

S. A. Rafat, PhD

Research Experience

- Feb 2016 – present* **Professor (Full)**
University of Tabriz, Department of Animal Science
Tabriz, Iran
- Jun 2011 – Feb 2016* **Associate Professor**
University of Tabriz, Department of Animal Science
Tabriz, Iran
- Jun 2007 – Jun 2011* **Professor (Assistant)**
University of Tabriz, Department of Animal Science
Tabriz, Iran
- Jan 2004 – Jun 2007* **Doctorant (PhD Student)**
French National Institute for Agricultural Research (INRA), INPT - Institut National Polytechnique de Toulouse (France)
Toulouse, Midi-Pyrénées, France

La Station d'Amélioration Génétique des Animaux (SAGA, UR631) a été créée en 1970 suite à la décentralisation du département de Génétique Animale (GA) et à la création du Centre de Toulouse.
- Jun 1998 – Jan 2004* **Lecturer**
University of Tabriz,
Tabriz, East Azarbaijan, Iran

Awards & Grants

- Feb 2011* Grant: Coordinated Research Project on “Genetic Variation on the Control of Resistance to Infectious Diseases in Small Ruminants for Improving Animal Productivity”

Skills & Activities

- Skills* Animal Science, Animal Breeding, Genetics, Selection, Quantitative Genetics, Inbreeding, Asreml, Animals, Animal Genomics, Mastitis, Dairy Cattle, Fiber, SAS Base, SAS/STAT, divergent selection, Milk, Animal Genetics, Cattle Breeding, Animal Production, Animal Biotechnology, Dairy Science, Coding

Languages English, French, Turkish

Publication Highlights

- Hajializadeh R, Abbas Rafat S, Notter DR, Djalil Shojda, Gholamali Moghaddam, Ahmad Nematollahi: *Fecal egg counts for gastrointestinal nematodes are associated with a polymorphism in the MHC-DRB1 gene in the Iranian Ghezel sheep breed.* Frontiers in Genetics 02/2015; 6., DOI:10.3389/fgene.2015.00105
- S A Rafat, P Namavar, D J Shodja, H Janmohammadi, H Z Khosroshahi, I David: *Estimates of the genetic parameters of Turkey body weight using Random Regression analysis.* animal 09/2011; 5(11):1699-704., DOI:10.1017/S1751731111000929
- S.A. Rafat, D Allain, H de Rochambeau: *Genetic description of a divergent selection experiment in Angora rabbits with overlapping generations.* Journal of Animal Breeding and Genetics 06/2009; 126(3):189-97., DOI:10.1111/j.1439-0388.2008.00769.x
- S A Rafat, H de Rochambeau, M Brims, R G Thébault, S Deretz, M Bonnet, D Allain: *Characteristics of Angora rabbit fiber using optical fiber diameter analyzer.* Journal of Animal Science 12/2007; 85(11):3116-22., DOI:10.2527/jas.2007-0109
- Mohammad Farhadian, Abbas Rafat, Esmaeil Ebrahimi, Karim Hasanpur, Fazeli Farsani: *Identification of genes involved in milking process using microarray analysis.* The 6th Conference on Bioinformatics, Iran; 12/2016

Books

- S. A. Rafat: *The Last Project of INRA on Angora Rabbit: After 30 Years of Research on French Angora Rabbit: Analysis of a Divergent Selection Experiment on Total Fleece Weight.* 06/2014; LAP LAMBERT Academic Publishing., ISBN: 3659551023

Book Chapters

- H. Esfandyari, A.A. Aslaminejad, S.A. Rafat: *Genetic and non-genetic factors influencing fibre quality of Arkharmerino × Ghezel and Arkharmerino × Moghani crossbreeds of sheep in third generation.* 01/2012: pages 51-58; , DOI:10.3920/978-90-8686-727-1_5
- H. Esfandyari, A.A. Aslaminejad, S.A. Rafat: *Genetic and non-genetic factors influencing fibre quality of Arkharmerino × Ghezel and Arkharmerino × Moghani crossbreeds of sheep in third generation.* Fibre production in South American camelids and other fibre animals, 01/2012: pages 51-58; , DOI:10.3920/978-90-8686-727-1-5

