

Curriculum Vitae

▪ Personal History

- * **Name (first name/surname, last name/forename):** Zeinab Toluei
- * **Birth date:** 23 December 1978
- * **Gender:** female

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- * **Phone (Office):** + 98 31 - 5912301
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▪ Educational History

a. Education (Academic Preparation)

Major	Minor	Degree	University	City	Country	Year	
						From	To
Biology	Zoology	B. Sc.	Kharazmi University	Tehran	Iran	1999	2002
Biology	Plant Ecology and Systematics	M. Sc.	Bu-Ali Sina University	Hamedan	Iran	2004	2006
Biology	Plant Systematics	Ph. D	Bu-Ali Sina University	Hamedan	Iran	2006	2012
Biology	Plant Molecular Systematics	Visiting Ph. D student	Ruprecht-Karls-Universität Heidelberg	Heidelberg	Germany	2010	2011

b. Theses

Title of thesis	Degree	Supervisor(S)	Advisor
Biosystematic study on the genus <i>Onobrychis</i> Miller sect. <i>Onobrychis</i> in Iran	M. Sc.	Prof. Dr. Massoud Ranjbar	Prof. Dr. Roya Karamian
Systematic study on the genus <i>Onobrychis</i> Miller sect. <i>Onobrychis</i> in Iran	Ph. D	Prof. Dr. Morteza Atri	Prof. Dr. Masood Ranjbar
Systematic study on the genus <i>Onobrychis</i> Miller sect. <i>Onobrychis</i> in Iran (Phylogeny and Phylogeography)	Ph. D	Prof. Dr. Michael Wink]

▪ Teaching history

University	* Level	** Type of lesson (theory of Practical)	Title of lesson	Year	
				From	To
Bu-Ali Sina University	Undergraduate	Theory	Botany- Plant Morphology and Taxonomy	2006	2007
Malayer University	Undergraduate and Graduate (MS. c)	Theory and Practical	Plant systematics- Modern Taxonomy- Plant Taxonomy	2011	2013
University of Kashan	Undergraduate	Theory and Practical	Ecology- Evolution-Plant Biology-Plant Biology Laboratory- Plant Development-Environment and Biotechnology- Molecular Biology Laboratory-Biodiversity and Systematics-	2012	Continue
	Graduate	Theory and Practical	Botany- Bioinformatics-The Principles of Research and Technology-Biotechnology		

▪ **Research Interests**

- 1) Plant Systematics
- 2) Plant Ecology
- 3) Plant Phylogeny
- 4) Plant Phylogeography
- 5) Plant Secondary Metabolites and their Biological Activities
- 6) 6- Medical Plants
- 7) Population Genetics
- 8) Bioinformatics

▪ **Abilities:**

- 1) Techniques: PCR, DNA Extraction, DNA Fingerprinting, DNA Sequencing, Electrophoresis, Biometry, Plant anatomy, Plant palynology, Plant secondary metabolites extraction, evaluation of biological activities.
- 2) Bioinformatics and Working with SPSS, MVSP, NTSYS, BIOEDIT, MEGA, PAUP, TREEVIEW, ANAPHYTO Softwares etc.

3) **Honors and Awards**

Award	Place	Awarding body	Year
Distinguished Student in Faculty of science	Bu-Ali Sina University	Vice-Chancler of Bu-Ali Sina University	2010, 2009 and 2007
Top student in B. Sc. Course among graduated students	Tarbiat Moallem University of Tehran	Vice-Chancler of Tarbiat Moallem University	2002
Top student in M. Sc. Course among graduated students	Bu-Ali Sina University	Vice-Chancler of Bu-Ali Sina University	2006
Membership in Iranian National Foundation of Talents	Iran		

4) Membership in Professional Associations and societies (Professional Memberships)

Name of Association	Site of association
Iranian Society of Biology	http://www.ibs.org.ir
Iranian National Foundation of Talents	http://www.bmn.ir

Journal Papers:

