir, India Advisor: Prof Zafar A. Reshi	Jan 2004 – Mar 2009 2000 - 2002
MSc	Department of Botany, University of Kashmir, Srinagar, J&K, India	

PROFESSIONAL POSITIONS

• Associate Professor, Department of Botany, University of Kashmir, J&K, India	October 2022 – Till date
• Assistant Professor, Department of Botany, University of Kashmir, J&K, India	April 2012 – September 2022
• Assistant Professor, Department of Botany, Government Degree College Baramulla, J&K, India	Nov 2009 – Mar 2012
• Lecturer, Higher Secondary School -Town Baramulla, J&K, India	Mar 2009 – Oct 2009

PERFORMANCE SUMMARY

• Papers Published in Impact Factor Journals: 130 <u>Citations:</u> 3184 <u>h-index:</u> 32 <u>i10-index:</u> 63	
• Countries visited for presenting research work: 10 Australia (2007); Sri Lanka (2007); Canada (2008); Pakistan (2010); Switzerland (2010); Australia (2011); China (2015); Saudi Arabia (2016); China (2016); USA (2017); Austria (2022); Nepal (2023)	
• Research Projects Completed: 04 (worth 411.16 lakhs) Ongoing: 04 (worth 158.47 lakhs)	
• PhD (Supervision) Completed (as supervisor): 08 Completed (as co-supervisor): 07 Ongoing: 04	

GRANTS AND AWARDS

Fellowships

- Visiting Scientist Fellowship by Indian National Science Academy (INSA), New Delhi to visit Indian Institute of Science (IISc), Bangalore from 01.12.2024 to 31.01.2025.
- Raman Fellowship for Post-Doctoral Research for Indian Scholars in USA by the University Grants Commission, New Delhi, India. 01.01.2017 to 31.12.2017
- Visiting Scientist Fellowship by Indian National Science Academy (INSA), New Delhi to visit Institute of Botany, The Czech Academy of Sciences (CAS), Trebon, Czech Republic from 11.11.2016 to 25.11.2016.

Awards

- J&K Council for Science & Technology Young Scientist award during 10th JK Science Congress, held in Jammu University from March 14-16, 2015
- Young and Deserving Scientist award during 23rd Asian Pacific Weed Science Society Conference, held in Cairns, Queensland, Australia from September 26-29, 2011.
- AusAID funding during 23rd Asian Pacific Weed Science Society Conference, held in Cairns, Queensland, Australia from September 26-29, 2011.
- Travel grant by Swiss Agency for Development and Cooperation, together with the Mountain Partnership (FAO) to participate in GMBA Conference at Chandolin, Switzerland July 27 - 30, 2010.
- Graduate Student Award during 5th International Weed Science Congress held at Vancouver, British Columbia, Canada from 23 to 27 June 2008.
- Asian Pacific Weed Science Society (APWSS) Young Scientist Awards during 21st and 22nd Asian Pacific Weed Science Society Conference, held in Lahore, Pakistan and Colombo, Sri Lanka respectively.

Research Projects

- Impact of alien plantation forestry on ecosystem services in Srinagar city of Kashmir Himalaya (PI), J&K Science Technology and Innovation Council, Department of Science and Technology, J&K (INR, 10,30,000) 2024-2026
- Biotechnological interventions for management of protected areas (Co-PI) Department of Biotechnology (DBT), Government of India (INR 49,00,480) 2023 to 2026
- Drivers of treeline shift in Kashmir Himalaya (Co-PI) Science and Engineering Research Board is a statutory body under the Department of Science and Technology (DST), Government of India (INR 33,66,264) 2023-2025
- Phytoliths as quantitative indicators for the reconstruction of past environmental conditions in Kashmir Himalayas, India (Co-PI) Ministry of Earth Sciences (MoES), Government of India (INR 65,50,430) 2021-2024
- Mapping, modelling, monitoring and managing invasive species in some protected areas of Kashmir Himalaya, India (Co-PI) Department of Biotechnology (DBT), Government of India (INR 68,91,400) 2019 to 2022
- Anthropogenic impacts and their management options in different ecosystems of the Indian Himalayan Region (Co-PI) Ministry of Environment, Forests and Climate Change (MOEFCC), Government of India (INR 2,67,68,400) 2017 to 2020
- Sustainable management of invasive plants using native insect herbivores in Kashmir Himalaya (Co-PI) Department of Science and Technology (DST), Government of India (INR 49,49,856) 2018 to 2021
- Effect of plant invasion on biodiversity and forest regeneration in fragmented ecosystems (PI) by Ministry of Environment, Forests and Climate Change (MOEFCC), Government of India (INR 25,06,250) 2014 to 2017

