

Dr. Arshad Ali

Professor/Editor

*Doctorate and Post-Doctorate in Ecology
(Specialization in Forest Ecology)*

Professor

Forest Ecology and Management

Department of Forest Resources Management, College of Forestry

Nanjing Forestry University, Nanjing, China

<http://linxue.njfu.edu.cn/info.php?cid=117>



Editorial Board Member (Section: Forest Diversity, Structure and Function)

Forest Ecology and Management

Elsevier Publishers, Germany

<https://www.journals.elsevier.com/forest-ecology-and-management/editorial-board/arshad-ali>

Editor (Section: Forest Management and Silviculture – Tropical)

Forestry: An International Journal of Forest Research

Institute of Chartered Foresters; Oxford University Press, UK

<https://academic.oup.com/forestry/pages/Editorial Board>

Associate Subject Editor (Section: Forest Ecology and Management)

Journal of Forestry Research

Northeast Forestry University China; Springer Publishers

<https://www.springer.com/life+sciences/forestry/journal/11676?detailsPage=editorialBoard>

Research interest

My broad-scale research interests are in the area of forest or plant ecology, particularly related to multiple abiotic and biotic controls on ecosystem functions and processes. I am interested in to evaluate the underlying ecological mechanisms for explaining biodiversity – ecosystem functioning relationship in a changing environment. Plant functional traits, demography, and trees' size variation across space and time, as well as across forest biomes, are the main characteristics of my research. Using the multivariate statistical modeling (such as structural equation modeling) approach, I evaluate the multivariate relationships amongst environmental factors, multiple metrics of biodiversity and species/functional composition, and ecosystem functioning particularly aboveground biomass, carbon storage, and productivity in natural (subtropical, tropical, and temperate) forests, agroforestry systems, rangelands, and alpine plant communities. Most of my previous studies have focused on the biodiversity – ecosystem functioning relationship at both local and regional scales. Currently, I evaluate the macro-ecological mechanisms underpinning biodiversity – ecosystem functioning at global and/ or pantropical scales. I am also leading the Global Forest Diversity, Structure and Function (i.e. GlobalFDSF) research network.

我的研究领域为森林和植物生态学，特别是森林生态系统功能和过程的多种非生物和生物的控制机理。我的研究兴趣主要是森林生物多样性与生态系统功能之间的关系在环境变化背景下的潜在生态机制。过去几年中，我在植物功能性状、森林统计学特征、树木大小随时间和空间的变化、以及森林生物群落变化的潜在影响机制上做了大量工作。其中，代表性科研成果有，利

用多元统计建模(如结构方程建模)的方法评估了不同地带(亚热带、热带和温带)自然森林、农林复合系统、牧场和高山植物群落中环境因子、生物多样性和物种/功能组成之间的多元关系,以及阐述了地上生物量、碳储量、生产力和生态系统功能之间的关系。目前,除延续之前工作重点区域尺度上生物多样性和生态系统功能之间关系外,我正在全球和/或泛热带区域尺度评估支撑生物多样性和生态系统功能的宏观生态机制,其研究水平已处在全球森林多样性、结构和功能研究的前沿,是Global FDSF的发起者和领导人。

Research direction key words: Biodiversity – Ecosystem Functioning; Forest Multifunctionality; Forest Demographic Processes; Big-sized Trees Effect; Functional Traits; Forest Ecological Modeling; Rangeland Ecology; Plant Community Assembly

Personal details

Nationality: Pakistani
Date of Birth: 30th March, 1988
Marital Status: Single
Languages: English, Chinese (Basic), Urdu and Pashto
Abroad To: China (Higher Education Study and Work), United Kingdom, France, Finland, the Netherlands (Conference), Sri Lanka (visit)
Email: arshadforester@gmail.com / arshadforester@njfu.edu.cn
Phone: 15021242138
Official webpage: <http://linxue.njfu.edu.cn/info.php?cid=117>
Personal Website: www.arshadforester.info
Research gate: https://www.researchgate.net/profile/Arshad_Ali23
Google Scholar: <https://scholar.google.com/citations?user=F64Htg4AAAAJ>
ORCID: <https://orcid.org/0000-0001-9966-2917>

Education

Mar 2018 – May 2019 **South China Normal University**
Postdoc, Ecology
Specialization in Forest Ecology
Guangzhou, China
Research Report: “Linking species diversity, stand structure, and aboveground biomass along climate and soils gradients in tropical forests of Hainan Island, Southern China”