Journal Publications

- Hajializadeh Valilou R., S.A. Rafat, M. Firouzamandi, M. Ebrahimi: *Use of microsatellite polymorphisms in Ovar-DRB1 gene for identifying genetic resistant fat-tailed Ghezel sheep to gastrointestinal nematodes.*
- Rahman Hajializadeh Valilou, Mohammad Ranjbar Sarskanroud, Seyed Abbas Rafat, Marziyeh Ebrahimi, Masoumeh Firouzamandi, Seyed Abolghasem Mohammadi: *Association between Footrot Resistance and Microsatellite Polymorphisms of Ovar-DRB1 and BMC5221 Loci in Iranian Ghezel Sheep.* Revue de médecine vétérinaire 12/2016; 167(11-12):316-322.
- Z. Azizi, S.A.Rafat: *Study of population structure and stratification two ecotypes buffalo with dense single nucleotide polymorphism markers using Admixture, MDS, PCA and GC methods.* Chinese Journal of Agricultural Biotechnology 09/2016; 8(2):53-68.
- Farshid Nazari-Zenouz, Gh. Moghaddam, Gholamreza Hamidian, J. Ashrafi, S. A. Rafat, B. Qasemi-panahi: *Postnatal testicular development and testosterone changes in Ghezel ram lambs.* Small Ruminant Research 07/2016; 141., DOI:10.1016/j.smallrumres.2016.07.001
- S. Sadeghi, S.A. Rafat, G. Moghadam, H. Janmohammadi: *Measuring of Udder Morphological Characteristics among Crossbred and Pure Sheep Breeds.*
- B. Qasemi-Panahi, S. A. Rafat, M. Ebrahimi, M. H. Akbarzadeh, R. Hajializadeh Valilou: *New Technique for Activating Reproductive System during Non-Breeding Season in Ghezel Ewes.*
- Shahram Hosseinzadeh, S. A. Rafat, Gh Moghaddam: *Evaluation of trichostrongylidae parasites infestation of Ghezel sheep in East Azerbaijan Province using fecal eggs test.*
- Shahram Hosseinzadeh, S. A. Rafat, Gh Moghaddam: *Investigation of relationship between DRB2 gene polymorphism and Nematodirus parasites in gastrointestinal of Ghezel sheep breed.*
- Zahra Azizi, Hossein Moradi Shahrbabak, Mohammad Moradi Shahrbabak, Seyed Abbas Rafat, Jalil Shodja: *Genetic classification of Azari and North ecotype Buffalo population using SVM method.*
- s.sadeghi, s.a.rafat, j.shodja, H. amanlou: *Effects of Gender and Dietary Ionophores on Growth Performance and Carcass Characteristics in Moghani Lambs.*
- S Hosseinzadeh, S A Rafat, Gh Moghaddam, J Shodja, A Nematollahi, M Shamsuddin, K Periasamy, M Ebrahimi: *Microsatellite Polymorphism in DRB2 Gene and its Relation to Haemonchus Contortus Parasites Fecal Egg Count in Iranian Ghezel Sheep.*
- S. A. Rafat, S. Naghshineh, GH. Moghaddam, M. Ebrahimi, J. Shodja: *Calculation of Inbreeding Depression Effects on Subclinical Mastitis Using Three Different Models.*
- Sara Ebrahimpour Taher, S. Rafat A.: *Estimation of genetic parameters for production traits and some reproduction disorders of dairy cows in one of the East Azerbaijan herds.*
- Hajializadeh R, Abbas Rafat S, Notter DR, Djalil Shojda, Gholamali Moghaddam, Ahmad Nematollahi: *Fecal egg counts for gastrointestinal nematodes are associated with a polymorphism in the MHC-DRB1 gene in the Iranian Ghezel sheep breed.* Frontiers in Genetics 02/2015; 6., DOI:10.3389/fgene.2015.00105
- S. Naghshineh, S.A. Rafat, J. Shoja, G.A. Moghaddam, M. Ebrahimi: *Prevalence and Risk Factors of Subclinical Mastitis in Iranian Holstein Cows.*

