Received: 07 Feb 2014

Accepted: 01 Mar 2015

Effect of various levels of dietary prebiotic mannan oligosaccharide on haematological and some blood serum biochemical parameters of cultured juvenile Rainbow trout (*Oncorhynchus mykiss*)

- **Kia Amani Denji;** Ph.D. Candidate, Department of Fisheries, Science and Research Branch, Islamic Azad University, P. O. Box: 14515/755, Tehran, Iran
- **Majid Razeghi Mansour⁎;** Young Researchers and Elite Club, Azadshahr Branch, Islamic Azad University, Azadshahr, Iran
- **Shayan Ghobadi;** Assistant Professor, Fisheries, Department of Fisheries, Babol Branch, Islamic Azad University, Babol, Iran
- **Reza Akrami;** Associate Professor, Fisheries, Department of Fisheries, College of Agricultural Sciences and Natural Resources, Azadshahr Branch, Islamic Azad University, Azadshahr, Iran
- **Meysam Salehi;** Ph.D. Candidate, Department of Fisheries, Science and Research Branch, Islamic Azad University, P. O. Box: 14515/755, Tehran, Iran

ABSTRACT

The aim of this study was to evaluate the effect of mannan oligosaccharide (MOS; activeMOS®) on haematological and biochemical parameters of Rainbow trout (*Oncorhynchus mykiss*) juveniles. Fish fed during 60 days with a basal diet supplemented with 1, 2.5 and 4 g kg^{-1} MOS. Blood samples were collected from caudal vein of 36 apparently healthy fish at the end of trial and Data was analysed by regression analysis and pearson correlation test. There were no significant differences in serum enzymes activity between treatments ($P>0.05$). There were no differences in the glucose, cholesterol, triglyceride, uric acid, total protein and bilirobine between treatments ($P>0.05$); But the level of WBC is significantly higher in the group fed g kg^{-1} MOS than other groups ($P<0.05$). A non significant elevation of haematocrit, haemoglobin level and lymphocyte was found in the fish fed diet 1 g kg^{-1} mannan oligosaccharide ($P>0.05$). The results indicate that dietary administration of mannan oligosaccharide at the level of 1 g kg^{-1} can positively influence on some blood parameters of juvenile rainbow trout.

Keywords: biochemical, haematology, mannan oligosaccharide, prebiotic, rainbow trout.

⁎ Corresponding Author: Tel: +98 9111154613
Email: Razeghi2036@yahoo.com

Received: 24 Apr 2012
Accepted: 16 Oct. 2012

A histochemical of developing digestive tract of Persian sturgeon (*A. persicus*) from hatching to fingerling

- **Maryam Batebi;** MS.c., Department of Fisheries Sciences, University of Tehran, Karaj, Iran
- **Bagher Mojazi Amiri⁎;** Professor, Department of Fisheries Sciences, University of Tehran, Karaj, Iran
- **Rajab Mohammad Nazari;** Shahid Rajai Reproduction Center, Sari, Iran
- **MohammadAli Nematolahi;** Associate Professor, Department of Fisheries Sciences, University of Tehran, Karaj, Iran
- **Mostafa Karaminasab;** MS.c., Department of Fisheries Sciences, University of Tehran, Karaj, Iran

ABSTRACT

Histological development of digestive tract of the Persian sturgeon (Acipenser persicus) from hatching to fingerling size was studied using light microscope. The digestive tract of newly hatched larvae was a simple tube which continued from mouth to anus. In 7 days post hatching, digestive tract became differentiated and secretion was started smoothly, with appearance of goblet cells in epithelium of the mouth, pharynx and esophagus. In this stage, a thin layer of neutral mucopolysacharid component covered the epithelium of digestive tract. Nine days post hatching (exogenous feeding), this canal became differentiated into mouth, pharynx, esophagus, glandular and non-glandular stomach, anterior and posterior parts of the intestine, similar to adults at the onset of exogenous feeding, goblet cells appeared at intermediate and specially posterior part of the intestine and secretion role in this cells started that increased gradually. Present results reveal that the ontogenetic development of the digestive tract of Persian sturgeon is similar to Acipenserid species. However, there exist differences referred to the differentiation time of some digestive structures, such as the differentiation of taste bud, present of mouth and esophagus which affect first feeding time.

Keywords: *Acipenser persicus,* digestive tract, histochemical study , sturgeon.

