



I. PERSONAL INFORMATION:

Date of Birth: June, 1964

Place of Birth: Tehran, Iran

Nationality: Iranian

Marital Status: Married (F. Zamanian) – 2 children (Shiva and Nilufar)

Address: Department of Aquaculture, Faculty of Marine Sciences,
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II. EDUCATIONAL RECORDS:

1996-2000: PhD. Student in Fisheries Sciences, Culture and Breeding of Aquatic Organisms,
Tarbiat Modares University, Iran.

PhD Thesis: Immunization and immune response of Persian sturgeon against *Aeromonas hydrophila*.
Supervisor: Dr. Mahdi Soltani GPA: 19.01 out of 20

1994-1996: MSc. in Fisheries Sciences, University of Tarbiat Modares, Iran.

Master Thesis: Induction of triploidy in Rainbow Trout, *Oncorhynchus mykiss* by using
thermal shocks. Supervisor: Dr. Ghobad Azari GPA: 18.95 out of 20

1990-1994: BSc. in Fisheries Sciences, Gorgan University, Iran.

Bachelor Thesis: principle of shrimp culture in Iran.
Supervisor: Dr. Hassan Aslan parviz GPA: 18.20 out of 20



III. ACADEMIC EXPERIENCES:

1996-2000: Research Assistant, Aquaculture Dept. Tarbiat Modares University, Noor, Iran

2000-2005: Assistant Professor, Aquaculture Dept. Tarbiat Modares University, Noor, Iran

2005 to Current: Associated Professor, Aquaculture Dept. Tarbiat Modares University,
Noor, Iran (**Head of Marine Biology Department**)



IV. MEMBERSHIPS IN SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS:

- 1) Iranian Society of Biotechnology
- 2) Iranian Genetics Society
- 3) European Aquaculture Society (EAS)
- 4) Iranian Society of Gene bank and Aquatic Genetic Resources
- 5) Editorial board of international Journal of IJNRMS
- 6) Iranian Salmonid Conservation Society
- 7) Iranian Sturgeon Conservation Society
- 8) Foundation board of Iranian Ichthyologist Society
- 9) Managing Board of Iranian Aquaculture Society (IAS)



V. REFEREE FOR JOURNAL ARTICLES SUBMITTED TO:

- 1) Iranian Journal /Bulletin of Fisheries Sciences -*IFRO*
- 2) Journal of Agricultural Sciences and Natural Resources - *Gorgan Univ.*
- 3) Journal of science and technology of agriculture and natural resources - *Isfahan Univ.*
- 4) Journal of Pajouhesh-va-Sazandegi
- 5) Iranian Journal of Marine Sciences and technology – *Tarbiat Modares Univ.*
- 6) Iranian Journal of Biological Sciences
- 7) Journal of the Iranian natural Resources - *Tehran Univ.*
- 8) Archive of Razi – *Serum and vaccine Research institute*
- 9) Journal of Yakhteh – *Royan Institute*
- 10) Journal of Aquaculture Research
- 11) Italian journal of zoology
- 12) World Aquaculture society



VI. RESEARCH INTERESTS:

- 1) **Aquaculture** : (Sturgeons, Salmonids, Carps, Inland water species)
- 2) **Genetics and Fish Breeding**: Karyology, Chromosome Set Manipulations of Aquatic Organisms (Gynogenesis, Androgenesis, Triploidization, Hormonal Sex Reversal and Hybridization), Cryopreservation.
- 3) **Aquaculture and Fisheries Biotechnology**: Application of Molecular Genetics, Genomics and proteomix in Aquaculture and Fisheries Managements
- 4) **Aquatic Nanotechnology**



VII. JOURNAL PAPERS (ISI & ISC): 2000- 2013 (No. : 120)

-) **Mohammad Reza Kalbassi**, Esmail Abdollahzadeh & Hamid Salari-Joo. 2013. [A review on aquaculture development in Iran. - *Journal of Ecopersia*. Vol. 1, No. 2.-Under press](#)
-) Seyed-Ali Johari , **Mohammad-Reza Kalbassi** , Mehdi Soltani , Il-Je Yu .2013. [Toxicity comparison of colloidal silver nanoparticles in various life stages of rainbow trout \(*Oncorhynchus mykiss*\). *Iranian Journal of Fisheries Sciences*. 12\(1\)76 -95.](#)
-) Mohammad Sadegh Aramli, **Mohammad Reza Kalbassi**, Rajabmohammad Nazari. 2013. [Physiological Correlation between Sperm Motility and Seminal Plasma Composition in the Persian sturgeon, *Acipenser persicus*. *Journal of Infertility and Reproductive Biology*; 1\(2\):12-20.](#)
-) Ensieh Habibi, **Mohammad Reza Kalbassi**, Seyed Javad Hosseini, Seyed Ahmad Qasemi.2013. [Feasibility of Identification of Fall and Spring Migrating Caspian trout \(*Salmo trutta caspius*\) by Using AFLP Molecular Marker. *Turkish Journal of Fisheries and Aquatic Sciences* 13: 241-248](#)
-) **Mohammad Reza Kalbassi**, Reza lorestani- 2013- [Analysis of saline activator solution effects on sperm quality indices of *Barbus sharpeyi* by image J software. *Iranian Journal of Fisheries Sciences* - 12\(2\) 357-377.](#)
-) Banan A., **Mohammad Reza Kalbassi**, M. Bahmani and M.A. Y. sadati . 2013. [Stress Response of Juvenile Beluga, *Huso huso* to Light and Tank Colours. *Journal of Applied Aquaculture*. 25:1, 71-80.](#)