Sep 2014 – Dec 2017 **East China Normal University**
PhD, Ecology
Specialization in Forest Ecology
Shanghai, China
Thesis: “The forest strata-dependent relationships among environment, biodiversity and aboveground biomass in a subtropical forest in Tiantong, Zhejiang Province”
<http://tiantong.ecnu.edu.cn/Abstractfiles/ALI%20ARSHAD.pdf>

Sep 2012 – Jul 2014 **East China Normal University**
MS, Ecology
Specialization in Forest Ecology
Shanghai, China
Thesis: “The relationships between biodiversity and ecosystem carbon stocks in subtropical forests in Ningbo region, eastern China”
http://tiantong.ecnu.edu.cn/Abstractfiles/231220_51120802077%20ali%20arshad.pdf

Aug 2006 – Sep 2010 **Shaheed Benazir Bhutto University**

BS, Forestry

Major subjects: Silviculture, Forest Biometrics, Forest Ecology and Management, and Agroforestry

Dir (U), KP, Pakistan

Thesis: "Role of farm forestry in poverty alleviation and natural resources conservation in Swat valley, Pakistan"

Employment

Jun 2019 – present

Professor (Full-time)

Nanjing Forestry University, College of Forestry, Department of Forest Resources Management, Nanjing, Jiangsu, China

Mar 2018 – May 2019

Distinguished Associate Researcher

South China Normal University, School of Life Sciences
Guangzhou, Guangdong, China

Jan 2018 – Mar 2018

Visiting Researcher

South China Normal University, School of Life Sciences
Guangzhou, Guangdong, China

May 2011 – Jul 2012

Project Manager

Resource Organization for Advancement and Development (ROAD NGO), Peshawar, KP, Pakistan

Oct 2010 – May 2011

Social Organizer

Interfaith League Against Poverty (I-LAP NGO), Islamabad, Capital City, Pakistan

Teaching experience

Spring semester 2020

Forest Ecological Modelling

Master's students in Forestry (international/APFNet)
Nanjing Forestry University
Language of instruction: English

Fall semester 2019

Forest Ecology and Management

Master's and PhD students in Forestry
(international/APFNet)
Nanjing Forestry University
Language of instruction: English

Fall semester 2019

Introduction to Forestry

Bachelor's students in forestry (Chinese)
Nanjing Forestry University
Language of instruction: English
Course code: 0101305A
Teaching assistant: Mrs. Yang Lu

Professional services, and affiliations

1st August-present

Editorial Board Member

Section: Forest Diversity, Structure and Functioning
Forest Ecology and Management
Elsevier Publishers

Netherlands

26th May, 2018-present

Editor

Section: Forest Management and Silviculture – Tropical
Forestry: An International Journal of Forest Research
Institute of Chartered Foresters, UK
Oxford University Press

26th April, 2018-present

Associate Subject Editor

Section: Forest Ecology and Management
Journal of Forestry Research, Springer Publishers
Northeast Forestry University, China

15th July 2012-30th Dec 2017

Pre-doctoral Research Fellow

Tiantong National Forest Ecosystem Observation and
Research Station, Ningbo, PR China;
Forest Ecosystem Research and Observation Station in Putuo
Island, Zhoushan, Zhejiang, PR China

Scientific Societies Memberships

- 1) British Ecological Society
- 2) Italian Society of Silviculture and Forest Ecology
- 3) Ecological Society of China
- 4) The International Association for Ecology
- 5) Snow Leopard Network
- 6) Journal of Forestry Research
- 7) Forestry: An International Journal of Forest Research
- 8) Forest Ecology and Management

Forest Ecology and Management Lab (Team members)

1. **Ms. Liqiu Wang**, Department of Forest Resources, College of Forestry, Nanjing Forestry University
Status: Master's in Forestry (2019-2021); Chinese student
2. **Mr. Suwash Kanwar**, Department of Forest Resources, College of Forestry, Nanjing Forestry University
Status: APFNet Master's in Forestry (2019-2021); International student
3. **Mr. Viseuy Indavong**, Department of Forest Resources, College of Forestry, Nanjing Forestry University
Status: APFNet Master's in Forestry (2019-2021); International student
4. **Ms. Maryam Kazempour Larsary**, Department of Forestry, Natural Resource Faculty, University of Guilan, Somehsara, P. O. Box 1144, Guilan, Iran.
Supervisor: Co-advising with Professor Dr. Hassan Pourbabaei
Status: PhD student

5. **Dr. Anvar Sanaei**, Department of Reclamation of Arid and Mountainous Regions, Natural Resources Faculty, The University of Tehran, Iran.