⁎ Corresponding Author: Tel: +98 26 32223044
Email: bmamiri@ut.ac.ir

Received: 06 Feb. 2014
Accepted: 05 Jan. 2015

Evaluation of marginal marketing on sturgeon fish in Iran

- **Mahbobeh Jamebozorgi;** MSc. Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **Hasan Salehi;** Associate Professor, Iranian fisheries research institute, Tehran, Iran
- **Seyed Vali Hosseini⁎;** Assistant Prof. Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **Reza Fayzbakhsh;** Assistant Professor, Jehad-e Daneshgahi, University of Amir Kabir, Tehran, Iran
- **Sohayla Ramazani;** MS.c. of Business Management, Payame Noor University, Karaj Branch, Iran

ABSTRACT

Sturgeon is one of the most valuable fish species which are considered living fossils due to their long history. Sturgeon fish is cultured as an essential component of aquaculture as a lucrative industry for export. In this study, questionnaires were used and distributed among 20 aquaculture farms, 20 wholesalers and 20 retailers in Guilan, Mazandaran, Tehran, Qom, Tehran, Khuzestan, Yazd, Iran provinces from 2008 to 2010 to collect information. In this study, patterns surcharge (Mark - Up) used. Amortization of capital and their relation to food quality and cost as the primary factors affecting the cost and profits are growing sturgeon meat. Producer's share of the final price of the product is very low and about 42.5 percent. The results showed that the margins in this market compared to the price of producing high figure ($P < 0.05$) and the retail margin is greater than the marginal wholesale. Manufacturer's share of the final price is low. There is also no clear path through a lot of marketing, marketing is an important factor in increasing margins. Most appropriate solutions include comprehensive support for producers and consumers through organized markets, brokers and dealers in the province are creating modern markets.

Keywords: marketing, marketing margin, mark-up model, sturgeon fish.

⁎ Corresponding Author:
Email: hosseinisv@ut.ac.ir

Received: 19 Dec. 2013
Accepted: 25 Apr. 2015

Effects of dietary soybean meal (HP310) source on growth performance and blood parameters of rainbow trout (*Oncorhynchus mykiss*)

- **Samira Haghbayan;** MSc. Department of Fisheries, Faculty of Agriculture and Natural Resources, Islamic Azad University, Science and Researches Branch, Tehran, Iran
- **Mehdi Shamsaie⁎;** Assisstant Professor, Department of Fisheries, Faculty of Agriculture and Natural Resources, Islamic Azad University, Science and Researches Branch, Tehran, Iran
- **Nima Eila;** Assistant Prof. Department of Poultry, Faculty of Agriculture, Islamic Azad University, Karaj Branch, Iran
- **Yaser Abdollah Tabar**; MSc. Department of Fisheries, Faculty of Agriculture and Natural Resources, Islamic Azad University, Science and Researches Branch, Tehran, Iran
- **Pourya Bozorg Zadeh;** MSc. Department of Fisheries, Faculty of Agriculture and Natural Resources, Islamic Azad University, Science and Researches Branch, Tehran, Iran
- **Dabir Rezaie*;*** PhD. Kimiyagarane Taghzieh Company, Shahrekord, Iran

ABSTRACT

The aim of present study was to evaluate the effect of replacing fish meal with modified soybean powder (HP310) on growth performance and immunity of rainbow trout *(Oncorhynchus mykiss)*. So Fishmeal was replaced with HP310 at levels of 0, 25, 50, 75 and 100% in five experimental diets. A diet with 100% fishmeal (0% HP310) was used as control. Diets were fed to four replicate groups of 15 fish with an initial weight of 1.17±0.03 g for a period of 60 days. The results showed that diets with 25 and 50% of HP310 increased Feed Intake and thus increased Weight Gain, Specific Growth Rate and reduced Food Conversion Ratio ($P<0.05$). But fish growth parameters decreased when 75 and 100% of substitution were used ($P<0.05$). Furthermore, the results of blood parameters analysis, indicated that the amounts of Hemoglobin, Hematocrit and Red Blood Cells decreased by increasing the level of HP310 in experimental diets. But the difference between the control and the other treatments were not significant up to 75 percent replacement levels of diet. And only 10% HP310 treated showed a significant decrease compared to the control ($P<0.05$). Study of white blood cells showed a significant increase with increasing levels of fish meal replacement diets compared to the control ($P<0.05$). The present results indicated that soybean meal (HP310) can be replaced up to 50% of fish meal in rainbow trout's diet without negative effects on growth performance and blood parameters.

