Tooba Sepahvand

PhD student

PhD candidate of Forest Biology, Department of forestry and forest economy, University of Tehran, Iran

Personal details:

First name: Tooba
Last name: Sepahvand
Nikname: Delnia
Date of birth: 30-July-1990
Nationality: Iranian
Marital state: Single

Email: t.sepahvand@ut.ac.ir
Phone: +989101899813, +989381864839

Languge skills:

Kurdish (mother tongue)
Persian (native)
English (fluent)

Research interests:

- Plant Science:
  - Molecular Biology
  - Microbiology
  - Plant Pest and disease
  - Molecular Genetics
  - Gene expression patterns of important biosynthesis pathways
- Forest ecology:
  - Microorganism Symbiosis
  - Genetic diversiy
  - Forest pest and disease

Academic Qualifications:

2008 Diploma of experimental science.

2013 Bachelor of Science in Forestry, Behbahan Khatam Alanbia university of technology.
Average 16.46 out of 20.

2016 M.Sc. of Forest Ecology, University of Tehran.
Average 17.77 out of 20.

2019 PhD course of Forest Biology, University of Tehran.
Average 17.80 out of 20

Title of M.Sc. thesis:
The effects of mycorrhiza fungi and long-term drought stress on the morphological and physiological responses of Caucasian Hackberries (*Celtis Caucasica*) seedling

My MSc thesis, supervised by Dr. Vahid Etemead and Dr Mohammad matinizadeh was on topic the effects of mycorrhiza fungi and long-term drought stress on the morphological and physiological responses of Caucasian Hackberries (*Celtis Caucasica*) seedling. This study was performed for the first time in Iran with innovative aspects. The purpose of my thesis was produce mycorrhizal seedling inoculated with native mycorrhizal fungi for degradation areas. Therefore, after sampling of maternal hackberries trees rhizosphere, two type of arbuscular fungus separated and propagated. Then under several treatments this kind of fungi inoculated with hackberries (*Celtis Caucasica*) seeds. Six months after applying drought stress, morphological, physiological and biochemical responses were evaluated on control and inoculated seedlings. As result, native mycorrhizal inoculated-seedlings illustrated greater value in all studied traits. Finally, resistant mycorrhizal seedlings planted in damaged forests and have survived to present.

also, during last three years I have been engaging with a national projects entitled "The role of Biotechnology Science in the efficient reforestation management of Zagros forest (Ilam province) In this project, I had the opportunity to work with a tree species called oak (*Quercus* spp.), in order to provide a comprehensive view of its genetic diversity in the west of Iran and determine an appropriate management approach's of new reforestation strategies.

Lab skills:

Produce inoculation of mycorrhizal fungi
Identify endo-mycorrhiza fungi
Produce mycorrhizal seedling
Determine trees genetic diversity
DNA extraction, PCR, Real-time

Software skills

Office: word, power point, excel

Spss
SAS
Endnote
R

Honors:

Outstanding student in BSc , MSc and Doctoral courses.
Rank 20 in M.Sc. entrance exam of forest ecology in 2014, IRAN.
Rank 1 in PhD. entrance exam of forest Biology in 2018, IRAN

Work experience

Member of Technology of Natural Sustainable Ecosystems Research Group

Translate 2 scientific video in English subtitle

1- Tree of life (the role of juniper cypresses on local people life (Juniper project))
2- Zagros forests(degradation causes of Zagros forests (Zagros project))

National Projects:

- Effect of biotechnology science patterns on the efficient reforestation management of Zagros forest (Ilam province), supported by **Iran National Science Foundation.**
- Long-lived cypress trees in Iran by genetic study, a published book

Publications:

Sepahvand, T, Zandebasiri, M. (2014). Evaluation of Oak decline with local resident, opinions in Zagros forests, Iran. Scholarly Journal of Agricultural Science Vol. 4(4), pp. 231-234

Sepahvand, T, Etemad, V, Matinizadeh, M, Shirvani, A, Zahedi Amiri, Gh. (2017). Identification and inoculation of two species of Mycorrhiza fungi on Celtis Caucasica L. under greenhouse conditions. published in forest and poplar journal.Iran

Sepahvand, T, Etemad, V, Matinizadeh, M, Shirvani, A, Zahedi Amiri, Gh. (2016). The effect of arbuscular mycorrhizal fungus on the activity of antioxidant enzymes in (Celtis caucasica L.) under drought stress. Third national Conference of New Findings in Agricultural Science, Natural Resources and the Environment.Tehran.Iran

Sepahvand , T, Etemad , V, Matinizadeh, M, Shirvani, A, Armand ,N. (2016). Evaluation of plant indices of Celtis caucasica L. inoculated of mycorrhizal mycorrhizal arbuscular *Rhizophagus intraradices* under normal conditions. First Conference of Natural Resources and Sustainable Development in Central Zagros, Shahrekord. Iran

Sepahvand , T, Etemad , V, Matinizadeh, M, Shirvani, A, Armand ,N. (2016). Investigation of some root morphological traits of Celtis Caucasica L. seedlings with inoculation of *Funneliformis mosseae* and *Rhizophagus intraradices* under normal conditions. First Conference on Natural Resources and Sustainable Development in Central Zagros, Shahrekord, Iran

Sepahvand , T, Etemad , V, Matinizadeh, M, Shirvani, A, Armand ,N. (2016). The effect of mycorrhizal symbiosis of *Rhizophagus intraradices* on biochemical traits of Celtis Caucasica L. under drought stress conditions. First Conference on Natural Resources and Sustainable Development in Central Zagros, Shahrekord, Iran

Sepahvand, T, Etemad, V, Matinizadeh, M, Shirvani, A, Zahedi Amiri, Gh. (2016). Improvement of root traits of Celtis Caucasica L. seedlings inoculated with myrrhizous fungi under drought stress. International Conference of New Findings in Agricultural Science, Natural Resources and the Environment.Tehran.Iran

Sepahvand, T, Etemad, V, Matinizadeh, M, Shirvani, A, Zahedi Amiri, Gh. (2016). Physiological Responses of Mycorrhizal Seedlings of Celtis caucasica L. under Drought Stress. Third national Conference of New Findings in Agricultural Science, Natural Resources and the Environment.Tehran.Iran

Armand ,N, Matinizadeh, M, Shirvani, A, **Sepahvand, T**. (2015). Comparison of mycorrhizal symbiosis and stem height in inoculated seedlings with three species of mycorrhizal fungus in light texture. First National Conference on Applied Research in Environmental, Water and Natural Resources, Arak,Iran

Armand ,N, Matinizadeh, M, Shirvani, A, **Sepahvand, T**. (2015). Investigating the Effects of *Rhizophagus intraradices* and *Funneliformis mosseae* on Adsorption of Leaf P and P Elements in Mahlab Seedlings in Light Texture. . First National Conference on Applied Research in Environmental, Water and Natural Resources, Arak, Iran

Armand ,N, Matinizadeh, M, Shirvani, A, **Sepahvand, T**. (2015). Assay of acid phosphatase activity in Cerasus Mahaleb seedlings rhizosphere. First National Conference on Applied Research in Environmental, Water and Natural Resources, Arak,Iran

Interests:

- Swimming, Climbing, Dancing, Music, Photography, Free study of motivational books, health and psychology.