-) Mohammad sadegh Aramli, **Mohammad Reza Kalbassi**, Rajab Mohammad Nazari. 2013- [Selected biochemical parameters in plasma of blood and semen of Persian sturgeon *Acipenser persicus*](#). *Comparative clinical pathology*- Doi. 10.1007/00580-013-1769-6.
-) Iman Sourinejad, **Mohammad Reza Kalbassi** and Paulino Martínez. 2013. [Sperm competition influences effective size of breeders in mixed milt fertilization of endangered Caspian trout \(*Salmo trutta caspius*\)](#). *Iranian Journal of Fisheries Sciences*- Accepted Manuscript
-) **Mohammad Reza Kalbassi**,; hamid salari joo, Il J yu, je h Lee, Ali Johari, 2013 . [Bioaccumulation of silver nanoparticles in Rainbow trout \(*Oncorhynchus mykiss*\): Influence of concentration and salinity](#). *Aquatic Toxicology*. Accepted Manuscript.
-) Mohammad sadegh Aramli, **Mohammad Reza Kalbassi**, Rajab Mohammad Nazari. 2013- [Comparative analysis of blood and seminal plasma composition of Persian sturgeon, *Acipenser persicus*](#). *Journal of Applied Biological Sciences* 7 (2): 65-67..
-) Iman Shirdel and **Mohammad Reza Kalbassi**. 2013. [Assessing the Sensitivity of two Endangered Brackish Water Fish Species of Caspian Sea to Acute Toxicity of Nonylphenol](#). *Caspian Journal of Environmental Sciences (CJES)*. Vol.11, No. 2, December.
-) Mohammad sadegh Aramli, **Mohammad Reza Kalbassi**, Rajab Mohammad Nazari. 2013- [Study of Sperm Concentration, Seminal Plasma Composition and their Physiological Correlation in the Persian Sturgeon, *Acipenser persicus*](#). *Reproduction in Domestic Animals*. published online: DOI: 10.1111/rda.12207
-) Yadollahvand Reza, Haji Gholi Kami & **Mohammad Reza Kalbassi**. 2013. [Cytogenetic characterisation of the Caspian Pond Turtle, *Mauremys caspica* in Golestan and Mazandaran provinces, Iran \(Reptilia: Testudines\)](#). *Zoology in the Middle East* .DOI: 10.1080 /09397140 .2013.841426. Volume 59, (3). 214-219.
-) Mohammad sadegh Aramli, **Mohammad Reza Kalbassi**, Rajab Mohammad Nazari. 2013- [Comparative Study of Sex Steroid Levels of Persian Sturgeon, *Acipenser persicus* Males in Responding Negative and Positive to LHRH-A2 Hormone](#). *Journal of Aquaculture Research & Development*. Vol 4, No.3, 177-182.
-) **Mohammad Reza Kalbassi**, Reza lorestani- Jasem Marammazi. 2013- [Improvement of sperm quality of Bunni fish by application of LHRHA-2 and metocloperamide](#). *JAST*- Accepted Manuscript.
-) **Mohammad Reza Kalbassi**, Seyed Ali Johari, Mehdi soltani, Il je Yu .2012. [Particle size and agglomeration affect the toxicity of nanoparticles in aquatic environments](#) .2012. *Journal of Ecopersia*. Vol. 2, No. 3 - Accepted Manuscript
-) Rahimnejad Samad, Naser Agh and **Mohammad reza Kalbassi**. 2012. [Effect of dietary bovine lactoferrin on growth, haematology and non-specific immune response in rainbow trout \(*Oncorhynchus mykiss*\)](#). *Aquaculture Research*. Vol. 43, pp 1451-1459.
-) **Mohammad Reza Kalbassi**, Reza lorestani- Jasem Marammazi. 2012- [Improvement of sperm quality of Bunni fish by application of LHRHA-2 and metocloperamide](#). *JAST*- Accepted Manuscript.
-) **Mohammad Reza Kalbassi**, Reza lorestani- 2012- [Application of Imaje J software for analysis of sperm quality in *Barbus sharpie*](#). *JIFRO* - Accepted Manuscript.

- *) Jamshidi, Sh.; **Mohammad Reza Kalbassi**. 2011. Conspecific relation between two seasonal migratory forms of endangered Caspian trout, *Salmo trutta caspius* Kessler, 1877, revealed by RAPD markers. 2011. Iranian Journal of Fisheries Sciences. Vol. 10, NO. 3. pp 437-446.
- *) Banan A., **Mohammad Reza Kalbassi**, M. Bahmani and M.A. Y. sadati . 2011. Effects of Colored Light and Tank Color on Growth Indices and some Physiological Parameters of Juvenile Beluga (*Huso huso*). 2011.. Journal of Applied Ichthyology. Vol. (27), 565-570.
- *) Parentage assignment of progeny in mixed milt fertilization of Caspian brown trout *Salmo trutta caspius* using microsatellite DNA markers: Implications for conservation. 2011. Iman Sourinejad, **Mohammad R. Kalbassi**, Ania Pino-Querido, Manuel Vera, Carmen Bouza and Paulino Martinez. A.J.B. Vol. 10(26), pp. 5084-5090.
- *) Microsatellite Polymorphism Reveals Low Genetic Differentiation between Fall and Spring Migratory Forms of Endangered Caspian Trout, *Salmo trutta caspius* (Kessler, 1870) .2011. A. shirangi; **M.R. kalbassi** and S. Dorafshan. Caspian journal of environmental sciences. Vol. 9 No.1 pp. 9~16.
- *) Toxicity of silver nanoparticles in aquatic ecosystems: Salinity as the main causes of reducing toxicity. 2011. **M. R. Kalbassi**, H. Salari joo and S. A. Johari . Iranian journal of toxicology. Accepted for publish
- *) Effects of Rearing Tank Color and Colored Light on Stress Response of Juvenile Beluga, *Huso huso*. 2011. Banan A., **Kalbassi, M.R.**, Bahmani, M., Yazdani Sadati, M.A. Iranian Journal of Marine Science and Technology. Accepted for publish
- *) Effect of dietary bovine lactoferrin on growth, haematology and non-specific immune response in rainbow trout (*Oncorhynchus mykiss*). 2011. S. Rahimnejad, N. Agh and **M. R. Kalbassi**. Aquaculture research. doi:10.1111/j.1365-2109.2011.02947.x Under press
- *) Optimization of UV Irradiation to Induce Gynogenesis in the Endangered Caspian Salmon, *Salmo trutta caspius*: Emphasising “Hertwig Effect” and Photoreactivation. 2010. **Mohammad Reza Kalbassi**; Salar Dorafshan. Journal of Biotechnology , 150, Supplement, pg. 566-566
- *) Phylogeography, genetic structure, and conservation of the endangered Caspian brown trout, *Salmo trutta caspius* (Kessler, 1877), from Iran . 2010. Manuel Vera, Iman Sourinejad, Carmen Bouza, Román Vilas, Ania Pino-Querido, **Mohammad R. Kalbassi** and Paulino Martínez. Hydrobiologia , Volume 664, Number 1, 51-67.
- *) Keyvanshokoh Saeed, **Mohammad Reza Kalbassi**, Saman Hosseinkhani and Behrouz Vaziri. Comparative Proteomics Analysis of Male and Female Persian Sturgeon (*Acipenser persicus*) Gonads. (2009) Animal Reproduction Science, (111), 361-368.
- *) Jamshidi Sh., **Kalbassi Mohammad Reza** and M. Sadeghizadeh. 2009. Inheritance of RAPD marker in *Ctenopharyngodon idella* ♀ × *Hypophthalmichthys nobilis* ♂ and their F1 hybrids. Iranian scientific fisheries journal. Vol.8, No.1, 47-56.
- *) **Kalbassi Mohammad Reza.**, Dorafshan S., Pourkazemi M. and Amiri. 2009. Triploidy induction in the Caspian salmon *salmo trutta caspius* by heat shock. Journal of Applied Ichthyology. (25). 104-107.