Keywords: blood parameters, fish meal, growth factors, modified soybean powder (HP310), rainbow trout (*Oncorhynchus mykiss).*

⁎ Corresponding Author: Tel: +98 9121715245
Email: drshamsaie@gmail.com

Received: 23 Oct. 2013

Accepted: 21 Dec. 2014

On some feeding features of the Kura barb (*Barbus lacerta*) in Bibi-Sayyedan River of Semirom, Isfahan

- **Hakimeh Dopeikar;** Former M.Sc. Student, Department of Fisheries, Faculty of Natural Resources, Isfahan University of Technology, Isfahan, Iran
- **Yazdan Keivany⁎;** Associate Professor, Department of Fisheries, Faculty of Natural Resources, Isfahan University of Technology, Isfahan, Iran

ABSTRACT

This study was aimed to investigate some feeding characteristics of Kura barb (*Barbus lacerta*) from Bibi-Sayydan River of Semirom, Isfahan. For this purpose, during August 2010 to July 2011, some 445 specimens of the Kura barb fish were caught using a seine net and a cast net and transferred to the Fisheries laboratory on ice for further examinations. The results showed that the Condition Factor (CF) for fish sampled during some different months were significant different from each other ($P<0.05$). The mean relative length of gut (RLG) was 0.967±0.007 for all fish during the year. Also, comparison of this index in different length classes revealed significant differences among them ($P<0.05$). Comparison of the Vacuity Index (VI) in some months and between the females and males showed significant differences among them ($P<0.05$). Also, comparison of mean Gastrosomatic Indix (GI) in females and in all fish during the study period showed no significant differences among them ($P>0.05$), but it was significantly difference in males during this period ($P<0.05$). In conclusion, this fish could be classified in the relative gluttonous group with an omnivory habit biased towards carnivory (mostly feeding on aquatic insects) and with a continuous feeding strategy throughout the year.

Keywords: condition factor, cyprinidae, Kura barb, relative length of gut, vacuity index.

⁎ Corresponding Author: Tel: +98 311 3913571 Fax: +98 311 3912840
Email: keivany@cc.iut.ac.ir

Received: 09 Jun 2013 Accepted: 08 July 2012

Comparative performance and efficiency of two automated (based on fuzzy logic) and conventional rearing system, in red Pacu (*Piaractus brachypomus*) production

- **Mahdi Saadatfard;** Department of Agricultural Machinery Engineering, Faculty of Agricultural Engineering and Technology, University of Tehran, Karaj, Iran
- **Hojat Ahmadi⁎;** Department of Agricultural Machinery Engineering, Faculty of Agricultural Engineering and Technology, University of Tehran, Karaj, Iran
- **Gholamreza Rafiee;** Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **Seyed Saeed Mohtasebi;** Department of Agricultural Machinery Engineering, Faculty of Agricultural Engineering and Technology, University of Tehran, Karaj, Iran

ABSTRACT

In the last decade, several studies have evaluated possibility of aquaculture production techniques improvement and the environmental conditions of fish during a culture period. Other researches have focused on presenting new technologies for fish management in semi-intensive and intensive aquaculture production systems, reducing the human intervention in the management of rearing systems designed for fish production. The educational intensive system of the present study was designed to reduce the level of human intervention in the fish culture system. Water quality sensors and automatic fuzzy logic controller were involved to the conventional system to get new system then compared to the first system. For this purpose, 50 pieces of red Pacu (*Piaractus brachypomus*) with mean initial weights of 15.05±3.47 and 14.89±3.43g, introduced to systems A & B rearing tanks, respectively to get twice initial weight after rearing. At the end of the fourth week, the average weight of the fish within the modern system at the A tank attained 56.43±10.06 g (3.75 times the initial weight) and the average fish weight within the conventional system at the B tank reached as much as 40.13±7.38 g (2.68 times the initial weight), indicating average daily weight gain Indices of 1.32 and 0.65 grams per fish, specific growth rates of 5.40 and 3.16 percent and feed conversion rate 0.73 and 1.21 respectively, were obtained in both modern and conventional systems in comparison between the two ecosystems were significantly was different ($P<0.05$). The environmental variables were kept within acceptable ranges for pacu production. It was concluded that it is possible to increase the productivity and profitability of the aquaculture system, using new approaches based on modern control techniques, such as fuzzy logic control, that promote water resource optimization.