SELECTED PUBLICATIONS

Research Papers	Publisher	Impact Factor
<ul style="list-style-type: none"> Ahmad, R., Lone, S. A., Rashid, I., Khuroo, A. A. (2025). A global synthesis of the ecological effects of co-invasions. <i>Journal of Ecology</i>. doi.org/10.1111/1365-2745.14475 	Wiley	5.4
<ul style="list-style-type: none"> Malik, M. A., Hassan, S., Rashid, I., Tahir, I. (2025). Wheat Genotypes vary in efficiently using silicon to enhance growth and yield—a physiological perspective. <i>Journal of Soil Science and Plant Nutrition</i>. doi.org/10.1007/s42729-025-02348-5 	Springer	3.4
<ul style="list-style-type: none"> Shameen, F., Wani, A. H., Gulzar, I., Ahmad, T., Rashid, I. (2025). Silicon supplementation reinforces maize defence to defeat the oriental armyworm. <i>Journal of Applied Entomology</i>. doi.org/10.1111/jen.13434 	Wiley	1.7
<ul style="list-style-type: none"> Rehman, I.U. Qader, W., Dar, R.A., Rashid, I., Shah, R.A. (2024) Phytolith based paleoecological reconstruction from a loess-paleosol sequence in the Kashmir Himalaya, India. <i>Catena</i> 245: 108318 	Elsevier	5.4
<ul style="list-style-type: none"> Haq, S. M., Calixto, E. S., Song, L., Rashid, I., Khuroo, A.A. (2024). Pervasive impacts of railway edge effects on edaphic parameters and vegetation distribution patterns. <i>Environmental Development</i>, 52, 101064. 	Elsevier	4.7
<ul style="list-style-type: none"> Yan, L.J., Fan, P.Z., Wambulwa, M. C., Qi, H.L., Chen, Y., Wu, Z. Y., Milne, R.I., Khan, R., Luo, Y.H., Gao, L-M., Shen, S-K., Rashid, I., Khan, S.M., Maity, D., Li, D-Z., Liu, J. (2024). Human-associated genetic landscape of walnuts in the Himalaya: implications for conservation and utilization. <i>Diversity and Distributions</i> 30(4): e13809. 	Wiley	4.6
<ul style="list-style-type: none"> Haq, S. M., Rashid, I., Malik, A.H., Waheed, M., Khuroo, A.A. (2024). Floristic composition, natural history traits and habitat affiliation in vegetation of major forest types in Jammu and Kashmir, western Himalaya. <i>Nordic Journal of Botany</i>, e04129. 	Wiley	1.0
<ul style="list-style-type: none"> Qader, W., Dar, R. A., Rehman, I. U., Rashid, I., Sheikh, S. H. (2024). Assessing phytolith preservation in a Late Quaternary loess-paleosol sequence from the Kashmir Valley, Northwest Himalaya, India. <i>Quaternary Science Advances</i>, 16, 100238. 	Elsevier	2.9
<ul style="list-style-type: none"> Bashir, I., War, A. F., Rafiq, I., Reshi, Z. A., Rashid, I., Shouche, Y. S. (2024). Uncovering the secret weapons of an invasive plant: The endophytic microbes of <i>Anthemis cotula</i>. <i>Heliyon</i> 10: e29778. 	Cell	3.4
<ul style="list-style-type: none"> Ahmad, R., Lone, S.A., Rashid, I., Khuroo, A.A. (2024). Ecological impacts of a global plant invader: synthesizing mean and variance effects using meta-analysis. <i>Oikos</i> e10102. 	Wiley	3.1
<ul style="list-style-type: none"> Sofi, M.S., Rautela, K.S., Muslim, M., Bhat, S.U., Rashid, I., Kuniyal, J.C. (2024) Modeling the hydrological response of a snow-fed river in the Kashmir Himalayas through SWAT and Artificial Neural Network. <i>International Journal of Environmental Science and Technology</i> 21: 3115-3128. 	Springer	3.0
<ul style="list-style-type: none"> Lone, S.A., Ahmed, R., Rasray, B.A., Rashid, I., Nuñez, M.A., 	Springer	2.8

Khuroo, A. A. (2024). Disentangling the impacts of plant co-invasions: additive, antagonistic and synergistic. <i>Biological Invasions</i> doi.org/10.1007/s10530-024-03411-5		
• Sheergojri, I.A., Rashid, I. , Rehman, I.U. (2024). Systematic review of wetland ecosystem services valuation in India: assessing economic approaches, knowledge gaps, and management implications. <i>Journal of Environmental Studies and Sciences</i> , 14(1): 167-179.	Springer	1.9
• Najar, R. A., Wani, A. A., Rashid, I. , Javid, W. (2024). Meiotic chromosomal behaviour of <i>Artemisia amygdalina</i> Decne: A critically endangered medicinal plant, endemic to the North-western Himalaya. <i>Flora</i> 315: 152525.	Elsevier	1.7
• Chisholm, C., Lenoir, J., Haider, S., Seipel, T., Barros, A., Hargreaves, A., Kardol, P., Lembrechts, J., McDougall, K., Rashid, I. , .., Wright, G., Alexander, J. (2023). Rapid upwards spread of non-native plants in mountains across continents. <i>Nature Ecology and Evolution</i> 7: 405-413	Springer	13.9
• Qader, W., Mir, S.H., Meister, J., Dar, R.A., Madella, M., Rashid, I. (2023). Sedimentological perspective on phytolith analysis in palaeoecological reconstruction. <i>Earth Science Reviews</i> 244: 104549	Elsevier	10.8
• Qader, W., Dar, R.A., Rashid, I. (2023). Phytolith particulate matter and its potential human and environmental effects. <i>Environmental Pollution</i> 327: 121541	Elsevier	7.6
• War, A.F., Bashir, I., Reshi, Z.A., Kardol, P., Rashid, I. (2023) Insights into the seed microbiome and its ecological significance in plant life. <i>Microbiological Research</i> 127318	Elsevier	6.1
• Malik, M. A., Wani, A. H., Rashid, I. , Tahir, I., Gulzar, I., Shameen, F., Mir, R.R., Ahmad, T. (2023). Do genotypes ameliorate herbivory stress through silicon amendments differently? A case study of wheat. <i>Plant Physiology and Biochemistry</i> 196: 339-349	Elsevier	6.1
• War, A.F., Bashir, I., Reshi, Z.A., Rashid, I. (2023). Seed-endophytes empower <i>Anthemis cotula</i> to expand in invaded range. <i>Current Plant Biology</i> 34: 100281	Springer	5.4
• Dad, J.M., Rashid, I. , Chen A. (2023). Is climate change pushing gymnosperms against the wall in the northwestern Himalayas? <i>Regional Environmental Change</i> 23: 51	Springer	3.4
• Sofi, M.S., Hamid, A., Bhat, S.U., Rashid, I. , Kuniyal, J.C. (2023) Understanding the role of natural and anthropogenic forcings in structuring the periphytic algal assemblages in a regulated river ecosystem. <i>Scientific Reports</i> 13(1): 1882	Springer	3.8
• Sheergojri, I. A., Rashid, I. , Aneaus, S., Rashid, I., Qureshi, A. A., Rehman, I.U. (2023). Enhancing the social-ecological resilience of an urban lake for sustainable management. <i>Environment, Development and Sustainability</i> doi.org/10.1007/s10668-023-04125-9	Springer	4.7
• Yaqoob, S., Jan, I., Reshi, Z.A., Rashid, I. , Shah, M.A. (2023) Risk analysis of fast spreading species in a Kashmir Himalayan National Park (Dachigam) for better monitoring and management. <i>Risk Analysis</i>	Wiley	3.0