- *) Effects of triploidy on the Caspian salmon *salmo trutta caspius* haematology. 2008. Dorafshan S., **Kalbassi M.R.**, Pourkazemi M., Amiri B.M. and Soltankarimi S.. Journal of Fish Physiology and Biochemistry. 34 (3):195-200
- *) A study on the production possibility of all- female rainbow trout, *Oncorhynchus mykiss* 2008. Johari A. and **M.R. Kalbassi**. Journal of science and technology of agriculture and natural resources .Vol. 12, No. 2
- *) Investigation on the effect of changes amount of spermatocrit and duration of sperm motility in with age and time of stripping . 2008. Lorestany R., Ahmadi M.R. and **M.R. Kalbassi** . Iranian scientific fisheries journal. Vol. 17, No. 2
- *) Inheritance of RAPD marker in *Ctenopharyngodon idella* ♀ × *Hypophthalmichthys nobilis* ♂ and their F1 hybrids. 2008. Jamshidi Sh., **Kalbassi M.R.** and M. Sadeghizadeh. Iranian scientific fisheries journal. (In press)
- *) Intraction of male broodstock age and different dilution on eyed eggs rate in rainbow trout, *Oncorhynchus mykiss*. 2008. Lorestany R., Ahmadi M.R. and **M.R. Kalbassi** . Journal of the faculty of veterinary medicine. (In press)
- *) Effect of triploidy induction on some hematological indices changes in all- female rainbow trout, *Oncorhynchus mykiss* in winter. 2007. Sourinezhad I., **Kalbassi M.R.**, and Soltankarimi S. Modern genetics journal. Vol.2, No.2, 51-58.
- *) Karyological study of *Ctenopharyngodon idella* ♀ × *Hypophthalmichthys nobilis* ♂ F1 hybrids. 2007. Dorafshan S. and **Kalbassi M.R.** Iranian Journal of Biology. 20(2):277-285.
- *) The RAPD technique failed to identify sex-specific sequences in beluga (*Huso huso*) . 2007, S. Keyvanshokoo, M. Pourkazemi, **M. R. Kalbassi**, Journal of Applied Ichthyology 23 (1), PP 1–2.
- *) Karyological study on bighead gobie (*Neogobius kessleri*) from southern part of the Caspian Sea. 2007- A. H. Esmaily and **M. R. Kalbassi**, Iranian scientific fisheries journal – Vol. 7, No.2. 15-26.
- *) Correlation of sperm quality of different rainbow trout, *Oncorhynchus mykiss* broodstocks in propagation process.2007. Lorestani R., Ahmadi M.R. and **Kalbassi M.R.** Journal of the Iranian natural res., Vol. 60, No.1, 141-150
- *) Production of all female rainbow trout, *Oncorhynchus mykiss* using sex-reversed males and investigation of their growth parameters in the first year of culture. 2007. Johari A., **Kalbassi M.R.**, Amiri B. M. and A.Halajian. Iranian scientific fisheries journal. Vol. 15, No.3. 45-54.
- *) Effect of different diluents solutions on the duration of sperm motility in Investigation on the effect of changes amount of spermatocrit and duration of sperm motility in rainbow trout, *Oncorhynchus mykiss*. 2007. Lorestani R. and **M.R. Kalbassi**. J. Agric. Sci. Natur. Resour. Vol. 13, No. 6, 132-143.
- *) Olfactory responses to amino acids in triploid rainbow trout, *Oncorhynchus mykiss*. 2007. Naghdi, Abtahi, **Kalbassi**, Ghanizadeh and sotoodeh. Journal of Marine Science and Technology Research. Vol.2, No.6, 13-20.
- *) Optimization of UV irradiation for production of gynogenetic rainbow trout, *Oncorhynchus mykiss*: emphasising “Hertwig Effect” and photoreactivation – 2006. Dorafshan S., **Kalbassi M.R.**, Pourkazemi M. and Amiri B.M. Iranian journal of fisheries sciences- vol. 6, No 1, 19-34