- 1- Tafvizi, F., Hosseini Tafreshi, S., Toluei, Z., & Toghyani, M. 2020. Stress responses of the green microalga, *Dunaliella salina* to PEG-induced drought. Journal of the Marine Biological Association of the United Kingdom, 100 (7), 1043-1052.
- 2- Iravani, M., Mahinpour, R., Zahraei, Z., Toluei, Z. & Asgari, F. 2020. Comparison of cytotoxic and antioxidant activities and phenol content of four *Salvia* L. species from Iran. Journal of Medicinal Plants, 19 (76): 59-68.
- 3- Toluei, Z., Hosseini Tafreshi, A. & Arefi, M. 2019. Comparative Chemical Composition Analysis of Essential Oils in Different Populations of Damask Rose from Iran. Journal of Agriculture Science and Technology, 21 (2): 423-437.
- 4- Toluei, Z., Arefi, M. & Hosseini Tafreshi, A. 2019. Evaluation of morphological variation of different populations of *Rosa damascena* Mill. from Kashan and its correlation with essential oil content. Journal of Plant Research (Iranian Journal of Biology), 33 (1): 167-178.
- 5- Toluei A.& Toluei Z. 2019. Application of gene sequences in plant phylogenetic inferences. Iranian Journal of Genetics and Plant Breeding, 7(2): 13-23.
- 6- Iravani, M., Mahinpour. R., Zahraei, Z., Toluei, Z. 2019. In Vitro Evaluation of the Antimicrobial Properties of Essential Oils and Methanolic Extracts of Four Species of *Salvia* L. Research in Medicine, 43 (3) :157-163.
- 7- Yazdani, M., Jookar Kashi, F., Toluei, Z. & Rahimi-Moghaddam, A. 2020. Evaluation of biological activity and identification of the chemical composition of essential oil of aerial parts of *Melissa officinalis* L. Eco-phytochemical Journal of Medicinal Plants. 29 (1): 16-30.

- 8- Ranjbar, M., Askari, A., Karamian, R., Joharchi, M.R. and Toluei, Z. 2018. A new species of *Onobrychis* sect. *Onobrychis* (Fabaceae) from Iran. *Phytotaxa*, 347(4): 285-291.
- 9- Toluei Z, Atri M, Ranjbar M & Wink M. 2013. Iranian *Onobrychis carduchorum* (Fabaceae) populations: morphology, ecology and phylogeography. –*Plant Ecology and Evolution* 146 (1): 1–15.
- 10- Toluei, Z, Ranjbar, M, Wink, M & Atri, M. 2013. Molecular phylogeny and ecogeography of *Onobrychis viciifolia* Scop. (Fabaceae) based on nrDNA ITS sequences and genomic ISSR fingerprinting. – *Feddes Repertorium*. 123 (3): 193-207.
- 11- Toluei Z, Ranjbar M, Wink M & Atri M. 2013. Molecular characterization of *Onobrychis altissima* (Fabaceae) populations from Iran with the description of *O. chaldoranensis*, sp. nova. – *Ann Bot Fenn* 50: 249–257.
- 12- Toluei Z, Atri M, Ranjbar M & Wink M. 2012. Morphological, genetical and ecogeographical characterization of long-winged species of *Onobrychis* sect. *Onobrychis* (Fabaceae) in Iran. – *Iranian Journal of Botany* 18 (1): 31–41.
- 13- Toluei Z, Atri M & Ranjbar M. 2010. Taxonomic study of *Onobrychis transcaspica* V. Nikitin (Fabaceae) in northeastern of Iran with emphasis on altitudinal effect on morphological characters using floristic marker. – *Taxonomy and Biosystematics* 2: 25–38.
- 14- Ranjbar M, Karamian R, Tolui Z & Amirabadizadeh H. 2007. *Onobrychis assadii* (Fabaceae), a new species from Iran. – *Ann Bot Fenn* 44: 481–484.
- 15- Sharifi, M.M. & Toluei, Z. 2008. The study of salinity and drought stress effects on three range species: *Agropyron intermedium*, *Avena barbata* and *Panicum antidotale* from Iran. *Multifunctional Grasslands in a Changing World*. 1: 119.

