



Profile

With over 11 years of research experience at the Iranian Forests and Rangelands Research Institute, I attained the title of distinguished researcher in 2024. Collaborating on 17 national projects and leading one, I specialize in soil biology, chemistry, physics, Arbuscular mycorrhizae symbiosis, DNA extraction, and molecular identification of fungi. Adept at troubleshooting and quality control in the laboratory, I have published 18 articles in esteemed journals. Furthermore, my 6-month study stint in the Czech Republic broadened my expertise. Passionate about scientific discourse, I actively participate in international conferences to expand my knowledge and solve pressing issues in soil and plant sciences.

Education

Doctor of Philosophy Natural Resources Engineering - Combat with Desertification *Sep 2014 – April 2019*

Semnan University, Semnan, Iran

GPA: 19.38/20.00

Thesis: *Some soil biological indicators under grazing management and isolation arbuscular mycorrhizal aimed at providing establishment of mycorrhizal seedlings of Salsola laricina (Case Study: Khoshkerood site) (19.87/20.00)*

Supervisors: Dr. Alireza Moshki, Dr. Mohammad Matinizadeh

Master of Natural Resources Engineering - Combat with Desertification *Sep 2012 – Sep 2014*

Semnan University, Semnan, Iran

GPA: 19.13/20.00

Thesis: *Investigation of oak wilt in the forest ecosystem of Ilam Haj Bakhtiyar by biomonitoring of heavy metals in the environmental dust (19.78/20.00)*

Supervisors: Dr. Alireza Moshki, Dr. Mohammad Matinizadeh

Bachelor of Natural Resources Engineering of Rangeland and Watershed Management *Sep 2007 – Sep 2011*

University of Malayer, Hamedan, Iran

GPA: 15.52/20.00

Thesis: *Monitoring, zoning, and investigation of drought characteristics in Ilam province using the standardized precipitation index (SPI) and SURFER software (20.00/20.00)*

Supervisor: Dr. Hamid Nouri

Research Interests

- Arbuscular mycorrhizae symbiosis
- Soil organic carbon and nitrogen dynamics
- DNA extraction and molecular identification and diversity of arbuscular mycorrhizal fungi
- Soil enzymes and microbial activity
- Soil biology and soil and plant properties

Language Competence and Test Scores

Persian (*Native*), English **IELTS Academic** (*C1- Advanced*)