- *) Karyological analysis on endangered Caspian salmon, *salmo trutta caspius* – 2006. **Kalbassi M.R.**, Dorafshan S., Tavakolian T., Khazab M. and Abdolhai H. Aquaculture Research 37, vol. 13, PP 1341-1347.
- *) Genetic variation of *Rutilus r. caspius* populations in Iran based on RAPD markers: a preliminary study- 2006- Keyvanshokoh S. and **M.R.Kalbassi**, Aquaculture Research 37, vol. 13, PP 1401-1407.
- *) Investigation of red blood cell alterations in triploid rainbow trout, *Oncorhynchus mykiss*. 2006. Johari A. and **Kalbassi M.R.** Iranian Journal of Biology. Vol.19, No.4, 492-495.
- *) Short-term storage of Persian sturgeon (*Acipenser persicus*) ova in artificial media and coelomic fluid. 2006- Sohrabnezhad M, **Kalbassi M.R** ,Nazari R.M and M. Bahmani. Journal of Applied Ichthyology. 22. Supl. 1, PP 395-399.
- *) Induction of meiotic gynogenesis in rainbow trout, *Oncorhynchus mykiss* with emphasis on time determination of second polar body. 2006- A. H. Esmaily and **M. R. Kalbassi** and I. Poosti. J. Agric. Sci. Natur. Resour. Vol. 13(4), 120-127
- *) Study on diet composition of Caspian Sand Goby *Neogobius fluviatilis pallasii* (Berg, 1916) in South of Caspian Sea (Noor Beach) .2006. Alavi Yeganeh M.S. and **M.R. Kalbassi**. Iranian Journal of Biology. Vol.19, No.2, 180-191.
- *) Effects of dietary vitamin C supplementation on performance, tissue chemical composition and alkaline phosphatase activity in great sturgeon (*Huso huso*).2006. B. Falahatkar, M. Soltani, B. Abtahi, **M. R. Kalbassi** and M. Pourkazemi. Journal of Applied Ichthyology 22. Supl. 1, PP 283-286.
- *) Effect of male age in rainbow trout, *Oncorhynchus mykiss* on duration of sperm motility, spermatocrite and eyed egg rate production. 2006. Lorestani R. Ahmadi M.R. and **M.R. Kalbassi**. Iranian scientific fisheries journal. vol. 15, No 1, 128-150 .
- *) Comparison of genetic variation of ship sturgeon (*Acipenser nudiiventris*) in the southern Caspian sea and Ural river using PCR_RFLP .2006. Qasemi A., M. Pourkazemi and **M. R. Kalbassi** . Iranian scientific fisheries journal - vol. 14, No 4, 164-180 .
- *) Comparison of digestive enzyme activity in the stomach, pyloric caeca and intestine in diploid and triploid female of rainbow trout, *Oncorhynchus mykiss* .2006. Zamani A., Hajimoradloo A., Madani R., Johari A., **Kalbassi M.R.** and Farhangi M. Iranian scientific fisheries journal - vol. 15, No 2, 29-36 .
- *) Reproductive Study of Caspian Sand Goby *Neogobius fluviatilis pallasii* (Berg, 1916) in South of Caspian Sea (Noor Beach) .2005. Alavi Yeganeh M.S. and **Kalbassi M.R.** Journal of marine sciences and technology. Vol.4, No.3&4, 31-41.
- *) Karyotype analysis of great tit (*Parus major*) in noor forest park (Mazandaran-Iran).2005. **Kalbassi M.R.** and T. Arbabi . Pajouhesh & Sazandegi . No. 65. PP:60-65
- *) Determination of chemical and biochemical composition of *Artemia urmiana* cyst shells and its chitin extraction. 2004. Asadpour Y.A., A Shojasadat, A.Ghoroghi, **M. R. Kalbassi**, A. Khosroshahi, Iranian journal of fisheries Sciences ,Vol.12, No.4, PP: 1-12.
- *) Growth factors of all female triploid rainbow trout (*Oncorhynchus mykiss*) in the first year of culture.2004. Johar A. and **Kalbassi M.R.** Journal of marine sciences and technology. Vol.3, No.4, 17-23.

- *) The possibility of sex determination in beluga (*Huso huso*) by using PCR_RAPD technique. 2004, Keyvanshokoo S., Pourkazemi M. and **M. R. Kalbassi**. Iranian scientific fisheries journal - vol. 13, No 1, 149-163.
- *) Quality evaluation of chitin and chitosan extracted from cyst shell of the *Artemia urmiana* and its comparison with other types from shrimp and crabs shell. 2004. Asadpour Y.A., A Shojasadat, **Kalbassi M.R.** and A. Khosroshahi. Journal of polymer sciences and technology. Vol. 16, No. 2, 89-94.
- *) Effect of activating solutions on propagation performance in rainbow trout, *Oncorhynchus mykiss*. 2004. Lorestani R., Ahmadi M.R. and **Kalbassi M.R.** Iranian Journal of Marine Sciences, Vol. 3, No.1, 67-75
- *) Purification and Partial Characterization of Serum Immunoglobulins from Persian sturgeon (*Acipenser persicus*) .2003. **M.R Kalbassi** , Mostafaii A., Majidi J. , Iranian Journal of Fisheries Sciences ,Vol.12, No.3, PP: 141-152
- *) Induction of tetraploidy in rainbow trout (*Oncorhynchus mykiss*) by heat shocks. 2003. **M.R. Kalbassi** , A. Bagheri, M.Pourkazemi, H.Abdolhay , Iranian Journal of Fisheries Sciences ,Vol.12, No.4, PP: 143-152
- *) Karyological study on Snow trout, *Schizothorax zarudnyi*, in Zahak of Sistan-Balochestan province of Iran..2003. Hosseini S.V. and **M.R. Kalbassi**. Iranian Journal of Marine Sciences, Vol. 2, No.1, 13-23.
- *) Comparison of some biological parameters between grass carp and female grass carp*male bighead carp hybrids.2003. Ebrahimzadeh S.M., **Kalbassi M.R.**, Nazari R.M. and Sh. Behrozi. Iranian Journal of Marine Sciences, Vol. 2, No.2,3, 27-39.
- *) Comparison of sperm traits and fertilization performance of normal male and rainbow trout (*Oncorhynchus mykiss*). 2003.Johari A., **M.R. Kalbassi.**, A.S. Veylaky and M. Tala. Iranian Journal of Marine Sciences, Vol. 2, No.4, 27-39.
- *) Progeny karyotyping of female kutum & male grass carp hybrid. 2002. M.R. Nowruz Fashkhami, M.Pourkazemi, **M. R. Kalbassi**. Iranian Journal of Marine Sciences, Vol.1, No.1, PP: 69-74.
- *) Karyotyping characterization of the grass carp by leukocyte culture.2002. M. R. Nowruzfashkhami , M.Pourkazemi, **M. R. Kalbassi**. Iranian journal of fisheries sciences, Vol.11, No.3, PP: 137-144.
- *) Effect of L-carnitine supplement on early growth and body composition of rainbow trout. 2002. S. N Hosseini, S. J. Seifabadi, **M. R. Kalbassi**, A.S.Vilaki. Iranian journal of marine sciences, Vol.1, No.2, PP: 41-45.
- *) Extraction chitin and chitosan from cyst shell of *Artemia urmiana*.2002. Y.A. Asadpour, A Shojasadat, **M. R. Kalbassi**, A. Khosroshahi, Iranian journal of marine sciences.Vol.1, No.3, PP: 1-9.
- *) Crossbreeding of female grass carp & male bighead carp and observation on (F1) hybrids. 2002. **M. R. Kalbassi**, H. Panahi and R. M. Nazari. Iranian journal of marine sciences.Vol.1, No.3, PP: 35-45.
- *) Protection of persian sturgeon fingerling against *Aeromonas hydrophila* septicemia using three different antigens. 2001. M. Soltani, **M. R. Kalbassi**. Bull. Euro. Ass. Fish Pathol., 21(6) , PP: 235-240 .