- R. Asadpour, H. Bagherniaee, M. Houshmandzad, H. Fatehi, A. Rafat, K. Nofouzi, K. Maftouni:
Relationship between teat end hyperkeratosis with intra mammary infection and somatic cell counts in lactating dairy cattle.
- S. Mohammad Rahimi, S. A. Rafat, J. Shoja, S. Alijani: *Calculating economic weights for growth, reproduction and wool traits in Makui sheep breed by Ecoweight software.* 01/2015; 31(1)., DOI:10.2298/BAH1501063R
- Shiva Emami, sodeif azadmard-damirchi, Javad Hesari, Seyed Hadi Peighambardoust, Yousef Ramezani, Mahboub Nemati, Mohsen Esmaili, Seyed Abbas Rafat: *Production of Butter Incorporating Hazelnut Powder.* Journal of Agricultural Science and Technology 11/2014; 16(6).
- Nastaran Ahangaran Rajabi, S .A. RAFAT: *Risk Factors of Seven Groups of Health Disorders in Iranian Holstein Cows.* International journal of Advanced Biological and Biomedical Research 09/2014; 2(9):2588-2594.
- Reza Nabavi, Sadegh Alijani, Akbar Taghizadeh, Seyed Abbas Rafat, Mehdi Bohlouli: *Genetic study of reproductive traits in Iranian native Ghezel sheep using Bayesian approach.* Small Ruminant Research 08/2014; 120(2-3)., DOI:10.1016/j.smallrumres.2014.05.008
- Sanaz Mohammad Rahimi, Rafat S.A., Jafari S.: *Effects of environmental factors on growth traits in Makue sheep.* 07/2014; 30(2):185-192., DOI:10.2298/BAH1402185R
- Fatemeh Ala Noshahr, Abbas rafat: *Polymorphism of DGAT1 Gene and Its Relationship with Carcass Weight and Dressing Percentage in Moghani Sheep Breed.*
- Fatemeh Ala Noshahr, Abbas Rafat: *Genetic Polymorphism of GDF9 Gene in Iranian Moghani Sheep Breed.*
- A. Gitoe, H. Janmohammadi, A. Taghizadeh, S.A. Rafat: *Effects of a multi-enzyme on performance and carcass characteristics of broiler chickens fed corn-soybean meal basal diets with different metabolizable energy levels.* Journal of Applied Animal Research 05/2014; 43(3):1-8., DOI:10.1080/09712119.2014.963103
- Saadat Sadeghi, Seyed Abbas Rafat, Mehdi Bohlouli: *Effect of crossbreeding on linear udder scores and their phenotypic relationships in Iranian fat-tailed ewes.* 05/2014; 30(1):61-77., DOI:10.2298/BAH1401061S
- Reza Mosharrraf, Jalil Shodja, Mehdi Bohlouli, Sadegh Alijani, Seyyed Abbas Rafat: *Estimation of (co)variance components and breeding values of milk production traits of Holstein dairy cattle using random regression model via Bayesian approach.* 03/2014; 30(1):15-28., DOI:10.2298/BAH1401015M
- Roya Fathitil, Javad Hesari, Sodeif Azadmard-Damirchi, Mahboob Nemati, Seyed Hadi Peighambardoust, Seyed Abbas Rafat, Mostafa Aghamirzaei: *Exploring Margarine in Anhydrous Milk Fat by Chromatographic Tools.*
- M M Pourseif, Gh Moghaddam, S A Rafat, H Daghish Kia, A Pourseif: *Photoperiod as a factor for studying fluctuations of seminal traits in rams during breeding and non-breeding season.*
DOI:10.5897/JVMAH12.074
- A Yousefi Zonuz, S Alijani, S A Rafat, M A Abbasi, H Daghish Kia: *Estimation of maternal effects on the north-iranian native chicken traits using Bayesian and reml methods.*
- Mahmood Sahraei, Hossein Janmohammadi, Akbar Taghizadeh, Gholam Ali Moghadam, Seyed Abbas Rafat: *Estimation of the Relative Bioavailability of Several Zinc Sources for Broilers Fed a Conventional Corn-Soybean Meal Diet.* The Journal of Poultry Science 01/2013; 50(1)., DOI:10.2141/jpsa.0120022

