



# Abhishek Kumar

SENIOR RESEARCH FELLOW

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## Education

### Panjab University

DOCTOR OF PHILOSOPHY (BOTANY)

Chandigarh, India

2017-Present

### Panjab University

MASTER OF SCIENCE (BOTANY)

Chandigarh, India

2015-2017

### Arya PG College

BACHELOR OF SCIENCE (BOTANY, CHEMISTRY, ZOOLOGY)

Panipat, India

2012-2015

## Selected Publications

Please check my *website* for a complete list of *publications*.

### JOURNAL ARTICLES

1. Singh, A. N., & Kumar, A. (2022). Comparative soil restoration potential of exotic and native woody plantations on coal mine spoil in a dry tropical environment of India: A case study. *Land Degradation & Development*, 33(12), 1971–1984. <https://doi.org/10.1002/ldr.4286>
2. Kumar, P., Kumar, A., Patil, M., Sharma, N. K., & Singh, A. N. (2022). Herbaceous vegetation under planted woody species on coal mine spoil acts as a source of organic matter. *Acta Oecologica*, 114, 103809. <https://doi.org/10.1016/j.actao.2021.103809>
3. Kumar, A., Patil, M., Kumar, P., Kumar, M., & Singh, A. N. (2022). Plant ecology in Indian Siwalik range: A systematic map and its bibliometric analysis. *Tropical Ecology*, 63(3), 338–350. <https://doi.org/10.1007/s42965-022-00229-x>
4. Singh, A. N., & Kumar, A. (2022). Ecological performances of exotic and native woody species on coal mine spoil in Indian dry tropical region. *Ecological Engineering*, 174, 106470. <https://doi.org/10.1016/j.ecoleng.2021.106470>
5. Patil, M., Kumar, A., Kumar, P., Cheema, N. K., Kaur, R., Bhatti, R., & Singh, A. N. (2020). Comparative litter decomposability traits of selected native and exotic woody species from an urban environment of north-western siwalik region, India. *Scientific Reports*, 10(1), 7888. <https://doi.org/10.1038/s41598-020-64576-2>

### BOOK CHAPTERS

1. Kumar, A., Patil, M., Kumar, P., & Singh, A. N. (2021). Phosphorus and litter decomposability traits in tropical forest ecosystems under changing environment: A synthesis. In R. K. Chaturvedi, R. Singh, & R. Bhadouria (Eds.), *Tropical dry forests: Emerging features and ecological perspectives* (pp. 311–336). Nova Science Publishers, Inc.
2. Kumar, A., Yadav, R., Patil, M., Kumar, P., Zhang, L., Kaur, A., Sharma, S., Hussain, S., Tokas, D., & Singh, A. N. (2020). Sustainable management of national parks and protected areas for conserving biodiversity in India. In *Advances in forest management under global change* (pp. 75–91). IntechOpen. <https://doi.org/10.5772/intechopen.92435>

## Awards and Distinctions

### Young Scientist Award

PUNJAB ACADEMY OF SCIENCES, PATIALA

2022

## Best Poster Award

NATIONAL CONFERENCE ON CLIMATE CHANGE, CSIR-NBRI, LUCKNOW

2020

## Junior Research Fellowship

UNIVERSITY GRANTS COMMISSION, NEW DELHI

2017

## Research Interests

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- **Macroecology** Elevational patterns of plant species richness; Climate associated plant redistributions
- **Community Ecology** Diversity and distribution of plant communities along elevation and their controlling factors
- **Population Ecology** Population dynamics of mountain trees (*Pinus*, *Quercus* and *Rhododendron*); species distribution modelling
- **Ecophysiology** Variation of functional traits with environmental variables (elevation, temperature, rainfall and atmospheric pressure)
- **Ecosystem Ecology** Nutrient cycling in tropical forests; role of phosphorus and mycorrhizal fungi in litter decomposition
- **Restoration Ecology** Ecological restoration of coal mine spoils

## Skills and Qualifications

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Please check my *website* for a comprehensive list of *accomplishments* and certificates

- R
- Microsoft Office (Excel, PowerPoint, Word)
- Biostatistics
- Data analysis and visualisation
- Systematic reviews and meta-analysis
- Scientific and technical writing

## Professional Memberships

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- Student Member (#67527876), *International Association for Vegetation Science*
- Life Member (#L-1599), *Punjab Academy of Sciences, Patiala*

## References

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- **Dr. Anand Narain Singh**, Panjab University, Chandigarh, dranand1212@gmail.com
- **Prof. Amrik Singh Ahluwalia**, Eternal University, Sirmour, amrik.s511@gmail.com
- **Dr. Balkar Singh**, Arya PG College, Panipat, balkararya@gmail.com