- *) Therapeutic effects of formalin on hatching rate of common carp eggs under farmed condition. 2001. M. Soltani, **M. R. Kalbassi**, R. M. Nazari, H. Mostafavi. Journal of the faculty of veterinary medicine. Vol. 56, N.4, PP. 53-55.
- *) Humoral immune response of cultured Persian Sturgeon to four different *Aeromonas hydrophila* antigen. 2000. **M. R. Kalbassi**, M. Soltani, M. Pourbakhsh, A. Adams. Archives of Razi institute. No. 51, PP: 75-85.
- *) Application and nutrition value of *Artemia parthenogenetica* nauplii in feeding of fry sturgeons (*Acipenser Stellatus*). 2000. M. Rezaei, R. M. Nazari, **M. R. Kalbassi** . Journal of pajouhesh-va-sazandegi. Vol.13, N.2, PP.120-124.



VIII. LIST OF PAPERS PRESENTED IN CONGRESSES AND SEMINARS:

- [1] Induction of triploidy in rainbow trout *Oncorhynchus mykiss* by heat shock. 1995. 7th congress of Iranian Marine organization, Noor, Iran,
- [2] Determination of Artemia FCR in Persian sturgeon *Acipenser persicus* feeding, 1999, First national sturgeon Symposium, Rasht, Iran,
- [3] Comparative study on some biochemical characters in propagation of Persian sturgeon *Acipenser persicus* broodstocks. 1999. First National sturgeon Symposium, Rasht, Iran.
- [4] Determination & Micropile Number of persian sturgeon *Acipenser persicus* of Caspian Sea. 1999. First National sturgeon symposium. Raasht, Iran.
- [5] Immunization of Persian Sturgeon Against *Aeromonas hydrophila* Using Three Different Antigens. 2000_ 5th Conference of European Fish Pathologist . 17-21 June , Rodos, Greece
- [6] Passive Immunization of Persian Sturgeon (*Acipenser persicus*). 2002 _ 7th Conference on Fish Vaccination . 21-25 May, Norway
- [7] Purification and Partial Characterization of Serum Immunoglobulin from Persian sturgeon (*Acipenser persicus*) . 4th International Symposium on Sturgeon – July 8-13, Oshkosh,U.S.A.
- [8] Induction of tetraploidy in Rainbow Trout by Heat Shock . 2002- 3rd International Iran and Russia Conference– 18-20 September, Moscow, Russia
- [9] Comparison of Some Biological Parameters between Grass Carp and Female Grass Carp × Male Bighead Carp Hybrid. 2004. Seventh Asian Fisheries Forum, 30-4 November, penang, Malaysia
- [10] Purification and Partial Characterization of Serum Immunoglobulin in Caspian Kutum (*Rutilus frisii kutum*). 2004. Seventh Asian Fisheries Forum , 30-4 November, penang, Malaysia
- [11] Current status of aquaculture genetics research in IRAN. 2004. Seventh Asian Fisheries Forum, 30-4 November, penang, Malaysia
- [12] Effects of L-ascorbyl-2-polyphosphate on growth and survival of juvenile Beluga *Huso huso* 2004- Biotechnologies for quality, Aquaculture Europe .Spain
- [13] Short term storage of Persian sturgeon ova in artificial media and coelomic fluid .2005, 5th International symposium on sturgeon. 9-13 May, Ramsar, Iran