Keywords: fuzzy logic control, intensive aquaculture systems, growth factors and survival, red pacu.

⁎ Corresponding Author: Tel: +98 9123347512
Email: hjahmadi@ut.ac.ir

Received: 22 Oct. 2013

Accepted: 08 Dec. 214

A survey on feeding of sea urchin (*Echinometra mathaei*) in the tidal zone in the Coasts of Chabahar

- **Arash Shakouri∗;** Assistant Professor, Department of Marine Biology, Faculty Of Marine Science, Chabahar Maritme University, Iran
- **Sina Manavi Shaad:** MS.c.; Department of Marine Biology, Faculty Of Marine Science, Chabahar Maritme University, Iran.

ABSTRACT

This study aimed to determine the diet of sea urchin *Echinometra mathaei*; inter-tidal zones of Chabahar coast of the Persian date Shahrivar 1391, during a period when the Persian date Farvardin 1392, at 3 stations were seasonal. Sea urchin fisheries have been transferred to the lab and then dissected under a microscope to identify the contents of the digestive tract of animals was carried out. The results of this study identify the algae present in the digestive tract vitriol and prioritize them according to type (brown algae - red - green), respectively. Such a result was obtained, with a variety of high-Sea urchin that feeds on the current growth and gonad production is also effective. On the basis of studies have noted that E.mathaei of brown algae (kelp, Sargassum) and red algae (Grasylarya) power to bring the results of this study also noted. In the E.mathaei Sea urchin species of brown algae is feeding on your location and the next priority of green and red algae, and sometimes other animals (larvae, crustaceans and corals) feeds.

Keywords: *Echinometra mathaei*, Chabahar coast, diet, sea urchin, seaweed, tidal zone.

∗ Corresponding Author: Tel: +98 5454122156
Email: shakouri@cmu.ac.ir

Received: 10 Jun 2013

Accepted: 07 Dec 2014

Feasibility of sorting the tigertooth croaker (*Otolithes ruber*) and silver pomfret (*Pampus argenteus*) fishes using computer vision technology

- **Hasan Safiyari∗;** *MSc. Student,* Department of Mechanics of Agricultural Engineering, Shiraz University, Iran
- **Abdolabbas Jafari;** Assistant Professor, Department of Mechanics of Agricultural Engineering, Shiraz University, Iran
- **Mohammad Hosein Raoufat;** Professor, Department of Mechanics of Agricultural Engineering, Shiraz University, Iran
- **Seyed Mehdi Nassiri;** Assistant Professor, Department of Mechanics of Agricultural Engineering, Shiraz University, Iran

ABSTRACT

Grading science and grading equipment for many kinds of sea products are growing rapidly in developed communities and variety of grading equipment can be found in most of the large fishery units. Computer vision has the potential to be used as a precise method for recognition and assessment of apparent characteristics. In this study, machine vision technology was used to sort fish based on species, size and weight. Tiger-toothed croaker and Silver pomfret fishes were selected for this study. In the first stage, each sample fish was weighted and put in the illumination chamber and images were captured. Matlab environment was used for segmentation and image processing tasks. Linear and non linear regressions were used to estimate fish weight. Seven variables extracted from each image (length, height, area, perimeter, equal diameter, major axis length and minor axis length) in four models of mathematical approach (linear, logarithmic, binomial and exponential) were considered for developing each weight prediction equation. Results indicated that fish weight can be estimated with R^2 values of 95.4% and 94% for Tiger-toothed croaker and Silver pomfret, respectively. Model validation was investigated with new data. Results showed that there is not a significant difference between the actual and estimated weight at 5% significance level for all fish species in this study. It was also concluded that the system can accurately measure the length of the fishes using machine vision technology envisaged in this study. The algorithm was also able to sort two species of fishes including Tiger-toothed croaker and Silver pomfret with an accuracy of 100%.

Keywords: computer vision, fish, silver pomfret (*Pampus argenteus*), sorting, tigertooth croaker (*Otolithes ruber*).