Publications

Journal Articles

1. Mohammad Matinizadeh, **Elham Nouri**, Mohammad Bayranvand, Zuzana Kolarikova, Martina Janoušková, "Arbuscular mycorrhiza and rhizosphere soil enzymatic activities as modulated by grazing intensity and plant species identity in a semi-arid grassland," **Rhizosphere**, 2024
2. Haidari Maziar, Mohammad Matinizadeh, Mehdi Pourhashemi, **Elham Nouri**, and Nasim Bagheri Delijani. "Investigating changes in the physical and chemical characteristics of soil in control and dieback stands in Marivan county, Kurdistan province in Iran." **Forest Research and Development**, 2024
3. Mohammad Bayranvand, Mohammad Matinizadeh, Seyed Mosa Sadeghi, Tahereh Alizadeh, **Elham Nouri**, Hadi Darroudi, "Effect of two species of Prosopis (P. cineraria and P. juliflora) on soil quality in Saharo-Sindian region of Iran (Case study: Sistan and Baluchestan province)," **Journal of Forest and Wood Product**, 2024
4. Maziar Haidari, Mohammad Matinizadeh, Mehdi Pourhashemi, **Elham Nouri**, Nasim Bagheri Delijani, "Investigating changes in the physical and chemical characteristics of soil in control and dieback stands in Marivan county, Kurdistan province in Iran," **Journal of Forest Research and Development**, 2024
5. Mohammad Javad Rosta, Mohammad Matinizadeh, **Elham Nouri**, Mehrdad Zarafshar, Maryam Enayati, "Investigating the Diversity, Abundance and Degree of Symbiosis of Arbuscular Mycorrhizal Fungi with Trees and Pasture Plants in Kowsar Station," **Journal of Ecology of Iranian Forest**, 2023
5. Mohammad Javad Rosta, Mohammad Matinizadeh, Mehrdad Zarafshar, **Elham Nouri**, "Spate irrigation slightly ameliorates an arid soil's quality, but tree planting enhances its characteristics," **Journal of Soil and Tillage Research**, 2023
6. Mehrdad Zarafshar, Mohammad Javad Rosta, Mohammad Matinizadeh, Khosro Sagheb Talebi, Seyed Kazem Bordbar, Tahereh Alizadeh, Elham Nouri, Martin Karl-Friedrich Bader, "Scattered wild pistachio trees profoundly modify soil quality in semi-arid woodlands," **Journal of CATENA**, 2023
8. Mohammad Javad Rosta, Mohammad Matinizadeh, **Elham Nouri**, Mehrdad Zarafshar, Maryam Enayati, "Interactions between Flood Spreading and Vegetation Type on Some Biological Indices of Soil in the Gareh-Bygone Plain of Fasa (Kowsar Station)," **Watershed Management Research Journal**, 2023
9. Maziar Haidari, Mohamad Matinizadeh, Mehdi Pourhashemi, **Elham Nouri**, Fatemeh Keneshloo, "Changes in Leaf Nutrients of Healthy and Withered Trees in Garan and Dezlei Forests in Kurdistan Province," **Journal of Plant Ecosystem Conservation**, 2023
10. Nasim Bagheri Delijani, Alireza Moshki, Mohammad Matinizadeh, Hooman Ravanbakhsh, **Elham Nouri**, "The effects of fire and seasonal variations on soil properties in Juniperus excelsa M. Bieb. stands in the Alborz Mountains, Iran," **Journal of Forestry Research**, 2022
11. Mohammad Matinizadeh, **Elham Nouri**, Tahere Alizadeh, Anooshirvan Shirvany, "Improving the survival, establishment, and growth characteristics of Juniperus excelsa seedlings by inoculation of native mycorrhizal fungi," **Journal of Forest and Wood Product**, 2022
12. Nadia Kamali, Mohammad Matinizadeh, **Elham Noori**, Mahshid Soori, Roshanak Dehghan, "Assessment of arbuscular mycorrhizal fungi associated with three species of Astragalus L. (Astragalus squarrosus, Astragalus effusus and Astragalus podolobus)," **CABI Digital Library**. 2021
13. **Elham Nouri**, Alireza Moshki, Mohammad Matinizadeh, Ali Asghar Zolfaghari, Saeede Rajaei, "Variations in the diversity of the Arbuscular mycorrhizal fungi and its symbiosis as affected by different levels of grazing in rangelands," **Iranian Journal of Range and Desert Research**, 2020
14. **Elham Nouri**, A Moshki, M Matinizadeh, AA Zolfaghari, S Rajaei, "Variations in the diversity of the arbuscular mycorrhizal fungi and its symbiosis under the influence of different levels of grazing in rangelands," **Iranian Journal of Range and Desert Research**, 2020
15. **Elham Nouri**, Mohammad Matinizadeh, Alireza Moshki, Aliasghar Zolfaghari, Saeede Rajaei, Martina Janoušková, "Arbuscular mycorrhizal fungi benefit drought-stressed Salsola laricina," **Journal of Plant Ecology**, 2020

16. **Elham Nouri**, A Moshki, M Matinizadeh, A Zolfaghari, S Rajaei, "Symbiosis relationship between some arbuscular mycorrhizal fungi (AMF) and *Salsola laricina* and its effect on improving plant growth parameters," **Rostaniha**, 2018
17. **Elham Nouri**, Alireza Moshki, Mohammad Matini Zadeh, Ali Asghar Zolfaghari, Saeideh Rajaei, "The role of grazing management in the symbiosis of *Salsola laricina* Pall. with arbuscular mycorrhizal fungi," **Journal of Iran Nature**, 2018
18. Aliraza Moshki, Elham Nouri, Neda Soleyman Dehkordi, "The pattern of soil carbon sequestration changes regarding physicochemical soil properties (Case study: Semnan Sokan forest park)," **Iranian Journal of Forest and Poplar Research**, 2017
19. Mohammad Matinizadeh, Mostafa Khoshnevis, Tahereh Alizadeh, **Elham Nouri**, Shahab Bakhtiari, "The value of symbiosis mycorrhizal fungi for different plant species; Case study: *Celtis caucasica* L.," **Journal of Iran Nature**, 2017
20. **Elham Nouri**, Mohammad Matinizadeh, Alireza Moshki, Tahereh Ensafi Moghaddam, Mohammad Rahimi, "Evaluating the amount of heavy metals in dusts and their absorption by Brant's oak (*Quercus brantii* Lindl.) (Case study: Meleh Siah, Ilam)," **Iranian Journal of Forest and Poplar Research**, 2015