- [14] Effects of Dietary vitamin C supplementation on performance, tissue chemical composition and alkaline phosphate activity in great sturgeon, *Huso huso*. 2005. 5th International symposium on sturgeon. 9-13 May, Ramsar, Iran
- [15] Ploidy confirmation on some imported Indian major carp to Iran. 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November,
- [16] Observation on diet composition of Caspian sand goby in sought of Caspian sea 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [17] Effect of different activator solution on the duration of sperm motility in rainbow trout *Oncorhynchus mykiss*. 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [18] Investigation of production possibility of all female triploid rainbow trout *Oncorhynchus mykiss* . 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [19] Comparison of sperm traits and fertilization performance of normal; male and neomale rainbow trout - *Oncorhynchus mykiss* 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [20] Hertwing effect caused by UV irradiation of sperm of the Caspian salmon *Salmo trutta caspius* and its photoreactivation 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [21] Karyological analysis of Female Grass Carp × Male Bighead Carp F1 Hybrid - 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [22] Investigation on red blood cell alteration in triploid rainbow trout *Oncorhynchus mykiss* -2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [23] Hertwing effect caused by UV irradiation of sperm of the rainbow trout *Oncorhynchus mykiss* and its photoreactivation 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [24] Acute stress response in all female diploid and triploid rainbow trout *Oncorhynchus mykiss* - 2005-7th Indian Fisheries Forum held at Bangalore during 8-12 November
- [25] Evaluation of L-ascorbyl-2-polyphosphate (AAPP) as a dietary ascorbic acid source for great sturgeon . *Huso huso* .2005- World aquaculture 2005, 19-23 May .Indonesia
- [26] Triploidy Induction in the Caspian Salmon, *Salmo trutta caspius* by Heat Shock” In 9th Iranian Genetics Congress, 20-22 May 2006, Tehran, Iran.
- [27] High Incidence of Triploids in Grass Carp × Big Head Carp Hybrid Progeny” In 9th Iranian Genetics Congress, 20-22 May 2006, Tehran, Iran.
- [28] Genetic manipulation in Aquaculture, A review on Important cultivated Fish Species in Iran” In 9th Iranian Genetics Congress, 20-22 May 2006, Tehran, Iran.
- [29] Transgenic Fish, Threats and Opportunities” In 9th Iranian Genetics Congress, 20-22 May 2006, Tehran, Iran.
- [30] Possibility of using Flowcytometry Method to Identify Triploid and Hybrid progenies of Rainbow trout, *Oncorhynchus mykiss* and the Caspian salmon, *Salmo trutta caspius*” 14th Iranian and the Second International Conference on Biological Sciences, Sep. 2006, Tehran, Iran.
- [31] Use of RAPD markers to assess hybridization between female rainbow trout *Oncorhynchus mykiss* and male Caspian Salmon *Salmo trutta caspius*” The 5th National Biotechnology Congress of Iran. Nov. 2007, Tehran, Iran.

- [32] Use of Microsatellite markers to assess gynogenesis in the Caspian Salmon *Salmo trutta caspius*" The 5th National Biotechnology Congress of Iran. Nov. 2007, Tehran, Iran.
- [33] Comparison of Gonadal developments in male and female diploid hybrids between female rainbow trout *Oncorhynchus mykiss* and male Caspian salmon *Salmo trutta caspius* " The 7th Iranian Marine Science and Technology Conference. Nov. 2007, Noshahr, Iran.
- [34] Do stress responses in cultured juveniles Bluga *Huso huso* affected by ascorbic acid . 2006. 2nd international and 14th national biology conference, Iran
- [35] An investigation of seasonal changes of coliforms bacteria in Noor-roud river in mazadaran state,Iran . 2007. Kalbassi,M.R., Younesi,H., Peymankia, .M. and Moghadam Y. Malaysia
- [36] Use of Microsatellite markers to assess hybridization between two species of commercial Salmonids of Iran" The 2nd National Congress of Cellular and Molecular Biology, Jan. 2008, Kerman, Iran.
- [37] Determination of Gynogenesis status in the Caspian salmon *Salmo trutta caspius* using Molecular method, Microsatellite" The 2nd National Congress of Cellular and Molecular Biology, Jan. 2008, Kerman, Iran.
- [38] Comparison of Morphometric and Meristic incidences between Diploid and Triploid Caspian salmon *Salmo trutta caspius*" The 2nd International Congress of Biological Sciences of Iran, Feb. 2008, Tehran, Iran.
- [39] Comparison of Morphometric and Meristic incidences between Diploid and Triploid Rainbow trout *Oncorhynchus mykiss*" The 2nd Local Congress of Agriculture and Natural Resources, Mar. 2008, Sanandaj, Iran.
- 40) Effects of colored light on growth indices and some physiological parameters of juvenile Beluga *Huso huso* (2009)- A.Banan, M. R. Kalbassi, M. Bahmani and M. A. Yazdani- 6th International Symposium on Sturgeon- 25-31 October- Hubei Province- China
- 41) Effects of tank colour on growth indices and some physiological parameters of juvenile Beluga *Huso huso* (2009)- A.Banan, M. R. Kalbassi, M. Bahmani and M. A. Yazdani- 6th International Symposium on Sturgeon- 25-31 October- Hubei Province- China
- 42) Adaptability of triploid Caspian Sea Salmon (*Salmo trutta caspius*) and triploid hybrid *Oncorhynchus mykiss* × *Salmo trutta caspius* to different salinities (2009)- Rahimi Khosr, M Kalbassi, S Soltankarimi, M. Frozandeh, S. Khodabandeh- 4th European Conference on Costal Lagoon Research- 14-18 december- Montpellier- France.
- 43) Application of D-loop and cytochrome b genes for detection of genetically differences (sic) between two migratory forms of endangered *Salmo trutta caspius* Kessler, 1870) assessed by DNA sequencing and RFLP analysis. Jamshidi, Sh., Kalbassi, M. R. and Daliri, M. H. 2009. 13th European Congress of Ichthyology, 6-12 September, Klaipeda, Lithuania.
- 44) Genetic relationships between two seasonal migratory forms of endangered Caspian salmon *Salmo trutta caspius* Kessler, 1870 based on RAPD markers. , Sh., Kalbassi, M. R., Shirangi, A. and Daliri, M. H. 2009.13th European Congress of Ichthyology, 6-12 September, Klaipeda, Lithuania
- 45) Application of nanosilver filters in egg incubation system of rinbow trout. 2010. Aquaculture 2010,. M. R. Kalbassi, S. A. Johari, M. Soltani Global conference. Phuket- Thailand. 22-25 Sep.
- 46) Prevention from Saprolegniosis by means of silver nanoparticles and silver zeolite. 2010. Aquaculture 2010,. M. R. Kalbassi, S. A. Johari, M. Soltani Global conference. Phuket- Thailand. 22-25 Sep.
- 47) Microsatellite profiling technique and assignment programs serve to detect parentage in Caspian salmon (*Salmo trutta caspius*). ImanSourinejad, Mohammad R. Kalbassi, Manuel Vera, PaulinoMartínez,Third Iranian Conference on Bioinformatics National Institute for Genetic Engineering & Biotechnology, January 5, 6, 2010

