

# Bedirhan Avdancı

## Personal Information

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E-mail: [bedirhan.avd@gmail.com](mailto:bedirhan.avd@gmail.com)

Personal Website: <https://bedirhanavdanci.github.io/>

## Research Interests

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Soil Ecology, Environmental Pollution, Computational Ecology, Microbial Ecology,

## Language

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Turkish (Native)

Azerbaijani (Native)

English (C2 - 8.0/9.0 IELTS)

Persian (Beginner)

## Education

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2021 – 2025

Bachelor of Science (B.Sc.) in Biology, **Hacettepe University**, Ankara, Türkiye

Cgpa: 3.94/4.00, valedictorian, highest ever in the whole faculty

## Projects

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### [1] Soil organisms under global change, effects of climate change and land-use on belowground communities. (Final thesis)

German Centre for Integrative Biodiversity Research (iDiv), Experimental Interaction Ecology Laboratory (Eisenhauer Lab.)

- Supervisors: Dr. Marie Sünnemann, Prof. Dr. Nico Eisenhauer

*Responses of Microorganisms, Nematodes, Meso- and Macrofauna under different climate change scenarios and different land-use treatments*

### [2] Community Composition and Resistance Levels of Soil Bacteria and Fungi in a Mediterranean Forest Under Varying Wildfire Severities.

Hacettepe University Functional Ecology Laboratory, Ankara University Evolutionary Genetics Laboratory

- Supervisors: Assist Prof. Dr. Emine Ertekin, Prof. Dr. Emre Keskin, Prof. Dr. Cagatay Tavsanoglu

*Impacts of moderate and high wildfire severities on soil bacteria and fungi communities, assessed by using eDNA metabarcoding techniques*

## Research Experience

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2022 / 7 – 2025 / 6	Functional Ecology Laboratory, Hacettepe University, Ankara, Türkiye Internship, Advisor: Prof. Dr. Cagatay Tavsanoglu
2023 / 4 – 2023 / 11	TUBITAK (Scientific and Technological Research Council of Türkiye) Scholarship  The Impact of Post-Fire Restoration Practices on Plant Communities in Turkish Pine ( <i>Pinus brutia</i> ) Forests of Muğla, Marmaris, Türkiye
2024 / 7 – 2023 / 10	Erasmus+ Traineeship Programme Internship  German Centre for Integrative Biodiversity Research (iDiv), Experimental Interaction Ecology Group (Eisenhauer lab.)  Advisors: Dr. Marie Sünnemann, Prof. Dr. Nico Eisenhauer

## Oral and Poster Presentations

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**1. Avdancı B.**, Ediş G., Deniz S. A., Yıldızcan E. E., Keskin E., Tavşanoğlu Ç., *Community Composition and Resistance Levels of Soil Bacteria and Fungi in a Mediterranean Forest Under Varying Wildfire Severities* Oral presentation at XI. Ecology and Evolutionary Biology Symposium, 8-11 July, Ankara, Türkiye

## Fieldworks

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2022 / 1 / 17 – 2022 / 1 / 19	Mushroom Diversity Assessment, Abant National Park, Bolu, Türkiye
2022 / 9 / 05 – 2022 / 9 / 08	Soil Sample Collection for Abiotic Property Analysis, Anatolian Steppes, Sivrihisar, Eskişehir, Türkiye
2023 / 4 / 18 – 2023 / 4 / 23	Vegetation diversity Assessment in Artificial Terraced and Planted Regions, After Wildfires in Mediterranean Ecosystems of Türkiye [1]
2023 / 4 / 29 – 2023 / 5 / 13	Post-fire Plant Diversity Assessment, Phrygana Vegetation areas, burnt in 2009, 2010, 2016 and 2020, Mediterranean Ecosystems of Türkiye
2023 / 6 / 18 – 2023 / 6 / 23	Vegetation diversity Assessment in Artificial Terraced and Planted Regions, After Wildfires in Mediterranean Ecosystems of Türkiye [2]
2023 / 8 / 24	Collection of Anatolian Steppe Plant Roots for Functional Character Assessment [1]
2023 / 9 / 7	Collection of Anatolian Steppe Plant Roots for Functional Character Assessment [2]
2023 / 9 / 11 – 2023 / 9 / 25	Assessment of Recruitment Interactions of Woody Plant Species in Trojan Fir Forests of Kazdağıları, Northwest Türkiye
2023 / 9 / 26 – 2023 / 9 / 29	Soil Sample Collection for Analysis of Wildfire Intensity Impact on Bacterial and Fungal Communities
2024 / 6 / 12	Collection of Anatolian Steppe Plant Roots for Functional Character Assessment [3]
2024 / 6 / 20 – 2024 / 6 / 23	Collection of Anatolian Steppe Plant Roots for Functional Character Assessment [4]

## Skills

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- Programming Languages: R (Advanced level), Python (Intermediate level)
- Methodological Expertise: *eDNA Metabarcoding* (DNA extraction, PCR amplification, gel electrophoresis, library preparation, high-throughput sequencing, and bioinformatic analysis)  
*Phospholipid Fatty Acid Analysis* (lipid extraction, methylation, gas chromatography, and microbial community profiling)

## Memberships

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- 2021 – 2022 Co-Founder of the Ankara University Biological Sciences Society
- 2024 – Ecology and Evolutionary Biology Society of Türkiye (*Member of the Current Supervisory Board*)

## Academic Courses, Workshops, and Certificates

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- 2025 Land Ethics Education Project, 10-11 May, Ankara, Türkiye
- 3rd introduction to R programming in Natural Sciences Workshop (Ecology and Evolutionary Biology Society of Türkiye)
- R Programming A-Z™: R For Data Science with Real Exercises! (UDEMY)  
No: UC-d8cbdf48-79fa-41a8-94e0-81173-b35a201

## Scientific Meetings

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- 2025 XI. Ecology and Evolutionary Biology Symposium, 8-11 July, Ankara, Türkiye
- 2025 International Wildlife Documentary Film Festival, 15-18 May, Ankara, Türkiye
- 2025 Birds and Words: Tracing biocultural diversity in sub-Saharan Africa, 27 April, Ankara, Türkiye
- 2024 IUCN red list from past to present and new approaches and trends in conservation biology, 4 November, Ankara, Türkiye
- 2024 Effects of global climate change on Salt Lake plants, and habitat diversity Conference, 5 March, Ankara, Türkiye
- 2024 Biodiversity of Anatolia, from Steppes to Mountains Conference, 14 February, Ankara, Türkiye
- 2023 VIV. Ecology and Evolutionary Biology Symposium, Istanbul, Türkiye
- 2022 VIII. Ecology and Evolutionary Biology Symposium, Ankara, Türkiye
- 2022 III. Multidisciplinary neuroscience conference, Ankara, Türkiye
- 2022 Levontin's Legacy, Science, Philosophy and Policy Conference, Ankara, Türkiye
- 2021 5th Biogeography Conference, Ankara, Türkiye
- 2021 16th Aykut Kence Evolution Conference, Ankara, Türkiye

## Science Communication & Writing

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- Unutulmuş bir Tanrı: Benim Sadık Yârim Kara Topraktır. [Link](#)
- Diana Wall. [Link](#)
- Super-Small Predators in Soils: Who Are They and What Do They Do?  
(Translation from English to Turkish; published in Frontiers for Young Minds). [Link](#)
- The Fascinating World of Belowground Communication  
(Translation from English to Turkish; published in Frontiers for Young Minds). [Link](#)

## Hobbies and Interests

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Poetry, Literature, Playing violin, Camping