Student No: 720192031; Duration, 2014-17. Co-advised in the last year of PhD (2017).

Supervisor: Co-advised with Professor Mohammad Ali Zare Chachouki

Status: Graduated; currently working through collaboration.

Research Projects / Grants

- 2021- Influences of plant and soil biodiversity on the multifunctionality of subtropical and warm temperate forests in the changing environment of Jiangsu province (**Under Review**; verified by NSFC). *National Natural Science Foundation of China, International (Regional) Cooperation and Exchange Program*
Principal Investigator.
- 2020- Global Forest Diversity, Structure and Function, Jiangsu Science and Technology Project (Special Project for the Introduction of Foreign Talents)- Jiangsu "Hundred Programs for Foreign Experts" (Grant No. BX2019084).
Principal Investigator.
- 2019- Metasequoia Faculty Research Startup Funding at Nanjing Forestry University (Grant No. 163010230). **Principal Investigator.**
- 2019- Linking some environmental factors, plant diversity, stand structure, and aboveground biomass in temperate forests of west Guilan in Iran.
Iran National Science Foundation (INSF), Grant No: 97010593. (Key Member). Principal Investigator: Professor Hassan Pourbabaei (Natural Resource Faculty, Guilan University, Iran).
- 2018- 2019 Linking abiotic and biotic drivers of aboveground biomass productivity across forest strata in tropical forests of Hainan Island, Southern China. *China Postdoctoral Science Foundation, Grant No: 2018M643117. (Principal Investigator).* School of Life Sciences, South China Normal University, Guangzhou.
- 2018- Functional response of abundance distribution in forest tree species along a rainfall gradient in the sea-land transition area in eastern Zhejiang Province. *National Natural Science Foundation of China, Grant No: 31770467. (Member).* Principal Investigator: Professor En-Rong Yan (School of Ecological and Environmental Sciences, East China Normal University, Shanghai).

Awards and scholarships (selected):

Time	Type	Title	Awarding organization
April 2020	Award	Most Read Article (Second Author)	Ecology, ESA
Nov 2019	Award	Top 1% highly-cited paper (first author), published in FEM	Web of Science
July 2019	Award	Excellent Subject Editor	Journal of Forestry Research, Northeast Forestry University, China
Jan 2019	Award	Excellent Researcher	School of Life Sciences, South China Normal University
Nov 2018	Award	Chinese Provincial Award on Excellent Academic Paper published in Ecohydrology	Administration of Xinjiang Region, China
Sep 2018	Award	Publon's Global Peer Review Award. Top 1% of the field	Publons.com
Jun 2018	Scholarship and award	Excellent Graduate – International PhD student	Global Education Centre, International students' office, East China Normal University
Dec 2017	Scholarship and award	Outstanding foreigner scholarship and academic performance award	International students' office, East China Normal University
Nov 2017	Award	Outstanding Reviewer	Ecological Indicators, Elsevier Publishers, the Netherlands
Sep 2017	Scholarship and award	Wisdom scholar award for academic performance	School of Ecological and Environmental Sciences, East China Normal University
April 2017	Scholarship and award	Wisdom scholar award for academic performance	School of Ecological and Environmental Sciences, East China Normal University
Mar 2017	Honor award	Member of excellent young researchers	East China Normal University; National Excellent Society; and the Shanghai Star Community Local Construction Society
Nov 2016	Scholarship and award	Outstanding foreign student scholarship for excellent performance, only 2 positions	China Scholarship Council, East China Normal University
Dec 2015	Scholarship and award	Outstanding foreigner scholarship and academic performance award	International student's office, East China Normal University
Sep 2015	Scholarship and award	Wisdom scholar award for academic performance	School of Ecological and Environmental Sciences, East China Normal University