- 48) Application of bioinformatics in genetic comparison of Caspian Salmon (*Salmo trutta caspius*) immigrant forms. Shirangi S. A, Kalbassi M. R. Third Iranian Conference on Bioinformatics National Institute for Genetic Engineering & Biotechnology, January 5, 6, 2010
- 49) Application of GenAlEx and TFGA Softwares for Identifying Fall and Spring Migrating Caspian Salmon (*Salmo trutta caspius* Kessler, 1877) by Using AFLP Molecular Marker. Habibia E., Kalbassi M. R., Hosseini S.J., Qasemic S.A-Third Iranian Conference on Bioinformatics National Institute for Genetic Engineering & Biotechnology, January 5, 6, 2010
- 50) Application of bimolecular markers and bioinformatics to assess fertilization scheme of Caspian trout in hatchery (*Salmo trutta caspius*) (2010)- Iman Sourinejad, Mohammad Reza Kalbassi, Poulino Martinez-9th Iran Biophysical Chemistry Conference- 24-25 February-Tehran- Iran.
- 51) Application of Silver nanoparticles in Water Filtration System of Rainbow Trout Fry Culture to Control of *Streptococcus iniae* Infection. 2010. M. R. Kalbassi, m. Ghahramani, M. Soltani, S. A. Johari .International Congress on Nanosciences and nanotechnology. Shiraz. Iran.
- 52) Application of Polyurethane Foam Containing Silver nanoparticles in Water Filtration System in Rainbow Trout fry culture for Control Infection by *Streptococcus Iniaie*. 2010. , A. Shahim, M. R. Kalbassi , M. Soltani, S. A. Johari.International Congress on Nanosciences and nanotechnology. Shiraz. Iran.
- 53) Application of bioinformatics in genetic comparison of Caspian Salmon (*Salmo trutta caspius*) immigrant forms (2010)- Shirangi S. A, Kalbassi M. R. Iranian Conference on Bioinformatics-5-6 Januray- Tehran-Iran.
- 54) Optimization of UV irradiation to induce Gynogenesis in endangered Caspian salmon. 2010. M. R. Kalbassi, S. Dorafshan. IBS2010, Rimini, Italy. 14-18 Sep.
- 55) Application of Polyurethane Foams Containing Silver Nano-particles in Water Filtration System of Rainbow Trout Fry Culture to Control Infection by *Streptococcus Iniaie*. 3rd International Conference on Nanoscience and Nanotechnology, 9-11 November 2010, Shiraz, Iran
- 56) Acute Effects of Micro and Nano Silver Particles on Alevin and Juvenile Rainbow Trout (*Oncorhynchus mykiss*)” 2011, International Conference on Biological Responses to Nanoscale Particles . M. R. Kalbassi, S. A. Johari, M. Soltani, September 11-15, 2011, Essen, Germany
- 57) Toxicity of Silver Nanoparticles in Aquatic Ecosystems: Salinity as the Main Cause of Reducing Toxicity. 2011, International Conference on Biological Responses to Nanoscale Particles.M. R. Kalbassi, H. S. Joo, S. A. Johari. September 11-15, 2011, Essen, Germany
- 58) Application of Polyurethane Foam Containing Silver Zeolite (Zeomic) in Water Filtration System for Infection Control of *Streptococcus Iniaie* in Rainbow Trout. 2011, International Conference on Biological Responses to Nanoscale Particles. M. R. Kalbassi, A. Shahim, M. Soltani, S. A. Johari. September 11-15, 2011, Essen, Germany
- 59) Identification of Molecular Weight of Oocyte Vitellogenin Protein of Iranian Caviar in time of Inducing in Liver by Treatment of 17 Beta Estradiol Hormone, Secreted in to Bloodstream and Stored in Oocyte in Iranian Sturgeon as a Yolk Protein. 2012 - Shirin Jamshidi, Mohammadreza Kalbassi, Majid Sadeghizadeh, The First International & 11th Iran Biophysical Chemistry Conference . J. Iran. Chem. Soc., Vol. 9, Suppl. 1, pp. A1-A144.
- 60) Application of biomolecular markers and bioinformatics to assess fertilization scheme of Caspian trout in hatchery. 2012 - Iman Sourinejad, Mohammad Reza Kalbassi, Poulino Martinez .The First International & 11th Iran Biophysical Chemistry Conference . J. Iran. Chem. Soc., Vol. 9, Suppl. 1, June 2012, pp. A1-A144.
- 61) Induction of vitellogenin and zonzpelucida mRNA expression as a biomarker of xenoestrogens compounds by in vitro treatment of nonylphenol in Persian sturgeon *Acipenser persicus*. . 2012 . GRF one health summit. Davous Swiss. 19-22 Feb.

62) MHC genes application for larvae-parente assignment in captive Caspian salmon. 2012. Kaveh Khosraviani, Mohammadreza Kalbassi, Majid Sadeghizadeh, . First international larviculture conference in Iran. 2012- Karaj. Iran



IX. SEARCH PROJECT LEADER:

- 1) Chromosome Karyotyping from different developmental stages of rainbow trout-Leader. Supported project by Tarbiat Modares Univ.
- 2) Hybridization of female grass carp & male bighead carp and investigation on F1 hybrids. Leader. Supported project by Tarbiat Modares Univ.
- 3) Determination of nutritional value of artemia on sturgeon feeding – Cooperator. Supported project by Tarbiat Modares Univ.
- 4) Evaluation of effects of Euglena extract on fish anesthesia – Cooperator. Supported project by Iranian Fisheries Research Organization.
- 5) Immunization of Iranian sturgeon against bacterial pathogen – Cooperator. Supported project by Tehran Univ.
- 6) Cryopreservation of rainbow trout sperm in Kelardasht-Iran – Cooperator. Supported project by Iranian Fisheries Research Organization.



X. BOOKS

- 1) Principles and Applications of Aquaculture. 2013. Tarbiat Modares Univ. Press. Iran. 550 p.