Conference Paper:

- 1- Torkian, M. & Toluei, Z. 2020. Evaluation of anti-diabetic effects of Solanaceae. 2nd International Conference on Technology Development in Chemical Engineering. 2 September. Tehran, Iran (Full paper).

- 2- Ghasemi, E. and Toluei, Z. 2020. Determination of total phenolic content of methanolic extract of *Centaurea virgata* lamark 2nd International Conference on Technology Development in Chemical Engineering. 2 September. Tehran, Iran (Full paper).
- 3- Aloosi Savad Koochi, Z. & Toluei, Z. 2019. The cytotoxicity of Solanaceae family in the treatment of various cancer cells. 3rd International and 11th national Biotechnology Congress of Islamic Republic of Iran. 1-3 September. Tehran, Iran (Full Paper).
- 4- Aloosi Savad Koochi, Z., Toluei, Z. & Rashedinia, M. 2019. Study of analgesic effects of methanolic extract from leaves of *Hyoscyamus senecionis* Willd. (Solanaceae). 3rd International and 11th national Biotechnology Congress of Islamic Republic of Iran. 1-3 September. Tehran, Iran (Full Paper).
- 5- Mahdian, M. & Toluei, Z. 2019. Phylogenetic analysis of *Trichodesma* (Boraginaceae-Boraginoideae) based on ITS sequences data 3rd International and 11th national Biotechnology Congress of Islamic Republic of Iran. 1-3 September. Tehran, Iran (Full Paper).
- 6- Mahdian, M. & Toluei, Z. 2019. Molecular phylogeny of *Trichodesma* (Boraginaceae-Boraginoideae) based on trnL-F sequences data. 3rd International and 11th national Biotechnology Congress of Islamic Republic of Iran. 1-3 September. Tehran, Iran (Full Paper).
- 7- Toluei A., Toluei Z & Ranjbar M. 2019. Phylogenetic analysis of *Anchusa* (Boraginaceae-Boraginoideae) Based on ITS Sequences from Iran. 2nd International Conference on Medicinal Plants, Organic Farming, Natural and medicinal materials. Iranian Medical plants Society. Mashhad, 13-14 February (Full paper).
- 8- Toluei A., Toluei Z & Ranjbar M. 2019. The genetic variation of *Anchusa* L. genus (Boraginaceae) as medicinal plants from Iran based on trnL-F sequences data. 2nd International Conference on Medicinal Plants, Organic Farming, Natural and medicinal materials. Iranian Medical Plants Society. Mashhad, 13-14 February (Full paper).
- 9- Dashtizadeh, Z., Jookar Kashi, F., Toluei, Z. 2019. Total phenolic and flavonoid contents of methanolic extract from leaves of a native plant from Marivan, 2nd International Conference on Medicinal Plants, Organic Farming, Natural and medicinal materials, Iranian Medical Plants Society. Mashhad, 13-14 February (Full paper).
- 10- Dashtizadeh, Z., Jookar Kashi, F., Toluei, Z. 2019. Antioxidant and cytotoxic activity of ethyl acetate extract from leaves of a native plant from Marivan. 2nd International Conference on Medicinal Plants, Organic Farming, Natural and medicinal materials, Iranian Medical Plants Society. Mashhad, 13-14 February (Full paper).