Feb 2015	Scholarship and job (Declined)	Overseas PhD scholarship with offer of lecturer (BS 18, regular) in environmental sciences	Abdul Wali Khan University Mardan & Pakistan Higher Education Commission, Pakistan
Sep 2014	Scholarship	Shanghai Government Scholarship (Class-A, full funded) for PhD degree at ECNU	Shanghai Education Commission, Shanghai
July 2014	Certificate	Certificate of Excellence for completing 3-years master's degree in 2-years	International students office, East China Normal university
Dec 2013	Certificate	Excellent Master's Student	School of Ecological and Environmental Sciences, East China Normal University
Dec 2013	Scholarship and award	Outstanding foreigner scholarship and academic performance award	International students' office, East China Normal University
Sep 2012	Scholarship	China Government Scholarship, full funded, for Master's degree at ECNU	China Scholarship Council (CSC)
Feb 2012	Award	Gold Medal for getting top position among all students at BS Forestry degree	Shaheed Benazir Bhutto University, Pakistan
May 2008	Scholarship	Encouraging talented BS students	Frontier Education Foundation, Pakistan

Projects/Grants Reviewer

Swiss National Science Foundation

Journals Reviewer

Nature Ecology & Evolution; Journal of Ecology; Global Change Biology; Forest Ecology and Management; Advances in Ecological Research; Journal of Applied Ecology; Journal of Vegetation Science; Scientific Reports; Science of the Total Environment; Ecological Indicators; Ecological Modeling; Ecology and Evolution; Journal of Environmental Management; Ecological Complexity; Frontiers in Plant Science; Forestry: An International Journal of Forest Research; Journal of Cleaner Production; Journal of Forestry Research; Plant Ecology; Plant Ecology and Evolution; Journal of Forest Science; Pakistan Journal of Botany; Current Science; Energy, Ecology and Environment; Ecosystem Processes.

Reviewer Recognition

Elsevier:

<https://www.reviewerrecognition.elsevier.com/recognition/index?key=A002F298890F30D85F7521154332F0C9B09CDBC6F48A1B81>

Forestry: <https://doi.org/10.1093/forestry/cpx050>

Publons: <https://publons.com/author/1522358/arshad-ali#profile>

Global Research Collaboration

Global Forest Diversity, Structure and Functioning (GlobalFDSF) Research Network:

Currently I am leading the GlobalFDSF research network, and I have collected a potential forest inventory data across the globe. I am trying to explore the macro-ecological mechanisms (with some new insights) underlying the latitudinal global gradient in forest diversity, structure and functioning

Specific Research Collaborations

1. Dr. Zuo-Qiang Yuan (Associate Professor)

Affiliation: CAS Key Laboratory of Forest Ecology and Management, Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang 110164, PR China

Theme: *Biodiversity and ecosystem functions of temperate forests in Northeastern China*

Other collaborators: **Professor Michel Loreau** (CNRS and Paul Sabatier University, France)

Dr. Tommaso Jucker (Bristol University, UK)

Dr. Shaopeng Wang (Peking University China)

Dr. Xugao Wang (CAS, China)

Dr. Antonio Gazol (Instituto Pirenaico de Ecología, IPE-CSIC, Avenida Montanana, Spain)

Dr. Paloma Ruiz-Benito (Universidad de Alcalá, Edificio de Ciencias, Spain)

2. Professor Hai-Sheng Jiang

Affiliation: School of Life Sciences, South China Normal University Shanghai, PR China

Theme: *Biodiversity and ecosystem functions of tropical forests in Hainan Island of Southern China*

Other collaborators: **Dr. Si-Liang Lin** (South China Normal University)

Dr. Jei-Kun He (South China Normal University)

3. Dr. Eskil Mattsson (Lead Analyst / Researcher)

Affiliation: Centre for Environment and Sustainability, University of Gothenburg, 412 96 Göteborg, Sweden; Swedish Agricultural Board

Theme: *Linking stand structure, biodiversity and aboveground biomass of homegarden agroforestry systems in the dry zone of Sri Lanka*

4. Dr. Anvar Sanaei (Researcher)

Affiliation: Department of Reclamation of Arid and Mountainous Regions, Natural Resources Faculty, The University of Tehran, Karaj, P.O. Box: 31585-4314, Iran

Theme: *Linking environment, biodiversity and aboveground biomass in semi-steppe rangelands in Iran*

Other collaborators: **Professor Mohammad Ali Zare Chachouki**, **Professor Mohammad Jafari**, and **Professor Hossein Azarnivand** (The University of Tehran, Iran)

