

Bedirhan Avdancı

Personal Information

E-mail: bedirhan.avd@gmail.com

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

Research Interests

Environmental Pollution, Computational Ecology, Microbial Ecology

Language

Turkish (Native)

Azerbaijani (Native)

English (C2 - 8.0/9.0 IELTS)

Persian (Beginner)

Education

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

[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

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

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

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

- 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

- 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

- 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

- 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

- 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

Poetry, Literature, Playing violin, Camping