Conference Papers

1. Mohammad Javad Roosta, Mohammad Matinizadeh, **Elham Nouri**, Mehrdad Zarafshar, Maryam Enayati, "Isolation and Identification of Mycorrhizal Fungi from Plant Rhizosphere in the Kowsar Flood Distribution Station," **Eighth International Conference on Agriculture, Natural Resources, and Environment Technology in Iran - March 18, 2023**
2. Mohammad Javad Roosta, Mohammad Matinizadeh, **Elham Nouri**, Mehrdad Zarafshar, Maryam Enayati, "Investigation of Changes in Some Biological Soil Indicators Affected by Flood Distribution," **Eighth International Conference on Agriculture, Natural Resources, and Environment Technology in Iran - Poster Presentation - March 18, 2023**
3. Ensafi Moghadam, T., **Nouri, E.**, Matinizadeh, M., "Bioindicators Monitoring using Soil & Plant Sediments to Measure Environmental Impacts in the Research Oak Forest of Ilam, Iran" **PAGES Agadir, Science Meeting & 4th Young Scientists Meeting "Learning from the past for a sustainable future" - Morocco - May 16-20, 2022**
4. Mohammad Matinizadeh, **Elham Nouri**, Toobie Sepehond, "Using Arbuscular Mycorrhizal Fungi to Enhance Plant Species against Drought Stress" **Seventh National Plant Physiology Conference in Iran - Gorgan Agricultural Sciences and Natural Resources University – 2021**
5. Tahereh Ensafi Moghadam, **Elham Nouri**, Mohammad Matinizadeh, "Tracking the Effects of Heavy Metal Pollution on Oak Trees in Ilam Research Forest" **Eighth International Comprehensive Crisis Management Conference, Tehran, 2017**
6. Tahereh Ensafi Moghadam, **Elham Nouri**, Mohammad Matinizadeh, "Comparison and Evaluation of Plant and Soil Contaminants at the Beginning and End of the Growing Season (Case Study: Haj Bakhtiari Ilam Research Forest)," **Eighth International Comprehensive Crisis Management Conference, Tehran, 2017**
7. **Elham Nouri**, Mohammad Matinizadeh, Alireza Mashki, Tahereh Ensafi Moghadam, Mohammad Rahimi, "Evaluation of Some Important Soil Elements under the Canopy of Healthy and Dry Oak Trees," **The 4th International Conference on Environmental Challenges & Dendrochronology, Sarri, Iran, 2014**
8. **Elham Nouri**, Mohammad Matinizadeh, Alireza Mashki, Tahereh Ensafi Moghadam, Mohammad Rahimi, "Comparison of Organic Carbon and Total Nitrogen Dynamics in Soil under the Canopy of Healthy and Dry Oak Trees (Case Study: Haj Bakhtiari Forest, Ilam)," **The 4th International Conference on Environmental Challenges & Dendrochronology, Sarri, Iran, 2014**
9. Neda Soleimandehkordi, Mohammad Rahimi, Zahra Bayat, **Elham Nouri**, "Investigating the Effect of Climate Change on Drought (Case Study: Shahr-e-Kord Plain)" **Conference on Climate Change Adaptation Challenges and Solutions, Hamedan, 2014**