XI. RESEARCH STUDENTS SUPERVISED:

- 1) Induction of Tetraploidy in Rainbow Trout (*Oncorhynchus mykiss*) by Heat Shock – Mr. Ali Bagheri (M.Sc. Degree of fisheries)
- 2) Karyological investigation and chromosomal polymorphism possibility on Caspian salmon (*Salmo trutta caspius*) - Mrs. Tahereh Tavakolian (M.Sc. Degree of marine biology)
- 3) Purification and Partial Characterization of Serum Immunoglobulin in Caspian Kutum (*Rutilus frisii kutum*) - Mr. Mohammad Ali Poya (M.Sc. Degree of fisheries)
- 4) Hybridization of female grass carp & male bighead carp and investigation on F1 hybrids. Hassan Panahi (M.Sc. Degree of fisheries)
- 5) Performance of PCR_RAPD method on determination of genetics variation on female grass carp & male bighead carp and their F1 hybrid –Shirin Jamshidi (M.Sc. Degree of fisheries)
- 6) Comparison of Some Biological Parameters between Grass Carp and Female Grass Carp × Male Bighead Carp Hybrid - Morteza Ebrahim zadeh (M.Sc. Degree of fisheries)
- 7) Morphometric, electrophoretic and cytogenetics comparison on Caspian sandy guppy (*Neogobios kessleri*) between Mazandaran and Golestan Iran - Hamid Ebrahimi (M.Sc. Degree of marine biology)
- 8) An investigation on delayed time of sperm collection from Persian sturgeon (*Acipenser persicus*) and their effects on sperm quality -Ali Majdi (M.Sc. Degree of fisheries)
- 9) Induction of mitotic and meiotic gynogenesis on Rainbow Trout (*Oncorhynchus mykiss*) -Amir Esmaili (M.Sc. Degree of fisheries)

- 10) Short term storage of Persian sturgeon (*Acipenser persicus*) ova in Cortland media and coelomic fluid – Mehdi Sohrabnejad (M.Sc. Degree of fisheries)
- 11) Production possibility of all female diploid and triploid Rainbow Trout (*Oncorhynchus mykiss*) - Ali Johari (M.Sc. Degree of fisheries)
- 12) Gamet transferring, fertilization and hatching of Rainbow Trout (*Oncorhynchus mykiss*) under laboratory incubator - Ali Taheri (M.Sc. Degree of fisheries)
- 13) Comparison of gonad development, growth and flesh quality between diploid and all female triploid Rainbow Trout (*Oncorhynchus mykiss*) - Imman Sorinejad (M.Sc. Degree of fisheries)
- 14) Chromosomal set manipulation and hybridization between Rainbow Trout and Caspian salmon – Salar Dorafshan (Ph.D. Degree of Aquaculture)



XII. COURSES TAUGHT:

- | | |
|--|-----------------------|
| 1) Principles of Genetics | undergraduate (B.Sc.) |
| 2) Principles of Microbiology | undergraduate (B.Sc.) |
| 3) Fish Genetics | undergraduate (B.Sc.) |
| 4) Genetics and fish breeding | graduate (M.Sc.) |
| 5) Complementary Aquaculture | graduate (M.Sc.) |
| 6) Fish processing biotechnology | graduate (M.Sc.) |
| 7) Mariculture | postgraduate (Ph.D.) |
| 8) Advanced Aquacultural Biotechnology | postgraduate (Ph.D.) |



XIII. INVENTIONS:

Laboratory Fish Incubator :Patented in Iranian Patent Office; Tehran With No. 32024
Dated on July 9th 2005 (Tir 18 1384)



Genome documentation in NCBI Gene Bank:

1. *Salmo trutta caspius* haplotype Iran5 control region, complete sequence; mitochondrial 1,012 bp linear DNA , Accession: HM237341.1 GI: 299150789 , 2010
2. *Salmo trutta caspius* haplotype Iran4 control region, complete sequence; mitochondrial 1,012 bp linear DNA , Accession: HM237340.1 GI: 299150788 , , 2010
3. *Salmo trutta caspius* haplotype Iran3 control region, complete sequence; mitochondrial 1,012 bp linear DNA Accession: HM237339.1 GI: 299150787 , , 2010
4. *Salmo trutta caspius* haplotype Iran2 control region, complete sequence; mitochondrial 1,012 bp linear DNA ,Accession: HM237338.1 GI: 299150786 2010
5. *Salmo trutta caspius* haplotype Iran1 control region, complete sequence; mitochondrial 1,012 bp linear DNA ,Accession: HM237337.1 GI: 299150785 , , 2010
6. *Salmo trutta caspius* cytochrome b (cytb) gene, partial cds; mitochondrial 1,069 bp linear DNA Accession: FJ655773.1 GI: 223931344 ,GenBank FASTA Graphics Related Sequences , 2009
7. *Salmo trutta caspius* D-loop, partial sequence; mitochondrial 865 bp linear DNA Accession: FJ770380.1 GI: 224995225 ,GenBank FASTA Graphics Related Sequences , 2009
8. *Salmo trutta caspius* haplotype A D-loop, partial sequence; mitochondrial 865 bp linear DNA Accession: FJ655772.1 GI: 223931343, GenBank FASTA Graphics Related Sequences, 2009



V. OTHERS (Award, ...):

- 1) Ranked 1 among Fisheries Engineering postgraduate (M.Sc.) Students of Iran (1996).
- 2) Outstanding Junior Honor Student of fisheries in Tarbiat Modares University
- 3) The first PhD educated in Aquaculture in Iran from Tarbiat Modares University
- 4) Establishment of Aquatic Genetic and Biotechnology Laboratory, Aquarium lab, Aquaculture workstation lab for fisheries Dept., Tarbiat Modares University, Noor, Iran.
- 5) Invited Special Session Coordinator for zibakenar, Tehran, lahijan, Tonkabon and ghaemshahr fisheries conferences
- 6) Members of revision committee for B.Sc., M.Sc. and PhD fisheries syllabus in MSRT, Iran
- 7) Selected Researcher of Tarbiat Modares University (Ranked 14 among 400 professors) in 2006.
- 8) Selected teacher of Tarbiat Modares University in 2007.