43(3): 467-479		
<ul style="list-style-type: none"> ● Haq, S.M., Rashid, I., Calixto, E.S., Ali, A., Kumar, M., Srivastava, G., Bussmann, R.W., Khuroo A.A. (2022) Unravelling patterns of forest carbon stock along a wide elevational gradient in the Himalaya: Implications for climate change mitigation. <i>Forest Ecology and Management</i> 120442 	Elsevier	3.7
<ul style="list-style-type: none"> ● Rehman, I.U., Sheergojri, I.A., War, A.F., Nazir, A.N., Rasool, N., Rashid, I. (2023) Silicon supplementation as an ameliorant of stresses in Sorghum. <i>Silicon</i> 15: 5877-5889 	Springer	2.8
<ul style="list-style-type: none"> ● Reshi, Z. A., Shah, M. A., Malik, R. A., Rashid, I. (2023). Species composition of root-associated mycobiome of ruderal invasive <i>Anthemis cotula</i> L. varies with elevation in Kashmir Himalaya. <i>International Microbiology</i> 26: 1053-1071 	Springer	2.3
<ul style="list-style-type: none"> ● Haq, S.M., Rashid, I., Waheed, M., Khuroo, A.A. (2023). From forest floor to tree top: Partitioning of biomass and carbon stock in multiple strata of forest vegetation in Western Himalaya. <i>Environmental Monitoring and Assessment</i> 195(7): 812 	Springer	2.9
<ul style="list-style-type: none"> ● Farooq, S., Nazir, R., Rashid, I., Dar, G.J. (2023). Microbial pathogen profiling and water quality assessment of Jammu Himalayan springs. <i>Biologia</i>, 78(12), 3679-3690. 	Springer	1.4
<ul style="list-style-type: none"> ● Sheergojri, I.A., Rashid, I., Rehman, I.U., Rashid, I. (2022) Invasive species services-disservices conundrum: A case study from Kashmir Himalaya. <i>Journal of Environmental Management</i> 309: 114674 	Elsevier	8.0
<ul style="list-style-type: none"> ● Assad, R., Reshi, Z.A., Rashid, I. (2022) Seedling ectomycorrhization is central to conifer forest restoration: a case study from Kashmir Himalaya. <i>Scientific Reports</i> 12: 13321 	Springer	3.8
<ul style="list-style-type: none"> ● Wani, A.H., Mir, S.H., Kumar, S., Malik, M.A., Tyub, S., Rashid, I. (2022) Silicon en route-from loam to leaf. <i>Plant Growth Regulation</i> 99: 465-476 	Springer	3.5
<ul style="list-style-type: none"> ● Wani, S. A., Ahmad, R., Gulzar, R., Rashid, I., Malik, A. H., Khuroo, A. A. (2022) Diversity, distribution and drivers of alien flora in the Indian Himalayan region. <i>Global Ecology and Conservation</i> 38: e02246 	Elsevier	3.5
<ul style="list-style-type: none"> ● Rehman, I.U., Malik, M.A., Rashid, I., Sheergojri, I.A., Dar, R.A. (2022) Silicon fertilization increases carbon sequestration by augmenting PhytOC production in wheat. <i>Journal of Soil Science and Plant Nutrition</i> 23: 1149-1155 	Springer	3.4
<ul style="list-style-type: none"> ● Sofi, M. S., Hamid, A., Bhat, S.U., Rashid, I., Kuniyal, J. C. (2022) Biotic alteration of benthic macroinvertebrate communities based on multispatial-scale environmental variables in a regulated river system of Kashmir Himalaya. <i>Ecological Engineering</i> 177: 106560 	Elsevier	3.9
<ul style="list-style-type: none"> ● Haq, S.M., Calixto, E.S., Rashid, I., Srivastava, G., Khuroo, A.A. (2022) Tree diversity, distribution and regeneration in major forest types along an extensive elevational gradient in Indian Himalaya: Implications for sustainable forest management. <i>Forest Ecology and Management</i> 506: 119968. 	Elsevier	3.7