10. Developments in Hamoon zone and Its Environmental Issues, **Second National Conference on Iranian Environmental Research, Hamedan, Iran, 2014**
11. Moslem Asadi, Mohammad Rahimi, **Elham Nouri**, Neda Soleimandehkordi "Challenges and Environmental Impacts of Dust Storms"- **First International Dust Conference, Management of Factors and Consequences in Lorestan, 2013**
12. Moslem Asadi, Mohammad Rahimi, **Elham Nouri**, Neda Soleimandehkordi "Prognosis And Early Warning Of Dust Storms," **First International Dust Conference, Management of Factors and Consequences in Lorestan, 2013**












Promotional scientific Articles

1. Mohammad Matinizadeh, **Elham Nouri**, Tahereh Alizadeh, and Younes Rostami Kia, "Increasing Survival and Improving Growth Characteristics of Montpellier Maple (*Acer monspessulanum* L.) Seedlings in Nurseries Using Arbuscular Mycorrhizal Fungi", **Technical Journal, Issue 51, pp. 1-19, 2023**
2. **Elham Nouri**, "How Three Genes Participate in Plant Mutualism," **Iranian Scientific-Promotional Nature Journal, Volume 5, Issue 2, pp. 136, 2020**
3. **Elham Nouri**, Alireza Mashki, Mohammad Matinizadeh, Ali Asghar Zolfaghari, Saeideh Rajaei, "The Role of Why Management in the Mutualism of *Salsola* Species (*Salsola laricina* Pall) with Arbuscular Mycorrhizal Fungi," **Iranian Scientific-Promotional Nature Journal, Issue 5, pp. 39-36, 2018**
4. Mohammad Matinizadeh, Mostafa Khoshnavi, Tahereh Alizadeh, **Elham Nouri**, and Shahab Bakhtiari, "The Value of Mutualistic Mycorrhizal Fungi for Different Plant Species: A Case Study of Caucasian Hackberry (*Celtis caucasica* L.)," **Iranian Scientific-Promotional Nature Journal, Issue 2, pp. 45-42, 2017**

Under Review

1. Matinizadeh, M, **Nouri, E.**, Alizadeh, T "Evaluation of the Physicochemical Properties of Soil Masses Affected by Iranian Oak Decline in the Forests of Kohgiluyeh and Boyer-Ahmad," **Iranian Forest Journal, Submitted on January 29, 2024**
2. **Nouri, E.**, Matinizadeh, M, Bayranvand, M, Jalili A, Alizadeh T, Eftekhari A, Rashvand, S, Baldrian P, "[Distribution of arbuscular mycorrhizal fungi and soil enzymatic functions in C and P cycles from a semi-arid natural grassland in Iran,](#)" **Arid Land Research and Management, Submitted on November 17, 2023**
3. Matinizadeh, M, **Nouri, E.**, Bayranvand, M., Alizadeh T, Teimuri M, Eftekhari A., "Variation in rhizosphere biological characteristics of some species in the rangeland habitat, in Iran," **Arid Ecosystems, Submitted on November 15, 2023**

Skills

- | | | | |
|---|---|--|---|
| ▪ R |  | ▪ SPSS |  |
| ▪ Excel |  | ▪ Photoshop |  |
| ▪ Canoco5 |  | ▪ DIVA-GIS |  |
| ▪ Maxent |  | ▪ GPS |  |
| ▪ Work with Laboratory/Research Instruments |  | ▪ Routine laboratory procedures in plant and soil analysis |  |
| ▪ Quantification of arbuscular mycorrhizal fungal (AMF) DNA in roots and soil |  | | |

Professional and Academic Experience

▪ **Research Assistant and Laboratory Technician**

- *Drafting research proposals and reports for research projects*
- *Conducting all aspects of sampling and laboratory work, including routine procedures in plant and soil analysis*
- *Statistical analysis of data*
- *Writing scientific articles*
- *Reviewing articles for reputable journals*

Research Institute for Forests and Rangelands of Iran, Tehran

▪ **Thesis Supervision**

2022-2024

- *Thesis Title: The effect of ecological factors on the diversity of Thymus species*
Student: Somaye Suri

University of Maraghe

▪ **Collaboration in Organizing and Teaching Scientific Workshops**

2019

- *Workshop: Familiarity with R software and its application in natural resources statistics*
- *Role: Theory and practical teaching*