∗ Corresponding Author: Tel: +98 9177051955, Fax: +98 7132286104
Email: safiyari.hasan@gmail.com

Received: 09 Dec. 2013

Accepted: 17 May. 2014

The effects of *Bacillus subtilis* and *Lactobacillus plantarum* bacteria on survival, growth and digestive tract microflora of *Achanthopagrus latus* larvae with different delivery methods

- **Saeed Ziaei-nejad⁎;** Assistant Professor, Department of Fisheries, Natural Resources Faculty, Behbahan Khatam Alanbia University of Technology, Behbahan, Iran
- **Gholamreza Rafiee**; Professor, Department of Fisheries, Natural Resources Faculty, University of Tehran, Karaj, Iran
- **Alireza Mirvaghefi;** Associate Professor, Department of Fisheries, Natural Resources Faculty, University of Tehran, Karaj, Iran
- **Hamid Farahmand;** Associate Professor, Department of Fisheries, Natural Resources Faculty, University of Tehran, Karaj, Iran

ABSTRACT

This study examined the effects of two bacteria (*Bacillu subtilis* BP6 and *Lactobacillus plantarum* LP3) on survival, growth and digestive tract microflora of *Achanthopagrus latus* larvae with different delivery methods. For each bacterium was considered three treatments with different delivery methods. In first treatment, fish larvae were exposed to each bacterium through feeding them with bacteria-enriched Artemia. In second and third treatment, fish larvae were exposed to each bacterium through adding it directly to the water at 10^3 and 10^6 cells/ml respectively. The results show that in fish larvae to which bacteria had been administered, exhibited significant ($P<0.05$) increases in both survival and growth parameters wet weight as compared to control. Both bacteria could colonize the water and the gastrointestinal tract with relatively consistent trend.

Keywords: *Achanthopagrus latus, Bacillus subtilis, Lactobacillus plantarum,* microbial flora, probiotic.

⁎ Corresponding Author: Tel: +98 6152721190 Fax: +98 6152721190
Email: zbsaeed@yahoo.com

Received: 29 May 2013 Accepted: 20 Sep. 2014

The estimation of non-standard size fish (less than LM_{50}) in industrial trawler fishing shrimp in the fishing grounds of Hormozgan Province

- **Ehsan Farrokhi;** MS.c. Student of Fisheries Department, Faculty of Agriculture and Natural Resources, University of Hormozgan, Iran
- **Ehsan Kmrani;** Associate Professor, Fisheries Department, Faculty of Agriculture and Natural Resources, University of Hormozgan, Iran
- **Hadi Raeisi ∗;** Ph.D. Candidate of Fisheries Department, Faculty of Agriculture and Natural Resources, University of Hormozgan, Iran
- **Arash Akbarzade;** Assistant Professor, Fisheries Department, Faculty of Agriculture and Natural Resources, University of Hormozgan, Iran

ABSTRACT

This study was conducted to estimating the amount of non-standard sizes (with lengths less than LM_{50}) fishes of shrimp trawls in the Hormozgan Province coastal water during shrimp fishing season. Sampling was carried out using the Tabas otriger commercial trawler during 55 hauls. Eight commercially valuable species including *Pampus argenteus*, *Parastromateus niger*, *Plicofollis dussumieri*, *Saurida tumbil*, *Nemipterus japonicus*, *Scomberomorus guttatus*, *Platycephus indicus* and *Otolithes ruber*were were investigated in this study. *S. guttatus* (94.33%), *P. argenteus* (93.19%), *O. ruber* (91.57%), *P. niger* (89.86%), *P. indicus* (66.66%), *S. tumbil* (60.4%), *N. japonicas* (35.38%) and *P. dussumieri* (4.42%) had most high non-standard length in catch, respectively. L_{OPT} were calculating for *P. dussumieri*. The results showed a high pressure on the species of the shrimp trawl that can be the reason of species composition change in the Persian Gulf fisheries.

Keywords: by catch, Hormozgan, LM_{50}, Shrimp, trawl net.

∗ Corresponding Author: Tel: +98 9178952930
Email: raeisi_hadi@yahoo.com

Received: 06 Jan. 2015

Accepted: 15 Sep. 2014

Effect of early weaning on Sobaity Sea bream larvae performance (*Sparidentex hasta*)

- **Samira Nazemroaya;** MSc. Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **MohammadAli Nematollahi⁎;** Associate Professor, Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **Raziyeh Yazdanparast;** Professor, Department of Biochemistry, Institute of Biochemistry and Biophysics, University of Tehran, Iran
- **Hamid Farahmand;** Associate Professor, Department of Fisheries, Faculty of Natural Resources, University of Tehran, Karaj, Iran
- **Qodrat Mirzadeh;** Ph.D. Fisheries Organization of Hormozgan, Bandar-e Abbas, Iran