5. Professor En-Rong Yan

Affiliation: School of Ecological and Environmental Sciences, East China Normal University Shanghai, PR China

Theme: *Biodiversity and ecosystem functions of subtropical forests in Eastern China*

Other collaborators: **Professor Han Y.H. Chen** (Lakehead University, Canada)

Professor Scott X. Chang (University of Alberta, Canada)
Dr. Madelon Lohbeck (Wageningen University, the Netherlands)

6. Professor Juha M. Alatalo

Affiliation: Department of Biological and Environmental Sciences, College of Arts and Sciences, Qatar University, P.O. Box 2713, Doha, Qatar

Theme: *Diversity and productivity of an alpine plant community under different climate change scenarios*

Other collaborators: **Professor Ulf Molau** (University of Gothenburg, Sweden)

Dr. Annika K. Jägerbrand (Senior Research Manager in Calluna AB Land and Water, Sweden)

7. Dr. Xiao-Dong Yang (Associate Professor)

Affiliation: Institute of Resources and Environment Science, Xinjiang University, Urumqi 830046, PR China

Theme: *Ecological research in an arid desert region in North-West China*

Other collaborators: **Professor Guang-Hui Lv** (Xinjiang University)

8. Dr. Pedro Manuel Villa (Assistant manager / Research coordinator)

Affiliation: Federal University of Viçosa-Department of Botany

Researcher Forest Restoration Lab. Department of Forestry Engineering
Minas Gerais-Brazil

Theme: *Biodiversity – ecosystem functioning research in Amazon forests*

Publications

I have published over 50 papers in peer-reviewed journals including one book chapter, with several more currently in review or in revision. This includes papers in top forestry, ecology and multidisciplinary environmental journals such as *Global Change Biology*, *Journal of Ecology* (*BES journal*), *Ecology* (*ESA journal*), *Forest Ecology and Management*, *Tree Physiology*, *Science of the Total Environment*, *Biogeosciences*, *Ecological Indicators*, *Journal of Environmental Management*, *Annals of Forest Science*, *Ecohydrology*, *Land Degradation & Development*, *Journal of Hydrology*, *Journal of Plant Ecology*, *Ecological Research*. As of May 2020, these have been cited nearly **500 times (h-index = 13, i10-index= 21; based on Google Scholar metrics)**. Of these publications, nearly 40 have been appeared as first, second, third or corresponding author and have been cited over 300 times. See my Google Scholar profile for up-to-date citation metrics. PDF copies of articles in revision, under review or in press are available on request.

External citations in well-known journals:

Ecology Letters, Biological Reviews, Global Change Biology, Journal of Ecology, Ecological Applications, Forest Ecology and Management, Agricultural and Forest Meteorology, Scientific Reports, Ecology and Evolution, Science of the Total Environment, Applied Vegetation Science, Plant and Soil, Frontiers in Plant Science, BioEnergy Research, Agroforestry, Plant Physiology and Biochemistry, Forests, Flora, Forest systems, Arid Land Research and Management, and many other international and CSCD journals including MS and PhD thesis.

A. Under Review Papers

- 60) Yuan, Z[#], **Ali, A[#]**, Sanaei, A., Ruiz-Benito, P., Jucker, T., Lin, Fei., Fang, S., Ye, J., Fang, L., Hao, Z. & Wang, X. (2020) Few large trees drive the carbon dynamics of temperate forests. (Under Review).
- 59) Chun, J-H., **Ali, A.** & Lee, C-B. (2020) Abiotic conditions and forest strata-dependent biotic attributes regulate aboveground biomass in a temperate forest in South Korea. (Under Review).
- 58) Sanaei, A., **Ali, A.**, Yuan, Z., Lin, F., Fang, S., Ye, J., Liu, S., Hao, Z., Loreau, M., Wang, X. (2020) Stand age-dependent forest diversity attributes regulate temperate forest multifunctionality. (Under Review).
- 57) Xu, Y.L., **Ali, A.**, Yang, X.D., Sarkar, B., Lv, G.H., Aishan, T. & Gong, X.W. (2020) Hydraulic constraints determine the distribution of heteromorphic leaves across plant developmental stages and along vertical height. (Under Review).
- 56) Sanaei, A.[#], Saiz, H. Li, M. & **Ali, A.^{#*}** (2020) Niche segregation underlies diversity - biomass relationship in natural rangelands. (Under Review).
- 55) Oktavia, D., **Ali, A.** & Jin, G. (2020) Overstorey species diversity determines leaf area index and soil nutrients, thereby influencing understorey species diversity and growth rate in an old-growth temperate forest. (Under Review).