- 11- Arefi Tork Abadi, M., Toluei, Z. and Hosseani Tafreshi, SA. 2018. Morphological and essential oil characterization of different populations of *Rosa damascena* Mill. in Kashan. The first International Conference of *Rosa damascena*. Essential oils Research Institute, University of Kashan, Qamsar, Kashan. 3-5 November (Abstract).
- 12- Arefi Tork Abadi, M., Hosseani Tafreshi, SA. and Toluei, Z. 2018. In vitro regeneration of shoots and ex vitro rooting of damask rose (*Rosa damascena* Mill.). The first International Conference of *Rosa damascena*. Essential oils Research Institute, University of Kashan, Qamsar, Kashan. 3-5 November (Abstract).
- 13- Masoudi Marghmaleki, R. and Toluei, Z. 2018. In-Vitro bioactivity of methanol extract of the *Nepeta kotschyi* var. *persica* (Boiss.) Jamzad. International Congress of Chemistry and Nanochemistry from Research to Technology. Iranian Chemical Science and Technologies Association. Shahid Beheshti University, Tehran. 11-12 September (Full paper).
- 14- Masoudi Marghmaleki, R. and Toluei, Z. 2018. Antioxidant activity of methanol extract of the *Scutellaria multicaulis* Boiss. International Congress of Chemistry and Nanochemistry from Research to Technology. Iranian Chemical Science and Technologies Association. Shahid Beheshti University, Tehran. 11-12 September (Full paper).
- 15- Masoudi Marghmaleki, R., Toluei, Z. and Jookar Kashi, F. 2018. In-Vitro bioactivity of methanol extract of the *Proveskia abrotanoides* Kar. The 15th Iranian National Congress Biochemistry & 6th Internatoinal Congress Biochemistry & Molecular Biology. University of Medical Sciences. Isfahan. 25-28 August (Abstract).
- 16- Masoudi Marghmaleki, R., Toluei, Z. and Jookar Kashi, F. 2018. Antioxidant and antimicrobial activity of methanol extract of the *Salvia reuterana* Boiss. The 15th Iranian National Congress Biochemistry & 6th Internatoinal Congress Biochemistry & Molecular Biology. University of Medical Sciences. Isfahan. 25-28 August (Abstract).
- 17- Ghasemi, E. and Toluei, Z. 2018. Determination of antioxidant activity of methanolic extract of *Centaurea virgata* Lamark. International Congress of Chemistry and Nanochemistry from Research to Thechnology. Iranian Chemical Science and Thechnologies Association. Shahid Beheshti University, Tehran. 11-12 September (Full paper).

- 18- Ghasemi, E. and Toluei, Z. 2018. Genetic variation of *Centaurea virgata* Lamark in Iran using Scot markers. International Congress on the New Aspects of Applied Biology. Kharazmi University. Karaj. 11-12 July (Abstract).
- 19- Nowrouzi, M.& Toluei, Z. 2017. The antibacterial and antifungal activity of leaves and fruits of *Hyoscyamus senecionis* Willd. 18th International Iranian congress of Microbiology. 29-31 August. School Medicine, Tehran University of Medical science, Tehran, Iran. (Abstract)
- 20- Toluei A., Toluei Z & Ranjbar M. 2017. The Phylogeny of the genus *Moltkia* Lehm. (Boraginaceae) from Iran based on plastid trnL-trnF region sequence data. 2nd International and 10th national Biotechnology Congress of Islamic Republic of Iran. 29-31 August. Seed and plant improvement Institute, Karaj, Iran. (Abstract)
- 21- Toluei A., Toluei Z & Ranjbar M. 2017. The genetic variation of the genus *Moltkia* Lehm. (Boraginaceae) from Iran based on nrDNA ITS Sequence Data. 2nd International and 10th national Biotechnology Congress of Islamic Republic of Iran. 29-31 August. Seed and plant improvement Institute, Karaj, Iran. (Abstract)
- 22- Nowrouzi, M.& Toluei, Z. 2017. Plant Alkaloids and Application in Modern Medicine. 1st International Conference on modern technologies in sciences. 7th September. Amol University of special modern technologies. Amol, Iran (Full Paper).
- 23- Nowrouzi, M.& Toluei, Z. 2017. Alkaloidal and Non-alkaloidal Secondary Metabolites of *Hyoscyamus niger*. 1st International Conference on modern technologies in sciences. 7th September. Amol University of special modern technologies. Amol, Iran (Full Paper).
- 24- Toluei A.& Toluei Z. 2017. Phylogeny as a Modern Technology in Biology. 1st International Conference on modern technologies in sciences. 7th September. Amol University of special modern technologies. Amol, Iran (Full Paper).
- 25- Toluei A.& Toluei Z. 2017. Using Gene Sequences in Modern Plant Phylogeny. 1st International Conference on modern technologies in sciences. 7th September. Amol University of special modern technologies. Amol, Iran (Full Paper)
- 26- Nowrouzi, M.& Toluei, Z. & Jookar Kashi, F. 2017. The Antimicronial effect of seeds and stems of *Hyoscyamus senecionis* Willd. 18th International Iranian congress of Microbiology. 29-31 August. School Medicine, Tehran University of Medical science, Tehran, Iran. (Abstract).