<ul style="list-style-type: none"> Jan, I., Yaqoob, S., Reshi, Z.A., Rashid, I., Shah, M.A. (2022) Risk assessment and management framework for rapidly spreading species in a Kashmir Himalayan Ramsar site. <i>Environmental Monitoring and Assessment</i> 194(3): 175 	Springer	2.9
<ul style="list-style-type: none"> Sofi, M.S., Hamid, A., Bhat, S.U., Rashid, I., Kuniyal, J.C. (2022). Impact evaluation of the run-of-river hydropower projects on the water quality dynamics of the Sindh River in the Northwestern Himalayas. <i>Environmental Monitoring and Assessment</i> 194(9): 626 	Springer	2.9
<ul style="list-style-type: none"> Dad, J. M., Rashid, I. (2022) Differential responses of Kashmir Himalayan threatened medicinal plants to anticipated climate change. <i>Environmental Conservation</i> 49: 33-41 	Cambridge University Press	2.7
<ul style="list-style-type: none"> Haider, S., Lembrechts, J.J., McDougall, K., Pauchard, A., Alexander, J. M., Barros, A., Cavieres, L.A., Rashid, I., Rew, L.J.,....., Seipel, T. (2022) Think globally, measure locally: The MIREN standardized protocol for monitoring plant species distributions along elevation gradients. <i>Ecology and Evolution</i> 12(2): e8590. 	Wiley	2.3
<ul style="list-style-type: none"> Ahmad, T., Rashid, I., Ahmad, R., Mehraj, M., Ahmad, N. (2022) Alien plant and native herbivore network of Kashmir Himalaya. <i>Arthropod-Plant Interactions</i> 16(5): 423-435 	Springer	1.2
<ul style="list-style-type: none"> Haq, S.M., Calixto, E. S., Rashid, I., Malik, A.H., Kumar, M., Khuroo, A.A. (2022) Anthropogenic pressure and tree carbon loss in the temperate forests of Kashmir Himalaya. <i>Botany Letters</i> 169: 400-412 	Taylor and Francis	1.5
<ul style="list-style-type: none"> Haq, S.M., Calixto, E.S., Rashid, I., Khuroo, A.A. (2021) Human-driven disturbances change the vegetation characteristics of temperate forest stands: A case study from Pir Panchal mountain range in Kashmir Himalaya. <i>Trees, Forests and People</i> 6: 100134 	Elsevier	2.7
<ul style="list-style-type: none"> Assad, R., Reshi, Z.A., Rashi, I., Wali, D.C., Bashir, I., Rafiq, I. (2021) Metabarcoding of root-associated ectomycorrhizal fungi of Himalayan pindrow fir through morphotyping and Next Generation Sequencing. <i>Trees, Forests and People</i> 6: 100134 	Elsevier	2.7
<ul style="list-style-type: none"> Mehraj, G., Khuroo, A.A., Hamid, M., Muzafar, I., Rashid, I., Malik, A.H. (2021). Floristic diversity and correlates of naturalization of alien flora in urban green spaces of Srinagar city. <i>Urban Ecosystems</i> 24(6): 1231-1244. 100153 	Springer	2.5
<ul style="list-style-type: none"> Sofi, I.A., Rashid, I., Lone, J.Y., Tyagi, S., Reshi, Z.A., Mir, R. R. (2021) Genetic diversity may help evolutionary rescue in a clonal endemic plant species of Western Himalaya. <i>Scientific Reports</i> 11: 19595 	Springer	3.8
<ul style="list-style-type: none"> Malik, M.A., Wani, A.H., Mir, S.H., Rehman, I.U., Tahir, I., Ahmad, P., Rashid, I. (2021) Elucidating the role of silicon in drought stress tolerance in plants. <i>Plant Physiology and Biochemistry</i> 165: 187-195. 	Elsevier	6.1
<ul style="list-style-type: none"> Rashid, I., Haq, S.M., Lembrechts, J.J., Khuroo, A.A., Pauchard, A., Dukes, J.S. (2021) Railways redistribute plant species in mountain landscapes. <i>Journal of Applied Ecology</i> 58: 1967-1980 	Wiley	5.0
<ul style="list-style-type: none"> Sofi, M.S., Rautela, K.S., Bhat, S.U., Rashid, I., Kuniyal, J.C. (2021) Application of geomorphometric approach for the estimation of hydro- 	Springer	3.8

sedimentological flows and cation weathering rate: towards understanding the sustainable land use policy for the Sindh Basin, Kashmir Himalaya. <i>Water, Air, & Soil Pollution</i> 232(7): 280		
• Dad, J.M., Muslim, M., Rashid, I. , Reshi, Z.A. (2021) Time series analysis of climate variability and trends in Kashmir Himalaya. <i>Ecological Indicators</i> 126: 107690	Elsevier	7.0
• Ahmad, R., Rashid, I. , Hamid, M., Malik, A.H., Khuroo, A.A. (2021) Invasion shadows in soil system overshadow the restoration of invaded ecosystems: Implications for invasive plant management. <i>Ecological Engineering</i> 164: 106219	Elsevier	3.9
• Assad, R., Rashid, I., Reshi, Z. A., Sofi, I.A. (2021) Invasiveness traits help Amaranths to invade Kashmir Himalaya, India. <i>Tropical Ecology</i> 62(2): 209-217	Springer	1.1
• Ahmad, R., Khuroo, A.A., Hamid, M., Rashid, I. , Rather, Z.A. (2021) Disentangling the determinants of litter decomposition among invaded and uninvaded habitats: A field experiment from the Kashmir Himalaya. <i>Acta Oecologica</i> 110: 103708	Elsevier	1.3
• Goyal, N., Krishna, S., Shah, K., Rashid, I. , Sharma, G.P. (2020) Integrating the biological invasion paradigm in the policy framework in India. <i>Tropical Ecology</i> 62: 144-148	Springer	1.1
• Zhu, D., Wu, N., Bhattarai, N., Oli, K. P., Chen, H., Rawat, G. S., Rashid, I. , Dhakal, M., Joshi, S., Tian, J., Zhu, Q.A., Chaudhary, S., Tshering, K. (2021) Methane emissions respond to soil temperature in convergent patterns but divergent sensitivities across wetlands along altitude. <i>Global Change Biology</i> 27(4): 941-955	Wiley	10.8
• Haq, S.M., Calixto, E.S., Rashid, I. , Khuroo, A.A. (2021) Human-driven disturbances change the vegetation characteristics of temperate forest stands: A case study from Pir Panchal mountain range in Kashmir Himalaya. <i>Trees, Forests and People</i> 6: 100134	Elsevier	2.7
• Assad, R., Reshi, Z.A., Rashid, I. , Wali, D.C., Bashir, I., Rafiq, I. (2021) Metabarcoding of root-associated ectomycorrhizal fungi of Himalayan pindrow fir through morphotyping and Next Generation Sequencing. <i>Trees, Forests and People</i> 6: 100153	Elsevier	2.7
• Sofi, M.S., Bhat, S.U., Rashid, I. , Kuniyal, J.C. (2020) The natural flow regime: A master variable for maintaining river ecosystem health. <i>Ecohydrology</i> 13(8): e2247	Wiley	2.5
• Abbasi, A.O., Salazar, A., Oh, Y., Reinsch, S., Uribe, M.R., Li, J., Rashid, I. , Dukes, J.S. (2020) Soil responses to manipulated precipitation changes: A synthesis of meta-analyses. <i>Biogeosciences</i> 17: 3859-3873	Copernicus	3.9
• Ahmad, R., Khuroo, A.A., Hamid, M., Rashid, I. (2019) Plant invasion alters the physico-chemical dynamics of soil system: insights from invasive <i>Leucanthemum vulgare</i> in Indian Himalaya. <i>Environmental Monitoring and Assessment</i> 191:792	Springer	2.9
• Mir, S.H., Rashid, I. , Hussain, B., Reshi, Z.A., Assad, R., Sofi, I.A. (2019) Silicon supplementation of rescuegrass reduces herbivory by a grasshopper. <i>Frontiers in Plant Science</i> 10:671	Frontiers	4.1