ABSTRACT

In this study, the possibility of early weaning and its effect on growth, survival rate and quality of Sobaity Sea bream (*Sparidentex hasta*) larvae from 25 (control group) to 18 (treatment group) days post hatch (DPH) were investigated. For growth rate measurement, sampling was done prior to starting test on 0, 2, 4, 10, 14, 16, and 18, and afterward on 25, 32 and 39 DPH; and for survival rate, cannibalism rate and also larval quality on 39 day post hatch. The result showed that thought from the starting of weaning to the end of rearing, the Specific growth rate (SGR) was significantly higher in control group than early treatment ($P<0.05$), there was no significant difference on SGR between two treatments during the whole rearing period. Relative growth rate (RGR) did have the equal progress among sampling days in control treatment, but there was significant increased pattern in early treatment ($P<0.05$). Early weaning did not have significant effect on survival rate, cannibalism rate, and quality of larvae ($P>0.05$). These results showed that the early weaning of Sobaity Sea bream *S. hasta* larvae on 18 DPH was possible without having undesirable affects on SGR, survival rate and quality loss which is more economic for farmer.

Keywords: growth, *Sparidentex hasta*, sobaity sea bream, survival, weaning.

⁎ Corresponding Author: Tel: +98 26 32245909
Email: malahi@ut.ac.ir

Received: 16 Jan. 2014 Accepted: 07 Jun. 2014

Genetic diversity and population structure of crustacean *Paramysis intermedia* in Tiab and Gwatr Bay regions using mitochondrial 16S rRNA gene sequencing

- **Samira Vahidinejad;** MSc. Fisheries Department, Faculty of Marine and Atmospheric Science and Technology, University of Hormozgan, Iran
- **Iman Sourinejad⁎;** Assistant Professor, Fisheries Department, Faculty of Marine and Atmospheric Science and Technology, University of Hormozgan, Iran
- **Saeid Tamadoni Jahromi;** Assistant Professor, Genetics Department, Persian Gulf and Oman Sea Research Center, Hormozgan Province, Iran
- **Arash Akbarzadeh;** Assistant Professor, Fisheries Department, Faculty of Marine and Atmospheric Science and Technology, University of Hormozgan, Iran
- **Fariba Keshavarzi;** MSc. Fisheries Department, Faculty of Marine and Atmospheric Science and Technology, University of Hormozgan, Iran
- **Fereidon Chakmehdouz Ghasemi;** MSc. Genetics Department, Inland Aquaculture Research Institute, Anzali Port, Iran

ABSTRACT

The crustacean *Paramysis intermedia* is one of the most important zooplanktons which is used as food by aquatic animals in estuaries and marine environments. Regarding the existence of this zooplankton stocks in the Persian Gulf and Oman Sea, knowledge on genetic structure of this species is necessary for conservation of its biological diversity and gene pool. In present study, genetic diversity and population structure of *Paramysis intermedia* collected from Tiab and Gwatr Bay regions was assessed for the first time by mitochondrial 16S rRNA sequencing. Analysis of 10 sequenced samples including 365 alligned base pairs of 16S rRNA yielded 339 monomorphic loci, 26 polymorphic loci and 27 mutations, indicating a very low ratio of mutation between the two studied regions in this species. No insertions and deletions were observed. Nine haplotypes were identified in these two regions and haplotype and nucleotide diversity were 0.978±0.003 and 0.035±0.000, respectively for all samples between regions. Expected heterozygosity for Tiab region was higher (0.287±0.164) than Gwatr Bay (0.014±0.088). Based on the F- statistic parameter, population genetic distance was 0.18 between samples of the regions and was significant ($P<0.05$). According to the analysis of phylogenetic tree, the separation between the samples of the two regions was obvious. Mean values of Tajima's D and Fu's Fs between the two regions were -0.12 and 2.51, respectively. No significant values of these tests are indicative of no population expansion between the two regions of Tiab and Gwatr Bay. According to the results of this study, *Paramysis intermedia* populations of these regions have high genetic diversity especially in Tiab and each of its two populations is a genetically differentiated comunity.

Keywords: Gwatr bay, *Paramysis intermedia*, Sequencing, Tiab, 16S rRNA.

⁎ Corresponding Author: Tel: +98 9173157337
Email: sourinejad@hormozgan.ac.ir