- 27- Yazdani, M., Jookar Kashi, F. Toluei, Z. 2017. Extract from *Mentha Longifolia* As Natural Antimicrobial. 18th International Iranian congress of Microbiology. 29-31 August. School Medicine, Tehran University of Medical science, Tehran, Iran (Abstract).
- 28- Arefi, M. Toluei, Z. & Hosseini Tafreshi, A. 2016. Morphological variation and flower yield of different populations of *Rosa damascena* Mill. In kashan, The first Iranian seminar of essential oil, 10-11 May. Kahan, Iran (Full paper).
- 29- Arefi, M. Toluei, Z. & Hosseini Tafreshi, A. 2016. Essential oil characterization of different populations of *Rosa damascena* Mill. In kashan, The first Iranian seminar of essential oil, 10-11 May. Kashan, Iran (Full paper).
- 30- Zavarreza, M., Toluei Z.& Hosseini Tafreshi, A. 2016. The study of genetic variation in *Rosa damascena* Mill. from different regions of kashan, The first Iranian seminar of essential oil, 10-11 May. Kashan, Iran (Full paper).
- 31- Iravani, M., Mahinpour, R. Zahraie, Z & Toluei, Z. 2016. Antimicrobial activity of methanol extract of *Salvia limbata* C. A. Mey from Kashan- Ghazaan. 17th International and Iranian congress of Microbiology. 23-25 August. School Medicine, Tehran University of Medical science, Tehran, Iran (Abstract).
- 32- Iravani, M., Mahinpour, R. Zahraie, Z & Toluei, Z. 2016. Antimicrobial activity of *Salvia glutinosa* L. methanol extract from Gilan- Masal. 17th International and Iranian congress of Microbiology. 23-25 August. School Medicine, Tehran University of Medical science, Tehran, Iran (Abstract).
- 33- Mazrouei Arani, N., Salem, E., Toluei, Z. & Ranjbar, M. 2016. The Phylogeny of the genus *Paracaryum* (DC) Boiss. (Boraginaceae) from Iran based on plastid trnL-trnF region sequence data. 2nd International and 14th Iranian Genetic congress. 21-23 May. Sh. Beheshti University, Tehran, Iran (Abstract).
- 34- Toluei, Z., Ranjbar, M., Mazrouei Arani, N. & Salem, E. 2015. The genetic variation of the genus *Paracaryum* (DC) Boiss. (Boraginaceae) from Iran based on nrDNA ITS Sequence Data. 1st International and 9th National Biotechnology congress. 21-23 May. Sh. Beheshti University, Tehran, Iran (Abstract).
- 35- Toluei, Z. 2014. Genetic variation among different accessions of *Onobrychis viciifolia* Scop. (Fabaceae) revealed by genomic ISSR fingerprinting. 1st international and 13th Iranian Genetics Congress. 24-26 May. Tehran, Iran.
- 36- Toluei Z & Ranjbar M. 2014. Molecular phylogeny of *Onobrychis persica* Širj. & Rech.f. (Fabaceae) based on nrDNA ITS sequences. 1st international and 13th Iranian Genetics Congress. 24-26 May. Tehran, Iran.