<ul style="list-style-type: none"> ● Rashid, I., Mir, S.H., Zurro, D., Dar, R.A., Reshi, Z.A. (2019) Phytoliths as proxies of the past. <i>Earth Science Reviews</i> 194: 234-250 	Elsevier	10.8
<ul style="list-style-type: none"> ● Ahmad, R., Khuroo, A.A., Charles, B., Hamid, M., Rashid, I., Aravind, N.A. (2019) Global distribution modelling, invasion risk assessment and niche dynamics of <i>Leucanthemum vulgare</i> (Ox-eye Daisy) under climate change. <i>Scientific Reports</i> 9: 11395 	Springer	3.8
<ul style="list-style-type: none"> ● Ahmad, R., Khuroo, A.A., Hamid, M., Charles, B., Rashid, I. (2019) Predicting invasion potential and niche dynamics of <i>Parthenium hysterophorus</i> L. (Congress grass) in India under projected climate change. <i>Biodiversity and Conservation</i> 28: 2319-2344 	Springer	3.0
<ul style="list-style-type: none"> ● Ahmad, R., Khuroo, A.A., Hamid, M., Malik, A. H., Rashid, I. (2019). Scale and season determine the magnitude of invasion impacts on plant communities. <i>Flora</i> 151481 	Elsevier	1.7
<ul style="list-style-type: none"> ● Muzafar, I., Khuroo, A.A., Mehraj, G., Rashid, I., Malik, A.H. (2019) Floristic diversity along the roadsides of an urban biodiversity hotspot in Indian Himalayas. <i>Plant Biosystems</i> 153:222-230 	Taylor and Francis	1.6
<ul style="list-style-type: none"> ● Haq, S.M., Rashid, I., Khuroo, A.A., Malik, Z.A., Malik, A.H. (2019) Anthropogenic disturbances alter community structure in the forests of Kashmir Himalaya. <i>Tropical Ecology</i> 60: 6-15 	Springer	1.1
<ul style="list-style-type: none"> ● Mehraj, G., Khuroo, A.A., Qureshi, S., Muzafar, I., Cynthia, F., Rashid, I. (2018) Patterns of alien plant diversity in the urban landscapes of global biodiversity hotspots: a case study from the Himalayas. <i>Biodiversity and Conservation</i> 27: 1055-1072 	Springer	3.0
<ul style="list-style-type: none"> ● Tyub, S., Kamili, A.N., Reshi, Z.A., Rashid, I., Mokhdomi, T.A., Bukhari, S., Amin, A., Wafai, A.H., Qadri, R.A. (2018) Root-associated fungi of <i>Pinus wallichiana</i> in Kashmir Himalaya. <i>Canadian Journal of Forest Research</i> 48(8): 923-929 	Canadian Science Publishing	1.7
<ul style="list-style-type: none"> ● Assad, R., Reshi, Z.A., Jan, S., Rashid I. (2017) Biology of Amaranths. <i>The Botanical Review</i> 83:382-436 	Springer	2.8
<ul style="list-style-type: none"> ● Khanday, S.A., Yousuf, A.R., Reshi, Z.A., Rashid, I., Jehangir, A., Romshoo, S.A. (2017) Management of <i>Nymphoides peltatum</i> using water level fluctuations in freshwater lakes of Kashmir Himalaya. <i>Limnology</i> 18: 219-231 	Springer	1.4
<ul style="list-style-type: none"> ● Ahmad, S.S., Reshi, Z.A., Shah, M.A., Rashid, I., Ara, R., Andrabi S.M.A. (2016) Heavy metal accumulation in the leaves of <i>Potamogeton natans</i> and <i>Ceratophyllum demersum</i> in a Himalayan Ramsar site: management implications. <i>Wetlands Ecology and Management</i> 24(4): 469-475 	Springer	1.6
<ul style="list-style-type: none"> ● Ahmad, S.S., Reshi, Z.A., Shah, M.A., Rashid, I., Ara, R., Andrabi S.M.A. (2014) Phytoremediation potential of <i>Phragmites australis</i> in Hokersar wetland - A Ramsar Site of Kashmir Himalaya. <i>International Journal of Phytoremediation</i> 16(12): 1183-1191 	Taylor and Francis	3.4
<ul style="list-style-type: none"> ● Khuroo, A.A., Reshi, Z.A., Malik, A.H., Weber, E., Rashid, I., Dar, G.H. (2012) Alien flora of India: taxonomic composition, invasion status and biogeographic affiliations. <i>Biological Invasions</i> 14: 99-113 	Springer	2.8