B. In Revision Papers

- 54) **Ali, A^{*}**, Mattsson, E., Nansanka, S.P. & Wang, L.Q. (2020) Topmost trees promote but foremost species decline tropical forest structure, diversity and biomass in a changing environment. *Forest Ecology and Management* (In Revision).

C. Peer-Reviewed Publications (Selected featured papers are highlighted in red color)

#Contributed Equally

*Corresponding author

2020

- 53) Wang, Y., Yang, X.D., **Ali, A.**, Lv, G.H., Long, Y.X., Wang, Y.Y., Ma, Y.G. & Xu, C.C. (2020). Flowering phenology shifts in response to functional traits and phylogeny of woody species in the desert area. *Frontier in Plant Science*. DOI: 10.3389/fpls.2020.00536
- 52) **Ali, A^{*}**, Sanaei, A., Ahmadaali, K., Asadi, O., Javanmiri Pour, M., Valipour, A., Karami, J., Aminpour, M., Kaboli, H. & Askari, Y. (2020) Environmental filtering, predominance of strong competitor trees and exclusion of moderate-weak competitor trees shape species richness and biomass. *Science of the Total Environment* 723, 138105. DOI: [10.1016/j.scitotenv.2020.138105](https://doi.org/10.1016/j.scitotenv.2020.138105)
- 51) Yuan, Z[#], **Ali, A[#]**, Ruiz-Benito, P., Jucker, T., Mori, A., Wang, S., Zhang, X., Li, H., Hao, Z., Wang, X. & Loreau, M. (2020) Above- and below-ground biodiversity jointly regulate

temperate forest multifunctionality along a local-scale environmental gradient. *Journal of Ecology*. DOI: [10.1111/1365-2745.13378](https://doi.org/10.1111/1365-2745.13378)

- 50) Ali, A*, Sanaei, A., Li, M., Asadi, O.N, Javanmiri Pour, M., Valipour, A., Karami, J., Aminpour, M., Kaboli, H. & Askari, Y. (2020) Big-trees – Energy mechanism underlies forest diversity and aboveground biomass. *Forest Ecology and Management*. 461, 117968. DOI: [10.1016/j.foreco.2020.117968](https://doi.org/10.1016/j.foreco.2020.117968)
- 49) Ali, A*, Sanaei, A., Li, M., Ahmadaali, K., Asadi, O., Javanmiri Pour, M., Valipour, A., Karami, J., Aminpour, M., Kaboli, H. & Askari, Y. (2019) Impacts of climatic and edaphic factors on the diversity, structure and biomass of species-poor and structurally-complex forests. *Science of the Total Environment* 706, 135719. DOI: [10.1016/j.scitotenv.2019.135719](https://doi.org/10.1016/j.scitotenv.2019.135719)

