MARYAM NOROOZIZARMEHRI

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EDUCATION

Ph.D. in Plant Systematics | Kharazmi University | Iran| July 2021 **CGPA: 4**
Thesis Title: *Molecular systematic and evolution of tribe Lithospermeae (Boraginaceae)*
Relevant Courses: Biosystematics 1, Biosystematics 2, Evolution and Phylogeny in Plants

M.Sc. in Plant Systematics | Kharazmi University | Iran | July 2015 **CGPA: 4**
Thesis Title: *Foliar anatomy of Scorzonera subgenera Podospermum and Pseudopodospermum (Astraceae) in Iran*
Relevant Courses: Comparative Cytology and Histology of Plants, Systematic Botany, Plant ecology

B.Sc. in Plant Biology | Alzahra University | Iran | July 2012 **CGPA: 3.8**

MAJOR INTERESTS

- Systematics, Molecular Phylogeny, Evolution, Palynology, Ethnobotany

RESEARCH EXPERIENCE & ACADEMIC APPOINTMENTS

Postdoctoral Researcher, University of Tennessee, Knoxville (Jan. 2023- present)

- Analyze the morphological evolution of structures integral to the parent-offspring conflict across the moss phylogeny.

PhD candidate Researcher, Kettering University **(**Aug. 2019 to Jan. 2020)

- Extraction of DNA from selected species of Lithopsermeae to whole genome sequencing
- Survey quantitative and qualitative characteristics of fruit in genera of Lithospermeae using stereoscope
- Anatomical investigation on leaf and stem of Lithospermeae (Boraginaceae) using sliding microtome and examined on light microscope
- Phylogeny reconstruction, utilizing both molecular and pollen morphological characters, to understand the evolution of pollen characters in Boraginaceae and related families
- Create database of Palynological characteristics for Boraginaceae and related families

PhD candidate Researcher, Missouri Botanical Garden (Oct. 2018 to July 2019)

- Prepare playnological matrix for all genera of Lithospermeae
- Prepare morphological matrix for all genera of Lithospermeae
- Review the Lithospermeae herbarium samples and comparison of morphological characteristics of the tribe.

- Investigation pollen morphology of all genera of the tribe Lithospermeae using Scanning Electron Microscopy (SEM).

PhD Student, Kharazmi University (Sep. 2012 to Sep. 2018)

- Collaborate to organize specimens of T herbarium according to the APG IV.
- Collection information has been done in the library form for reviewing the past study on the Legumes of Iran for preparing checklist of Fabaceae.
- Ethnobotanical study of medical plants from west Iran.
- Investigation flower anatomy of some genera of convolvulaceae using microtome.
- Identification and nomenclature of genera of convolvulaceae.
- Collected some genera of convolvulaceae from southern of Iran.
- Comparative study of leaf epidermis in three subgenera of *Scorzonera.*
- Study on taxonomic and leaves anatomical characteristics of two subgenera of *Scorzonera.*

TEACHING EXPERIENCE

Plant Systematics | Kharazmi University | Spring & Fall 2014

- Review the major groups of plants
- Understand the basics of taxonomy by performing exercises in its components.
- Review the basics of herbarium use
- Practice preparing herbarium labels.

PUBLICATIONS

- **Noroozi, M.**, Cohen, J. I., Ghahremaninejad, F. In prep. Phylogenomics of the tribe Lithospermeae
- **Noroozi, M.**, Cohen, J. I., Ghahremaninejad, F. In prep. Anatomical study of leaf, stem and flower in Lithospermeae
- **Noroozi, M.**, Ghahremaninejad, F., Bogler, D., Witherspoon, J.M., Ryan, G.L., Miller, J.S., Riahi, M. and Cohen, J.I. (2021). Parsing a plethora of pollen: the role of pollen size and shape in the evolution of Boraginaceae. – Cladistics.
- **Noroozi, M.**, Farrokh Ghahremaninejad, Ali Asghar Maassoumi, Seyed Reza Safavi (2016) Anatomical studies on *Scorzonera* (Astraceae) species, subgenera *Podospermum* and *Pseudopodospermum* in Iran. – Modern phytomorphology 9: 51-68.
- Ghahremaninejad, F., **Noroozi, M.**, Edmondson, J. (2015) An improved list of Iranian authors. – Taxon 64 (5): 1078-1078.

- **Noroozi, M.** and Ebrahimnia, A. (2015) Plant Chromosome Book of Iran (Book review). – Caryologia 68 (4): 363-364.

- Hoseini, E., Feridounfar, S., **Noroozi, M.** (2015) Species plant with specific epithet derived from Iran. – Rouyesh of Journal kharazmi 2 (7): 34-47.

- **Noroozi, M.**, Safavi, S. R., Maassoumi, A. A., Ghahremaninejad, F. (2014) Studies on the anatomical structure of leaves of 19 *Scorzonera* species belonging to the subgenera *Podospermum* and *Pseudopodospermum* in Iran. –18th National and International Congress of Biology in Iran.

- **Noroozi, M.** and Ezzati, R. (2013) Investigating the Importance, Destruction and Management of Wetlands. – *The Second National Conference on Planning and Environmental protection.*

PROFESSIONAL PRESENTATIONS

- **Noroozi, M.**, Bolger, D., Miller, J.S., Riahi, M., Ghahremaninejad, F. 2019. Systematic significance of pollen morphological variation in tribe Lithospermeae. Botany 2019. Tucson, AZ [Submitted poster]

- **Noroozi, M.**, Cohen, J.I., Witherspoon, J.M., Gillian, L.R., Bolger, D., Miller, J.S., Riahi, M., Ghahremaninejad, F. 2020. Pollen diversity and evolution in Boraginaceae. Botany 2020. Virtually. [Submitted poster]

PROFESSIONAL ACTIVITIES

Manuscript reviews: Phytokeys, Journal of the Botanical Research Institute of Texas, Nova biologica reperta, Plant Biosystems, Rostaniha

SOCIETY MEMBERSHIPS

Iranian biology society (2014-2019), Botanical society of America (2018-2021)

LEADERSHIP/TEAMWORK EXPERIENCE

- Collaboration with publication committee of 18th national and 6th international congress of biology- Iran

CERTIFICATIONS

- Certificate in Traditional Medicine -Tehran University-May 2018
- The principle of PCR, Electrophoresis and Sequence Alinment- Kharazmi University-2016
- Certificate in Writing Scientific Paper- Kharazmi University-2016
- Phylogeny using Bayesian Approach-Iranian Biological Resource Center (IBRC)-2018

TECHNICAL SKILLS

- Knowledge of molecular laboratory techniques, such as DNA extraction, PCR, and sequence analysis, as well as methods for phylogenetic analyses using PAUP, TNT, RAXMEL, MrBayse, BEAST Mesquite, Aliview. BioEdit, Chromas Pro, FastQC, etc.
- Knowledge of anatomical laboratory techniques
- Knowledge of modeling complex dynamics of speciation, extinction, and trait evolution on phylogenetic trees using R, BAMM program, ParSplit
- Basic knowledge of utilizing next-generation sequencing technologies (e.g., Illumina sequencing) for investigating genetic diversity, population structure, patterns of gene expression, evolutionary history, etc.
- Basic experience in protein gel electrophoresis, DNA gel electrophoresis, tissue culture
- Collect, analyze and interpret plant/botanical data

OUTSIDE INTERESTS

- Literature, cinema, pop, jazz, and traditional music, walking, travel, cooking, photography