<ul style="list-style-type: none"> • Khuroo, A.A., Reshi, Z.A., Rashid, I., Dar, G.H. (2011) Towards an integrated research and policy agenda on biological invasions in developing world: India as a case-study. <i>Environmental Research</i> 111: 999-1006 	Elsevier	7.7
<ul style="list-style-type: none"> • Rashid, I., Reshi, Z.A. (2010) Does carbon addition to soil counteract disturbance-promoted alien plant invasions? <i>Tropical Ecology</i> 51(2S): 339-345 	Springer	1.1
<ul style="list-style-type: none"> • Rashid, I., Sharma, G.P., Esler, K.J., Reshi, Z.A., Khuroo, A.A., Simpson, A. (Letter) (2009) A standardized response to biological invasions. <i>Science</i> 325: 146 	AAAS	44.7
<ul style="list-style-type: none"> • Khuroo, A.A., Reshi, Z., Rashid, I., Dar, G.H., Malik, A.H. (Letter) (2009) Plant invasions in montane ecosystems. <i>Frontiers in Ecology and the Environment</i> 7(8): 408 	ESA	10.0
<ul style="list-style-type: none"> • Khuroo, A.A., Reshi, Z.A., Rashid, I., Dar, G.H., Khan, Z.S. (2008) Operational characterization of alien invasive flora and its management implications. <i>Biodiversity and Conservation</i> 17:3181-3194 	Springer	3.0
<ul style="list-style-type: none"> • Shah, M.A., Reshi Z.A., Rashid, I. (2008) Mycorrhizosphere mediated Chamomile invasion in a biodiversity hotspot. <i>Plant and Soil</i> 312: 219-225 	Springer	3.9
<ul style="list-style-type: none"> • Shah, M.A., Reshi, Z.A., Rashid, I. (2008) AMF mediated <i>Anthemis cotula</i> L. invasion is differently influenced by geographical AMF isolates and plant neighbour identity in a Himalayan Biodiversity Hotspot. <i>Applied Soil Ecology</i> 40: 330-337 	Elsevier	4.8
<ul style="list-style-type: none"> • Allaie, R.R., Reshi, Z.A., Rashid, I., Wafai. B.A. (2006) Effect of aqueous leaf leachate of <i>Anthemis cotula</i> – an alien invasive species on germination behaviour of some field crops. <i>Journal of Agronomy and Crop Science</i> 192: 186-191 	Wiley	3.7
<ul style="list-style-type: none"> • Khuroo, A.A., Rashid, I., Reshi, Z.A., Dar, G.H., Wafai. B.A. (2007) The alien flora of Kashmir Himalaya. <i>Biological Invasions</i> 9: 269-292 	Springer	2.8
<ul style="list-style-type: none"> • Rashid, I., Reshi, Z.A., Allaie, R.R., Wafai. B.A. (2007) Germination ecology of invasive alien <i>Anthemis cotula</i> L. helps it synchronize its successful recruitment with favourable habitat conditions. <i>Annals of Applied Biology</i> 150: 361-369 	Wiley	2.2

BOOK CHAPTERS

- War, A.F., Nanda, S.A., Bashir, I., Rehmaan, S., Sheergojri, I.A., Rehman, I. U., Reshi, Z.A., **Rashid, I.** (2024) Plant Phenolics Role in Bacterial Disease Stress Management in Plants. In: (Eds. Lone, R., Khan, S., Al-Sadi, A.M.) Plant Phenolics in Biotic Stress Management, pp. 217-241. Springer Singapore. doi.org/10.1007/978-981-99-3334-1_9
- Ahmad, S.S., Reshi, Z.A., Shah, M.A., **Rashid, I.**, Ara, R. (2023) Phytoremediation of Heavy Metals by *Trapa natans* in Hokersar Wetland, a Ramsar Site of Kashmir Himalayas In: (Eds. Newman, L., Ansari, A.A., Gill, S.S., Naeem, M., Gill, R.) Phytoremediation:

Management of Environmental Contaminants, Vol. 7. Springer, Cham. pp. 147-154. doi.org/10.1007/978-3-031-17988-4_8