2019

- 48) Sanaei, A.#, Li, M.S. & Ali, A.* (2019) Topography, grazing, and textures control over rangelands' vegetation quantity and quality. *Science of the Total Environment* 697, 134153. DOI: [10.1016/j.scitotenv.2019.134153](https://doi.org/10.1016/j.scitotenv.2019.134153)
- 47) Yuan, Z.Q., Ali, A., Wang, S.P., Lin, F., Wang, X.G., Ye, J., Hao, Z.Q., Loreau, M. & Lin, J. (2019) Temporal stability of aboveground biomass is governed by species asynchrony in temperate forests. *Ecological Indicators* 107, 105661. DOI: [10.1016/j.ecolind.2019.105661](https://doi.org/10.1016/j.ecolind.2019.105661)
- 46) Ali, A., Lin, S.L., He, J.K., Kong, F.M., Yu, J.H. & Jiang, H.S. (2019) Big-sized trees overrule remaining trees' attributes and species richness as determinants of aboveground biomass in tropical forests. *Global Change Biology* 25(8), 2810-2824. DOI: [10.1111/gcb.14707](https://doi.org/10.1111/gcb.14707)
- 45) Villa, P.M., Martins, S.V., Rodrigues, A.C., Safar, N.V.H., Bonilla, M.A.C. & Ali A. (2019) Testing species abundance distribution models in tropical forest successions: Implications for fine-scale passive restoration. *Ecological Engineering* 135, 28-35. DOI: [10.1016/j.ecoleng.2019.05.015](https://doi.org/10.1016/j.ecoleng.2019.05.015)
- 44) Alice, R., Pedro, P.M., Ali, A., Walnir, J. & Andreza, N. (2019) Fine-scale habitat differentiation shapes the composition, structure and aboveground biomass, but not species richness, of a tropical Atlantic forest. *Journal of Forestry Research*. DOI: [10.1007/s11676-019-00994-x](https://doi.org/10.1007/s11676-019-00994-x) (Early view).
- 43) Yang, X.D., Qie, Y.D., Teng, D.X., Ali, A., Liu, Y., Bolan, N., Yang, S., Ma, L.G., Liu, W.G., Lv, G.H., Yang, S.T. & Simayi, Z. (2019) Prediction of groundwater depth in an arid region based on maximum tree height. *Journal of Hydrology* 574, 46-52. DOI: [10.1016/j.jhydrol.2019.04.022](https://doi.org/10.1016/j.jhydrol.2019.04.022)
- 42) Yang, X.D., Ali, A., Xu, Y.L., Jiang, L.M. & Lv, G.H. (2019) Soil moisture and salinity as the main drivers for soil respiration across the natural forest and agricultural lands in an arid desert region. *Catena* 177, 126-133. DOI: [10.1016/j.catena.2019.02.015](https://doi.org/10.1016/j.catena.2019.02.015)
- 41) Ali, A., Lin, S.L., He, J.K., Kong, F.M., Yu, J.H. & Jiang, H.S. (2019) Elucidating space, climate, edaphic and biodiversity effects on aboveground biomass in tropical forests. *Land Degradation & Development* 30, 918-927. DOI: [10.1002/ldr.3278](https://doi.org/10.1002/ldr.3278)

- 40) Yuan, Z., Ali, A., Jucker, T., Ruiz-Benito, P., Wang, S., Jiang, L., Wang, X., Lin, F., Ye, J., Hao, Z. & Loreau, M. (2019) Multiple abiotic and biotic pathways shape biomass demographic processes in temperate forests. *Ecology* 100(5), e02650. DOI: [10.1002/ecy.2650](https://doi.org/10.1002/ecy.2650) (Most Read Paper, Top 10%; Wiley)
- 39) Yang, X.D., Wang, J., Xu, M.S., Ali, A., Xu, Y.L., Lamb, D., Duan, M.C., Yan, K.H. & Yang, S.T. (2019) Effects of the ephemeral stream on plant species diversity and distribution in an alluvial fan of arid desert region: an application of a low altitude UAV. *PLoS ONE* 14(2): e0212057. DOI: [10.1371/journal.pone.0212057](https://doi.org/10.1371/journal.pone.0212057)
- 38) Ali, A., Chen, H.Y.H., You, W.H. & Yan, E.R. (2019) Multiple abiotic and biotic drivers of aboveground biomass shift with forest strata. *Forest Ecology and Management* 436, 1-10. DOI: [10.1016/j.foreco.2019.01.007](https://doi.org/10.1016/j.foreco.2019.01.007)
- 37) Yang, X.D. & Ali, A. (2019) "Biochar for Soil Water Conservation and Salinization Control in Arid Desert Regions" In *Biochar from Biomass and Waste*, pp. 161-168. Elsevier Publishers. DOI: [10.1016/B978-0-12-811729-3.00009-1](https://doi.org/10.1016/B978-0-12-811729-3.00009-1) (Book Chapter).
- 36) Ali, A., Lin, S.L., He, J.K., Kong, F.M., Yu, J.H. & Jiang, H.S. (2019) Tree crown complementarity links positive functional diversity and aboveground biomass in tropical forests. *Science of the Total Environment* 656, 45-54. DOI: [10.1016/j.scitotenv.2018.11.342](https://doi.org/10.1016/j.scitotenv.2018.11.342)
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- 4) Zhao Y.T., Xu, M.S., Zhang, Z.H., Zhou, L.L., Zhang, Q.Q., **Ali, A.**, Song, Y.J. & Yan, E.R. (2016) Characteristics of hydraulic architecture in woody plants across successional stages in evergreen broad-leaved forests in Tiantong, Zhejiang Province. *Chinese Journal of Plant Ecology*, 40(2), 116-126. DOI: 10.17521/cjpe.2015.0258
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- 2) Sun, B.W., Yang, X.D., Zhang, Z.H., Ma, W.J., **Ali, A.**, Huang, H.X. & Yan, E.R. (2013) Relationships between soil carbon pool and vegetation carbon return through succession of evergreen broad-leaved forests in Tiantong region, Zhejiang Province, Eastern China. *Chinese Journal of Plant Ecology*, 37(9), 803-810. DOI:10.3724/SP.J.1258.2013.00084
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D. Invited Talks, Conference Abstracts, Posters and Presentations