- Abolfazl Golshan Tafti, Seyed Hadi Peighambardoust, Flora Behnam, Akbar Bahrami, Roya Aghagholizadeh, Mahdieh Ghamari, Seyed Abbas Rafat: *Effects of Spray-Dried Sourdough on Flour Characteristics and Rheological Properties of Dough*. Czech Journal of Food Sciences 01/2013; 31.
- Ali Mohammadi, Sadegh Alijani, Seyed Abbas Rafat, Akbar Taghizadeh, Mehdi Buhloli: *Comparison of Fitting Performance of Polynomial Functions in Random Regression Model for Test Day Milk Yield in of Iranian Holstein Dairy Cattle*.
- Sadeghi S, Rafat S A, Ghaderi Zefrei M, Khaligh F, Rostami K H, Bohlouli M, Bahrani Behzadi M R: *Factors affecting external and internal mammary morphology traits and assessment of their interrelationships with milk yield in Lori Bakhtiari breed ewes*. Livestock Research for Rural Development 11/2012; 25(3).
- G. H. MOGHADDAM, M. M. POURSEIF, S. A. RAFAT: *SEASONAL VARIATION IN SEMEN QUANTITY AND QUALITY TRAITS OF IRANIAN CROSSBRED RAMS*.
- G. H. Moghaddam, E. Ziai, S. A. Rafat, H. Daghighkia, M. M. Pourseif: *Evaluation of estrogen, insulin and some blood metabolites of dairy cows on the incidence of ovarian cysts in the Dasht Azar Negin farm*
- Gholamali Moghaddam, Mohamad Mostafa Pourseif, Reza Asadpour, Seid Abass Rafat, Raziallah Jafari-Jozani: *Relationship between Levels of Peripheral Blood Testosterone, Sexual Behavior, Scrotal Circumference and Seminal parameters in Crossbred Rams*. Acta Scientiae Veterinari 05/2012; 3(40):1049.
- Seyed Abbas Rafat, M Dorostkar, H Faraji arough, J Shodja, SA Rafat, M Rokouei, H Esfandyari: *Inbreeding and Inbreeding Depression in Iranian Moghani Sheep Breed*. Journal of Agricultural Science and Technology 02/2012; 14((3)):549-556.
- Seyed Abbas Rafat, Abbas Atefi, Jalil Shoja, Yadollah Jahani Maleki: *Growth performance and carcass characteristics of Iranian fat-tailed crossbred lambs*. Livestock Research for Rural Development 02/2012;
- Gholamali Moghaddam, Mohamad Mostafa Pourseif, Reza Asadpour, Raziallah Jafari-Jozani, seyed abbas rafat: *Relationship between Levels of Peripheral Blood Testosterone, Sexual Behavior, Scrotal Circumference and Seminal Parameters in Crossbred Rams..* Acta Scientiae Veterinari 01/2012; 40(3).
- Seyed Abbas Rafat, Zhila Toopchi Khosroshahi, Djalil Shoja: *Effects of non-genetic factors in milk production and composition in east azarbajian native buffaloes of Iran*. Buffalo Bulletin 09/2011; 30(3):202.
- S A Rafat, P Namavar, D J Shodja, H Janmohammadi, H Z Khosroshahi, I David: *Estimates of the genetic parameters of Turkey body weight using Random Regression analysis*. animal 09/2011; 5(11):1699-704., DOI:10.1017/S1751731111000929
- Hadi Esfandyari, Ali Asghar Aslaminejad, Seyed Abbas Rafat: *Wool characteristics in the third generation of Arkharmerino × Ghezel and Arkharmerino × Moghani crossbreed sheep*. Tropical Animal Health and Production 05/2011; 43(7):1337-43., DOI:10.1007/s11250-011-9862-9
- T. Farahvash, J. Shodja, A. Rafat, A. Keshtkaran: *The Effect of Bilateral Crossbreeding between Arkhamerino and Ghezel Sheep on the Quality of Wool of Their F1 Crosses*. Asian Journal of Animal and Veterinary Advances 04/2011; 6(4):397-400., DOI:10.3923/ajava.2011.397.400
- E Nourmohammadi, SH PEIGHAMBARDOUST, J Hesari, S AZADMARD DAMIRCHI, SA RAFAT: *Effect of Different Concentrations of Sorbitol and Oligofructose as Sucrose Replacement on Physico-Chemical Properties of Low Calorie Sponge Cake*.

M GHAMARI, SH PEIGHAMBARDOUST, SA RAFAT: COMPARING THE EFFICIENCY OF WHEAT QUALITY CLASSIFICATION TESTS WITH AN EMPHASIS ON THE NOVEL GLUTENIN MACRO POLYMER (GMP) METHOD.