Research Institute for Forests and Rangelands of Iran, Tehran, Iran

▪ **Scholar Period**

March 2018– Sep 2018

- *Quantification of arbuscular mycorrhizal fungal (AMF) DNA in roots*
- *Identification and diversity analysis of Arbuscular Mycorrhizal Fungi (AMF) using molecular ecology techniques*

Institute of Botany of the Czech Academy of Sciences, Prague

▪ **Thesis Supervision**

2017-2018

- *Thesis Title: Evaluation of soil biological conditions in Juniperus habitat two years after a fire: A case study of Sirachal in Alborz*
Student: Nasim Bagheri

University of Semnan

▪ **Collaboration in Organizing and Teaching Scientific Workshops**

2017

- *Workshop: Assessing the coexistence of arbuscular fungi*
- *Role: Theory and practical teaching*

Research Institute for Forests and Rangelands of Iran, Tehran, Iran

▪ **Collaboration in Organizing and Teaching Scientific Workshops**

2016

- *Workshop: Soil DNA extraction, PCR, and introduction to soil metagenomics*
- *Role: Theory and practical teaching*

National Institute of Genetic Engineering and Biotechnology (NIGEB), Tehran, Iran

Related Courses and Projects

General Ecology	20.00/20	Advanced Ecology	20.00/20
Geostatistics	19.00/20	Land Degradation and Desertification	19.50/20
Sustainable Development in Natural Resources	19.50/20	Saline and Alkaline Soils	19.75/20
Methods of Reforestation and Vegetation Cover Management	19.50/20		

Projects:

- Collaboration in Approved Research Projects by the Research Institute for Forests and Rangelands of Iran (15 projects):
 1. *The Effect of Mycorrhizal Symbiosis on Tolerance to Drought, Salinity, and Fungal Disease in White*

- Poplar Seedlings (Populus alba L)*
Main Collaborator, 2022-2025
2. *Assessment and Monitoring of Forest Soil Masses in Hyrcanian and Arasbaran Forests (Phase One)*
Main Collaborator, 2021-2025
 3. *Assessment and Monitoring of Soil in Forests and Woodlands in the Siah-Sand, Sistan Region (Phase One)*
Main Collaborator, 2021-2025
 4. *Assessment and Monitoring of Soil in Forests and Woodlands in the Irano-Turanian Region (Phase One)*
Main Collaborator, 2021-2025
 5. *Assessment and Monitoring of Forest Soil Masses in Hyrcanian and Arasbaran Forests (Phase One) - East Azerbaijan*
Principal Investigator, 2022-2024
 6. *Potential Use of Sewage Sludge as Soil Amendment in Afforestation (Case Study: South Tehran Wastewater Treatment Plant)*
Collaborator, 2019-2024
 7. *Impact of Flood Distribution on the Coexistence of Arbuscular Mycorrhizal Fungi and Some Soil Biological Indicators at the Kowsar Station*
Main Collaborator, 2020-2023
 8. *Effect of Two Oak Species (Iranian and American) on Some Soil Properties in the Siah-Sand, Sistan Region, Iran*
Main Collaborator, 2020-2023
 9. *Effect of Arbuscular Mycorrhizal Fungi Symbiosis on Growth Responses of Black Poplar (Populus nigra) under Salinity Stress*
Main Collaborator, 2020-2023
 10. *Assessment and Monitoring of Physical and Chemical Soil Properties and Leaf Elements Emphasizing Oak Decline Phenomenon in Zagros Forests*
Main Collaborator, 2017-2023
 11. *Efficiency of Arbuscular Mycorrhizal Fungi in Enhancing Growth and Yield of Mountain Thyme (Thymus kotschyanus) for the Production of Mycorrhizal Inoculated Materials*
Main Collaborator, 2018-2021
 12. *Isolation and Identification of Arbuscular Mycorrhizal Fungi and Production of Mycorrhizal Seedlings of Three Astragalus Species (Astragalus squarrosus, Astragalus effuses, and Astragalus podolobus)*
Main Collaborator, 2017-2020
 13. *Changes in Some Soil Biological Characteristics Due to Wildfire in the Sirachal Forest Habitat*
Main Collaborator, 2014-2018
 14. *Evaluation of the Coexistence and Abundance of Arbuscular Mycorrhizal Fungi in Steppe, Semi-Steppe, Meadows, and Grasslands Ecosystems*
Main Collaborator, 2014-2018
 15. *Evaluation of Some Soil Biological Factors in Steppe, Semi-Steppe, Meadows, and Grasslands Ecosystems*
Main Collaborator, 2014-2018
- Collaboration in Approved Research Projects by Semnan University:
 1. *Investigating the Effect of Some Tree Species Planted Purely and in Combination on the Physical and Chemical Properties of Soil (Case Study: Sukkand Forest Park, Semnan)*
Role: Main Collaborator, 2013-2014
 2. *The Impact of Different Land Uses (Agriculture, Horticulture, and Forestry with Native and Non-Native Species) on Soil Carbon, Nitrogen Reserves, and Structure in the Southern Districts of Semnan County*
Main Collaborator, 2012-2013