- 11) **Ali, A.**, (2020) Plant functional traits, species' functional strategies, and ecosystem functioning. Invited talk at University of Arid Agriculture Rawalpindi, Pakistan. Hosted by Prof Dr. Zia-ur-Rehman Mashwani, Faculty of Science, Department of Botany. 13 March 2020.

- 10) **Ali, A.**, (2020) Conducted workshop on R and functional trait survey. Hosted by Prof Dr. Shujaul Mulk Khan, Faculty of Biological Science, Department of Plant Sciences. 8 March – 12 March 2020.
- 9) **Ali, A.**, (2020) Plant diversity and ecosystem functioning in a changing environment. Invited talk at Quaid-Azam University Islamabad, Pakistan. Hosted by Prof Dr. Shujaul Mulk Khan, Faculty of Biological Science, Department of Plant Sciences. 25 Feb 2020.
- 8) **Ali, A***, Sanaei, A., Li, M., Asadi, O., Javanmiri Pour, M., Valipour, A., Karami, J., Aminpour, M., Kaboli, H. & Askari, Y. (2019) Big-trees – energy mechanism underlies forest diversity and aboveground biomass. *Celebrating Global Ecology*. 2019 Annual Meeting of British Ecological Society, Belfast, UK.
- 7) **Ali, A.** (2019) Biodiversity and the functioning of natural and managed plant ecosystems in a changing environment. Invited lecture at Tsinghua-Berkeley Shenzhen institute (TBSI). *TBSI Greater Bay Area Intellectual Forum, Lecture 97* available at <http://www.tbsi.edu.cn/en/index.php?s=/cms/527.html>
- 6) **Ali, A.**, Lin, S.L., He, J.K., Kong, F.M., Yu, J.H. & Jiang, H.S. (2018) Tree Functional diversity increases aboveground biomass via increasing tree crown complementarity in tropical forests of Hainan Island, Southern China. sciencesconf.org:sfecologie2018:208615. (oral presentation in *International Conference on Ecological Sciences*, Rennes, France)
- 5) **Ali, A.** (2017) Represented East China Normal University as the main organizer or student in charge in *The 15th Challenge Cup Carnival on Technological Innovation of Overseas Students in China*. Biodiversity and the functioning of forests in Eastern China.
- 4) **Ali, A.** & Yan, E.R. (2016) Stand structural diversity rather than species diversity enhances aboveground carbon storage in secondary subtropical forests in Eastern China. *2016 2nd graduate students' forum (Guang Hua forum) held at School of Ecological and Environmental Sciences, East China Normal University*. Available at <http://www.sees.ecnu.edu.cn/index.php?classid=7345&newsid=10911&t=show> (First presentation on 18th December, 2016)
- 3) **Ali, A.**, Yan, E.R., Xu, M.S., Zhao, Y.T. & Zhou, L.L. (2015) Functional dominance and divergence predict carbon stocks in subtropical forests: Testing the mass ratio and niche complementarity hypotheses. *64th International symposium on ecology held at East China Normal University*, Shanghai (Research Poster on 26th Sep, 2015). Available at <http://www.sees.ecnu.edu.cn/index.php?classid=7345&newsid=10609&t=show>
- 2) **Ali, A.** (2014) Deforestation: a key ecological issue. *The Express Tribune*, opinion letter no. 697344. Available at <http://tribune.com.pk/story/697344/deforestation-a-key-ecological-issue/>
- 1) **Ali, A.**, Yan, E.R. & Yang, X.D. (2013) Effects of stand structural diversity on carbon stocks in the subtropical forests of eastern China. *2013 national conference of Ecological Society of China (held at Nanchang China)*. Available at http://www.planta.cn/forum/files_planta/oeparagraphae__104.pdf (Page 26, Poster no. P38)