S A Rafat, R.G. Thébault, M. Bonnet, S. Deretz, B. Pena-Arnaud, H de Rochambeau, D Allain: *A note on divergent selection for total fleece weight in adult Angora rabbits: direct response to selection on total fleece weight at first and second harvest.* 07/2010; 17(1)., DOI:10.4995/wrs.2009.669

S.A. Rafat, D Allain, H de Rochambeau: *Genetic description of a divergent selection experiment in Angora rabbits with overlapping generations.* Journal of Animal Breeding and Genetics 06/2009; 126(3):189-97., DOI:10.1111/j.1439-0388.2008.00769.x

S. A. Rafat, H. de Rochambeau, R.G. Thébault, I. David, S. Deretz, M. Bonnet, B. Pena-Arnaud, D. Allain: *Divergent selection for total fleece weight in Angora rabbits: Correlated responses in wool characteristics.* Livestock Science 01/2008; 113(1):8-13., DOI:10.1016/j.livsci.2007.02.012

S A Rafat, H de Rochambeau, M Brims, R G Thébault, S Deretz, M Bonnet, D Allain: *Characteristics of Angora rabbit fiber using optical fiber diameter analyzer.* Journal of Animal Science 12/2007; 85(11):3116-22., DOI:10.2527/jas.2007-0109

Seyed Abbas Rafat: *Analyse of an experiment of divergent selection for fleece weight in french angora rabbits.*

S. A. Rafat, D. Allain, R.G. Thébault, H. de Rochambeau: *Divergent selection for fleece weight in French Angora rabbits: Non-genetic effects, genetic parameters and response to selection.* Livestock Science 02/2007; 106(2):169-175., DOI:10.1016/j.livsci.2006.08.001

Saeid Naderi, Hamid-Reza Rezaei, Pierre Taberlet, Stéphanie Zundel, Seyed-Abbas Rafat, Hamid-Reza Naghash, Mohamed A A el-Barody, Okan Ertugrul, François Pompanon: *Large-Scale Mitochondrial DNA Analysis of the Domestic Goat Reveals Six Haplogroups with High Diversity.* PLoS ONE 02/2007; 2(10):e1012., DOI:10.1371/journal.pone.0001012

Patents

Conference Proceedings

Mohammad Farhadian, Abbas Rafat, Esmaeil Ebrahimi, Karim Hasanpur, Fazeli Farsani: *Identification of genes involved in milking process using microarray analysis.* The 6th Conference on Bioinformatics, Iran; 12/2016

Rahman Hajializadeh Valilou, Seyed Abbas Rafat: *Novel polymorphisms in Ovine Interferon Gamma (IFNG) gene in Iranian fat tailed Ghezel sheep breed.* 9th National Biotechnology Congress of Iran; 05/2015

azizi, s a rafat, shodja, moradi: *A review of new Statistical methods for Study of genetic structure in Water Buffalo populations.* 8th Asian water buffalo congress, Turkey, Istanbul; 04/2015

Ziba ABDI, Seyed Abbas RAFAT, Gholamali MOGHADDAM, Mr HAJIKOLAII: *A review on the polymorphism of genes/markers responsible for genetically brucellosis disease resistance in water buffalo..* 8th Asian Buffalo Congress; 04/2015

Ziba Abdi, Seyed Abbas RAFAT, Djalil SHODJA 3 Farshid NAZARI 1 Babak GHASEMI PANAHI: *Effects of season on semen characteristics of water buffalo in breeding station of northwest of Iran.* Conference Paper; 01/2015

S M Rahimi, S A Rafat, S Jafari: *EFFECTS OF ENVIRONMENTAL FACTORS ON GROWTH TRAITS IN MAKUIE SHEEP.* S.A.Rafat; 01/2014

S. A. Rafat, P.Namavar, J. Shodja: *Effect of Transformation on Genetic Parameters Estimation in Body weight of Turkey.* Proceeding The 10th Iranian Statistical Conference; 08/2010

Seyed Abbas Rafat, jalil Shodja: *A review: research progress of crossbreeding of Arkhar-Merino with local breeds in Iran.* 8th World Merino Conference; 06/2010

J. Shodja, T. Farahvash, S. A. Rafat: *The evaluation of fleece characteristics in Arkharmerino Moghani F1 crossbreds..* Proceedings of the 11thAAAP Animal Science Congress, Kuala Lumpour; 09/2004

Technical Reports

S. A. Rafat, Z. Abdi: *Jabal Buffalo Breeding Center, Azarbaijan.*