- 37- Toluei Z, Ranjbar M, Wink M & Atri M. 2011. Morphological variations of *Onobrychis viciifolia* Scop. populations (Fabaceae) in Iran and their relationship with ecogeographical factors. Biosystematics Berlin Conference, 21-27 February. Germany-Berlin.
- 38- Toluei, Z., Atri, M. and Ranjbar, M. 2011. The ecogeographic study of *Onobrychis transcaspica* V. Nikitin (Fabaceae) in Iran. International conference on Biodiversity and environmental crisis: past, present and future. 11-13 February. India.
- 39- Toluei, Z., Atri, M. and Ranjbar, M. 2010. The study of stations of *Onobrychis carduchorum* C.C.Towns. in Iran. 16th National & 4th International Conference of Biology. Ferdowsi university of Mashhad, Iran. 14-16 September.
- 40- Toluei, Z., Atri, M. and Ranjbar, M. 2010. A morphometric study of the ecogeographic variation in *Onobrychis carduchorum* C.C. Towns. (Fabaceae) in Iran. XI International Conference of International Organization of Plant Biosystematists. 02-04 September. India.
- 41- Toluei, Z., Atri, M. and Ranjbar, M. 2009. Intraspecific diversity study of *Onobrychis transcaspica* V. Nikitin with floristic, morphologic and ecological markers in northeastern of Iran. 2nd Iranian Plant systematics Conference. Tehran Shahid Beheshti University. 10 December.
- 42- Olanj, N., Ranjbar, M., Karamian R., Toluei, Z. 2009. Seed Storage Protein Profile of Some Hedysarum L. Species Grown in Iran, Using SDS-PAGE. 2nd Iranian Plant systematics Conference. Tehran Shahid Beheshti University. 10 December.
- 43- Toluei, Z., Ranjbar, M. and Karamian, R. 2009. Comparative anatomical study on *Onobrychis* sect. *Onobrychis* in Iran. National conference of Biology students (NCBS-2009). Shahrekord University. 15- 16 July.
- 44- Karamian, R., Toluei, Z. and Ranjbar, M. 2008. Seed- coat microsculpturing and its systematic application in *Onobrychis* sect. *Onobrychis* in Iran. 15th National & 3rd International Conference of Biology. University of Tehran. 19-21 August.
- 45- Ranjbar, M., Toluei, Z. and Karamian, R. 2007. Numerical taxonomy of *Onobrychis* sect. *Onobrychis* from Iran. 1st National Plant Taxonomy Conference of Iran. National Botanical Garden of Iran, Research Institute of Forest and Rangelands, Tehran. 6 September.
- 46- Karamian, R., Toluei, Z. and Ranjbar, M. 2006. Systematic study of the *Onobrychis* sect. *Onobrychis* in Iran. 14th National & 2nd International Conference of Biology. Tarbiat Modares University, Tehran. 29-31 August.

- 47- Toluei, Z., Borzouei, Z., Bagheri, A. & Zahraei, E. 2002. The study of irrigation rate effects on antibacterial activity of *Rosmarinus officinalis*. Proceedings of the 1st scientific Meeting of Biology & Biotechnology organized for B. Sc students (Iran). Pp. 22-27.

Accession Number of Gene submitted in NCBI:

- 1- MF992938
- 2- MF992937
- 3- MF992936
- 4- MF992935
- 5- KY003160.1
- 6- KY003161.1
- 7- KY003158.1
- 8- KY003159.1
- 9- KU361596
- 10- KU361595
- 11- KU361594
- 12- KP234044
- 13- KP234043
- 14- KP234042
- 15- MH922750
- 16- MH922751
- 17- MH922752
- 18- MH922753
- 19- MH922754
- 20- MH922755
- 21- MH922756
- 22- MH922757
- 23- JX290359
- 24- JX290341
- 25- JX290358
- 26- JX290357
- 27- JX290356
- 28- JX290355
- 29- JX290354
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38- JX290345
39- JX290344
40- JX290343
41- JX290342
42- KF880422
43- KF880421
44- KF880420
45- KF880423
46- JQ780473
47- JQ780474
48- KF880419
49- KF880418
50- JX290360
51- JQ780472
52- JQ780471
53- JQ780470
54- JQ780469
55- JX290361
56- JX290362
57- JX290363
58- KF880424
59- MW015103
60- MW015102
61- MW015101
62- MW015104