- Joshi, S., Shrestha, B.B., Shrestha, L., **Rashid, I.**, Adkins, S. (2022) Plant Invasions in Mountains. In: (Eds. D.R. Clements, M.K. Upadhyaya, S. Joshi and A. Shrestha) Global Plant Invasions. Springer, Cham. pp 279-300. doi.org/10.1007/978-3-030-89684-3_13
- Barros, A., Haider, S., Müllerová, J., Alexander, J.M., Alvarez, M.A., Aschero, V., Daehler, C., Peyre, G., Backes, A.R., Arévalo, J.R., Cavieres, L., Dar, P., Fuentes-Lillo, E., Liedtke, R., McDougall, K., Milbau, A., Morgan, J.W., Naylor, B.J., Nuñez, M.A., Pauchard, A., **Rashid, I.**, Reshi, Z.A., Rew, L.J., Sandoya, V., Seipel, T., Vorstenbosch, T., Vítková, M., Walsh, N., Wedegärtner, R.E.M., Zong, S., Lembrechts, J.L. (2022) The role of roads and trails for facilitating mountain plant invasions. In: (Eds. A. Barros, R. Shackleton, L. Rew, C. Pizarro and A. Pauchard) CABI. pp 14-26 doi.org/10.1079/9781800620544.0003
- Khuroo, A.A., Ahmad, R., Hamid, M., Rather, Z. A., Malik, A. H., **Rashid, I.** (2021) An annotated inventory of invasive alien flora of India. In: (Eds. T. Pullaiah and Michael R. Ielmini) Invasive alien species: observations and issues from around the world. John Wiley & Sons Ltd. pp 16-37. doi.org/10.1002/9781119607045.ch14
- Assad R., Reshi Z., **Rashid I.**, Mir, S.H. (2020) Restoration of Heavy metal contaminated environs through ectomycorrhizal symbiosis. In: (Eds. R.A. Bhat and K.R. Hakeem) Bioremediation and Biotechnology, Vol 4. Springer Nature Switzerland. pp 313-330. doi.org/10.1007/978-3-030-48690-7_15
- Haq S.M., Khuroo, A.A., Malik, A.H., **Rashid, I.**, Ahmad, R., Hamid, M., Dar, G.H. (2020) Forest Ecosystems of Jammu and Kashmir State. In: (Eds. G.H. Dar and A.A.) Biodiversity of the Himalaya: Jammu and Kashmir State. Topics in Biodiversity and Conservation, vol 18. Springer, Singapore. pp 191-20 doi.org/10.1007/978-981-32-9174-4_8
- Khuroo, A.A., Ahmad, R., Mehraj, G., **Rashid, I.**, Malik, A.H., Dar, G.H. (2020) Diversity and distribution of alien flora in the Indian Himalayan region. In: (Eds. A. Das and S. Bera) Plant Diversity in the Himalaya Hotspot Region, vol 2. Bishen Singh Mahendra Pal Singh, Dehra Dun. pp. 451-495
- Khuroo A.A., Mehraj G., Muzafar I., **Rashid I.**, Dar G.H. (2020) Biodiversity Conservation in Jammu and Kashmir State: Current Status and Future Challenges. In: (Eds. G.H. Dar and A.A. Khuroo) Biodiversity of the Himalaya: Jammu and Kashmir State. Topics in Biodiversity and Conservation, vol 18. Springer, Singapore pp 1049-1076 doi.org/10.1007/978-981-32-9174-4_41
- Ahmad, S.S., Reshi, Z.A., Shah, M.A., **Rashid, I.** (2016) Constructed Wetlands: Role in Phytoremediation of Heavy Metals. In: (Eds. A.A., Ansari, S.S., Gill, R., Gill, G.R., Lanza and L., Newman) Phytoremediation. Springer. pp. 291-304 doi.org/10.1007/978-3-319-40148-5_10
- Reshi, Z., Shah, M.A., **Rashid, I.** Rasool, N. (2012) *Anthemis cotula* L.: a highly invasive species in the Kashmir Himalaya, India. In: (Eds. J.R. Bhatt, J.S. Singh, S.P. Singh, R.S. Tripathi and R.K. Kohli) Invasive Alien Plants: An Ecological Appraisal for the Indian Subcontinent. CABI International, UK. pp. 108-125 doi.org/10.1079/9781845939076.0108
- Reshi, Z., **Rashid, I.** (2012) Risk assessment for management of biological invasions. In: (Eds. J.R. Bhatt, J.S. Singh, S.P. Singh, R.S. Tripathi and R.K. Kohli) Invasive Alien Plants: An Ecological Appraisal for the Indian Subcontinent. CABI International, UK. pp. 227-243

PhD (Supervision)

S. No.	Name	Title of the Thesis	Status	Date of award
1	Abid Hussain Wani	Investigation into silica deposition, and the role of <i>TaLsi1</i> silicon transporter in biotic stress tolerance in select wheat genotypes	Awarded	January 08, 2025
2	Mushtaq Ahmad Malik	Role of silicon in mitigating biotic stress of some wheat genotypes	Awarded	January 08, 2025
3	Ishfaq Ahmad Sheergojri	Assessment of plant invasion impacts on ecosystem services of Dal Lake	Awarded	July 22, 2024
4	Ishfaq ul Rehman	Paleoecological reconstruction of Kashmir Valley using Phytoliths as indicators	Awarded	June 26, 2024
5	Aadil Farooq War	Diversity and role of seed microbiome of <i>Anthemis cotula</i> L. in its invasiveness in Kashmir Himalaya	Awarded	May 18, 2024
6	Iqra Bashir	Diversity and role of leaf microbiome of <i>Anthemis cotula</i> L. in its invasiveness in Kashmir Himalaya	Awarded	April 03, 2024
7	Irshad Ahmad Sofi	Genetic diversity and allelopathic potential of Kashmir Elder - a widespread clonal species in Northwestern Himalaya	Awarded	April 02, 2024
8	Afshana	Interactive role of allelopathy and arbuscular mycorrhizal mutualism in invasiveness of <i>Anthemis cotula</i> L. in Kashmir Himalaya	Awarded	May 22, 2023
9	Javaid Yousuf Lone	Ecology of <i>Sambucus wightiana</i> Wall. ex Wight & Arn. and its impact of understory vegetation in coniferous forests of the Kashmir Valley	Awarded	April 10, 2023
10	Rezwana Assad	Molecular diversity of root associated ectomycorrhizal fungi of some Conifers in Kashmir Himalaya, India	Awarded	October 07, 2022
11	Rameez Ahmad	Studies on the ecological impacts of plant invasion in Kashmir Himalaya	Awarded	June 16, 2021
12	Shiekh Marifatul Haq	Studies on floristic diversity and biomass of forests in Jammu and Kashmir	Awarded	January 21, 2021
13	Imran Khan	Diversity and distribution of soil fungal flora along an altitudinal gradient in Gulmarg region of Kashmir Himalaya	Awarded	October 07, 2020
14	Showkat Hamid Mir	Ecological studies on Phytoliths of some grasses in Kashmir Himalaya	Awarded	June 27, 2020
15	Gousia Mehraj	Floristic diversity of Public Green Spaces in Srinagar	Awarded	June 12, 2019

