Investigating the Prevalence of Ligulae among carp fish in Parishan Lake

Sadeghi Limanjoob Reza, 2,3Kargar Jahromi Hossein, 4Heydari Yazdan, 5Syahmard Nahid, 6Bathae Seyed Seyed Hamid, 7Mahmoudi Teimourabad Saeid, 1Farzam Mohammad

1Department of Aquatic Animal Health, Veterinary School, Kazerun Branch, Islamic Azad University, Kazerun, Iran.
2Zoonoses Research Center, Jahrom University of Medical Sciences, Jahrom, Iran.
3Young Researchers Club Elite, Jahrom Branch, Islamic Azad University, Jahrom, Iran.
4Department of Biology, Payam Noor University, Bavanat Branch, Fars, Iran.
5Department of Physiology, International Branch, Shiraz University, Shiraz, Iran.
6Department of Science, Institute of Supreme Education and Industry of Maragheh, Maragheh, Iran.
7Department of Anatomy and Embryology, International Branch, Shiraz University, Shiraz, Iran.

ABSTRACT

Introduction: Considering the prevalence of the parasite in fish, carrots Parishan Methods: In this regard, 50 pieces of abdominal Ligulaeinstinalys study was conducted. fish were caught 87 Carrots Parishan and fall into place along Ice Aquatic Veterinary Laboratory Kazeroon moved up towards appearance and autopsy studies are based on Results: In this study, contrary to expectation, the Conclusion: The occurrence of drought and food , parasite was isolated from any sample .shortages in the elimination of adult parasites is likely to have a role in abdominal side

INTRODUCTION

Flat worms in their life cycle to 2 up to 3 hosts its final home does not necessarily require that the fish does not count as attempted but sometimes as intermediate hosts. Basic human needs of food through hunting and gathering food supplies were around. But the growing world population and the subsequent increases the need for Iran to have a variety of plant and animal proteins. Meat, fish and other aquatic ten essential amino acids that must be present in the food is. The average protein is 19% of the fish from Iran to have a variety of plant and animal proteins. Meat, fish and other aquatic ten essential amino acids that must be present in the food is. The average protein is 19% of the fish from Iran to have a variety of plant and animal proteins. Meat, fish and other aquatic ten essential amino acids that must be present in the food is.

Carrots belong to the Kingdom of fish fauna, branches, roper; Category Order carp fish Shaklan, carp family, sub-family carp, C.carpio and scientific names of species Cyprinus carpio [2]. This species of fish has an elongated body, head down and pressed flat, greenish -white body color, no palpus and fin is short [3].

Amongst fish parasites that can live in both the sea and vulnerable to large and small protein may lead to pathological changes in the quality and lower the fish are friendly [4, 5, 6]. Ligulae parasites belonging to the class Cestoda (tape worms) and Order, Pseudeo phyllide Ligulidae families and genera is L.intestinalis. Many species of this genus in the body non- articulated plerocircuid but share internal organs, it is clear from the scheme of the section. One of the most important economic legaleses lesions is genital atrophy, fish, and their sterilization. Thus reducing stocks are sensitive to a water source. So to control this parasite detailed information about the ecology of intermediate host is required. The main purpose of this study is to assess the prevalence boteriosophalosise carp Lake Parishan.

Methods:

In this study, due to low Water Lake and problems in SM fish carrots just 50 pieces of fish (native lake Parishan) SM was not able to catch this kind of fish this lake Alternative unavailable. Fishing by hook and took in the fall of 2008. After they were caught in the ice box and put rubber -containing powder was transferred to the laboratory of Veterinary Medicine Kazeroon. Fish species identification in the laboratory and then symptoms such as weight, length, condition fins and gills were recorded.

Corresponding Author: Sadeghi Limanjoob Reza, Department of Aquatic Animal Health, Veterinary School, Kazerun Branch, Islamic Azad University, Kazerun, Iran.
Tel: +989173243418. E-mail: dr.r.s.limanjoob@gmail.com
To review individual fish before autopsy belly size, color, amount of mucus layer, the presence or absence of skin lesions and other abnormal signs were checked. Modes swim fins and caudal fin, particularly in terms of complete or incomplete and beard ulcers and also studied at the color of the gills. To dissect the fish along the midline of the anus to the gills cut.

Results:
According to the Cestoda parasites infecting fish carrots are plerocircuid Ligulae stage. Therefore, the original location of the abdominal dissection experiments is that after opening the apparent presence of the parasite was not observed in any of the samples, but the records in previous years (Views of researcher) The reason for the a mentioned many fish were seen in this study suggests the possibility of some kind of fish are in the presence of the parasite.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Recorded clinical signs</th>
<th>No.of fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>fin corrosion</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>intestinal mucosa</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>Remove the scales</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>gills anemia</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>gills hyperemia</td>
<td>31</td>
</tr>
<tr>
<td>6</td>
<td>shrinking of internal organs</td>
<td>19</td>
</tr>
<tr>
<td>7</td>
<td>Extreme thinness</td>
<td>30</td>
</tr>
<tr>
<td>8</td>
<td>Bleeding, the fin base</td>
<td>6</td>
</tr>
</tbody>
</table>

Discussion and conclusions:
The presence of pathogenic parasites found a home directly to reserves is dependent on their hosts. According to reports, this year's low rainfall in the country has been so significantly reduced the amount of water in the lake. Its undeniable changes in the ecosystem structure and physical - chemical water makes. This causes the following changes in the ecosystem of the area to be investigated [7,8,9]

1. Reduce floor plankton lake in the first place as a base for biomass power pyramid lake is used and secondly, some of them like the cope poud (Cyclopes) Ligulae are considered as intermediate hosts of parasites.
2. reduces the von (fauna) Fish Lake (Recent observations also suggest that reducing fishing lake), some of these fish -eating birds and their food sources are first and second, as the second intermediate hosts of parasites are known Ligulae.
3. Reduce the number and variety of birds that afflict Lake as a permanent or temporary habitats chose to host some of these birds are Ligulae ultimate parasite. Accordingly, the listed items will include:
   - Due to the changes in fauna and flora, and the physical parameters of the water of lakes and reservoirs reduced planktonic also reserves may change between consumers (fish) food competition will shape the kind of mass fish deaths inevitably makes be. This type of stress imposed by environmental changes can cause adverse effects on fish physiological processes, including reproduction, which may cause a further decline in fish stocks in the long run as the host -parasite interface [8,9,10]
   - The effects of changes in a planktonic stocks mentioned, and cut the fabric to the coup as intermediate hosts of the parasite Ligulae are likely to play a role in the lifecycle of the parasite as a result of disturbances. This practice can also affect the life cycle of the parasite.
   - In addition, the parasite plerocircuid 400 days after entry into the abdominal infectious power generation finds fish.
   - If the reduction in fish stocks caused by fishing and hunting are more fish in less than a year is actually disrupt the parasite 's life cycle [11].
   - These are the possible reasons why the parasite cycle disorders Ligulae the lake is disturbed leading to an absence of parasites collected samples for research has been done. However, due to problems in later years, there was no possibility of continuing studies, as well as a closer look at factors such as the chemical and physical parameters of water are required [11]

REFERENCES