Other Collaborative Projects:

- Collaborating in Implementing ISO/IEC17025 Standard in the Forest Laboratory Section
- Reviewing Articles in:
 1. Forest and Poplar Research Journal
 2. Iranian Journal of Forests and Rangelands Protection Research (IJFRPR)
 3. Iranian Journal of Forests
 4. Journal of Applied Research on Medicinal and Aromatic Plants
 5. Iranian Journal of Rangeland and Desert Research

6. Journal of Forest and Wood Products
 7. Soil Biology Journal
 8. Rangeland Ecology and Management Journal
 9. Frontiers In Forests And Global Change Journal
 10. Journal Of Agricultural Science And Technology
- Membership in the Iranian Rangeland Management Association
 - Producing a Video Clip titled “Biological Fertilizers - Arbuscular Mycorrhizal Fungi” in the Knowledge and Agricultural Technology Promotion Hall
 - Publishing a Brochure on the Use of Microorganisms for the Survival and Better Establishment of Seedlings, Arbuscular Mycorrhizal Fungi, Agricultural Education Publishing, Office of Agricultural Education and Promotion Media Network
 - Participation and Collaboration in the One Billion Seedlings Planting Working Group in Iran

Certifications

- Familiarity with the Concepts, Principles, and Planning of Crop Cultivation Patterns - **2022**
- Assessment of Measurement Uncertainty in Laboratories According to ISO 17025 Standard - **2020**
- Risk Assessment According to ISO 17025 Standard - **2020**
- Internal Audit of Laboratories According to ISO 17025 Standard - **2020**
- Internal and External Quality Control in Laboratories According to ISO 17025 Standard - **2020**
- Training Course on Health Verification of Testing Methods - **2020**
- Establishment and Documentation of Laboratory Accreditation System According to ISO 17025 Standard - **2019**
- Optimization of Agricultural Product Waste Management in Livestock Nutrition - **2019**
- Workshop on the Fundamentals of ISO 17025 Standard - **2019**
- Analysis of Biodiversity Data and Modeling of Ecological Niche of Species Using Climatic Data - **2018**
- Soil Testing, Fertility Assessment, and Determination of Fertilizer Requirements - **2018**

Honors and Awards

- Citation for a member of the best talent of students in Iran universities.
- The highest M.Sc. and Ph.D. thesis grades and GPAs compared with the other students at the University of Semnan.
- Received a certificate as an exemplary researcher in 2024 in the Research Institute of Forests and Rangelands, Tehran, Iran.

Hobbies

- Reading
- Traveling and Nature tourism
- Fitness
- Swimming

References

- Professor Martina Janouskova
Relation: Scholar period Supervisor
Professor
Department of Mycorrhizal Symbiosis
Institute of Botany, Czech Republic
Martina.Janouskova@ibot.cas.cz
- Dr. Mohamad Matinizade
Relation: Ph.D. Secondary Supervisor
Associate Professor
Forest Division in the Research Institute of Forest and Rangelands of Iran, Agricultural Research Education and Extension Organization (AREEO)
matini@rifr-ac.ir

- **Dr. Alireza Moshki**
*Relation: Ph.D. Primary
Supervisor*

*Associate Professor
Department of Afforestation in Arid
Lands
Semnan University*

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