ADMINISTRATIVE RESPONSIBILITIES

- Member, Boards of Under-graduate and Post-graduate studies in Botany and Bioresources, University of Kashmir, Srinagar.
- Member, Research Committee, PG course in Bioresources, University of Kashmir, Srinagar.
- Teacher In-charge Research, Department of Botany, University of Kashmir
- Nodal Officer, Directorate of Quality Assurance Cell, Department of Botany, University of Kashmir
- Member, FIST implementation Group, Department of Botany, University of Kashmir

COURSES ATTENDED

- Mountain Invasion Research Network (MIREN) meeting: in Malalcahuello, Chile held from November 20 to 26, 2022 sponsored by Institute of Ecology and Biodiversity (IEB), Universidad de Concepcion, **Chile**
- Workshop on Changing Mountain Biodiversity: Long-Term Monitoring and Distributed Ecological Experiments: at Furka Pass, Switzerland, from 2 to 6 September 2019 sponsored by Fondation Herbet, University of Lausanne, **Switzerland**.
- Training Course on Monitoring Greenhouse Gas Fluxes from Natural and Agroecosystems: at Chengdu Institute of Biology, Chengdu, Sichuan, China from, Dec 15- 31, 2015 sponsored by Chinese Academy of Sciences, China and Chengdu Institute of Biology, **China**
- Lecture Series on Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA): at Department of Environmental Science, University of Kashmir, Jammu and Kashmir from Jun 03-04, 2015 sponsored by University of Kashmir, J&K, **India**

PAPERS PRESENTED (Outside India)

- The current status of plant invasions in global mountain regions: Insights from the MIREN Network. In: GEO Mountains Workshop on Interdisciplinary Monitoring, Data, and Capacity Sharing Across the Hindu Kush Himalaya, November 6-8, 2023, **Nepal**
- Is Kashmir elder equipped with plasticity to expand its range within Himalayan Mountains? In: International Mountain Conference. September 11-15, 2022, Innsbruck, **Austria**
- Resource person for Pest Risk Analysis (PRA) Training held by Food and Agriculture organization of the United Nations, Italy in Nepal (Online) November, 23-27 2020, **Nepal**
- Tritrophic interactions promote chamomile invasion in a biodiversity hotspot. In: ESA Annual Meeting, August 6-11, 2017. Portland, Oregon, **USA**.
- Ecology, Biodiversity and Conservation of TsoMoriri– A High Altitude Ramsar Site of the Third Pole. In: The 10th INTECOL International Wetlands Conference: Hotspots of Biodiversity and Ecosystem Services under Global Changes. September 19 - 24, 2016. Changshu, **China**.
- Stinking Mayweed Invasion in a Biodiversity Hotspot. In: First Saudi Conference on Environment. In: First Saudi Conference on Environment (Sustainable Management of Natural Resources). March 7-9, 2016. King Khalid University, Abha, **Saudi Arabia**.
- Heavy metal dynamics in Hokersar wetland - A Ramsar site of Kashmir Himalaya. In: Regional Expert Consultative Symposium on Managing Wetland Ecosystem in the Hindu

Kush Himalayas: Securing Services for Livelihoods. August 25 - 27, 2015 Dali, Yunnan, China

- Prediction as a strategy to combat invasion. *In*: 23rd Asian Pacific Weed Science Society Conference. September 26-29, 2011 Cairns, Queensland, Australia.
- Catalogue of forest invaders of the Kashmir Himalaya. *In*: International GMBA-DIVERSITAS conference on “Functional significance of mountain biodiversity” 27th-30th July 2010, Chandolin (Valais), Switzerland.
- Plasticity facilitates *Anthemis cotula* to invade diverse habitats. *In*: 22nd Asian-Pacific Weed Science Society (APWSS) conference, March 8-12, 2010, GC University Lahore, Pakistan.
- A functional niche promotes an invasion in a biodiversity hotspot. *In*: 5th International Weed Science Congress 23-27 June 2008. Vancouver, British Columbia, Canada.
- Effect of seedling emergence time on the performance of Mayweed (*Anthemis cotula* L.) -an alien invasive species in the Kashmir Himalaya. *In*: 21st Asian Pacific Weed Science Society (APWSS) Conference 2-6 Oct. 2007 Colombo, Sri Lanka.
- What makes *Anthemis cotula* L. (Asteraceae) invasive in Kashmir Himalaya, India? *In*: 9th International Conference on the Ecology and Management of Alien plant Invasions 17-21 Sep. 2007. Perth, Western Australia.

PAPERS PRESENTED (Within India)

- Valuing the carbon sequestration regulation service by Hokersar wetland of Kashmir Himalaya. *In*: INSEE-CESS International Conference on Climate Change and Disasters: Challenges, Opportunities and Responses. November 6-8, 2019. Centre for Economic and Social Studies (CESS), Hyderabad.
- An analysis of risk analysis schemes for invasive alien species. *In*: Risk analysis of forest invasive alien species. (February 27 to March 01, 2013) Punjab University, Chandigarh.
- Plant invasions cause a shift in Glomalean diversity and spore density. *In*: International Tropical Ecology Congress 2007 December 02-05, 2007, Forest Research Institute (FRI), Dehradun.
- Does herbivory promote invasiveness of *Anthemis cotula* in Kashmir Himalaya, India? *In*: International Symposium on Biology, Ecology and Management of Worlds Worst Plant Invasive species. December 10-14, 2006 Centre for Environmental Management of Degraded Ecosystems (CEMDE), School of Environmental Studies, University of Delhi, Delhi.

Membership and activities in Professional Associations

- Member of MIREN (Mountain Invasion Research Network) Steering Committee
- Member of the Society for Ecological Restoration, Washington DC, USA.
- Coordinator, National Mission on Himalayan Studies Fellowships Programme, University of Kashmir sponsored by Ministry of Environment, Forests and Climate Change (MoEFCC), New Delhi