The Feeding Habit Of Yellow Fish (Selaroides Leptolepis) In Lekok Waters, East Java

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Abstract: Yellow selar fish (Selaroides leptolepis) is one type of fish that live in the waters of the East Java Sea, one of them is Lekok, Pasuruan Regency. Yellow selar fish favored by the people of East Java to become economically valuable consumption fish. Natural catches are felt to decrease with time and efforts are needed for domestication and cultivation. An analysis of the contents of the stomach has been carried out on yellow selar fish from Lekok waters. The study was conducted in July - August 2019. From the research results it is known that the Selarides (Selaroides leptolepis) are a group of carnivorous fish which can be seen from the Prefonderance Index value which consumes Copepoda (60%) as the main food. Ochrophyta (16.3%), Cyanobacteria (8.3%), Chlorophyta (7%) are categorized as a complementary food and Myzozoa (2.6%) and Charophyta (0.3%) as additional food.

Index Terms: Lekok waters, Yellow Selar, Index of Prefonderance

1. INTRODUCTION

Yellow selar fish (Selaroides leptolepis) is a species of fish found in the waters of Pasuruan. Yellow selar fish (Selaroides leptolepis) spread and cover the western Pacific, spread almost throughout Indonesia, Persian, Philippine, northern Japan, southern Arafuru and Autralia. Fish selar lives around the reef, at a depth of 1-25 m [1]. Selar fish spread almost all over Indonesian waters. This is what makes Selar fish known in various regions, although with each different local name. In the Madura and surrounding areas these fish are called Selar Square fishes. In Pasuruan selar fish (Selaroides leptolepis) is very popular and has high economic value. Natural catches are felt to be insufficient for the needs of the community until cultivation is needed. The main step for cultivation is to know the eating habits or natural food of the fish in the habitat. Selar requires specific natural food for its development. Ecological diversity, topography and habitat found in the waters of Pasuruan, East Java, allow for different types of natural food in selarides (Selaroides leptolepis). In addition, his varied assumptions about the types of natural food of Selar Fish encourage researchers to study further about the diversity of natural food contained in the Selar Fish's stomach because this underlies the domestication of selar fish from the waters of Pasuruan Regency. By observing the contents of the stomach, the eating habits (Feeding Habit) of Selar fish in Lekok waters can be known. An assessment of the contents of the stomach needs to be done to find out fish eating habits for fish management and development both for domestication and aquaculture [2]. It is hoped that this research will contribute information to the public about the contents of the Selar fish hull which will be the information for the natural feed of the Selar fish in the future.

2 MATERIAL AND METHOD

The research was conducted in July - September 2019 at three locations in the waters of the Lekok waters, while the observation of gastric contents was carried out at the Hydrobiology Laboratory of the Faculty of Fisheries and Marine Sciences, Brawijaya University, Malang. The tools used are sample box, step chart, section set, microscope, caliper, pH meter, thermometer, camera and stationery. The ingredients used are 4% selar fish and formalin. Fish catching at three locations is done by step on a chart in the waters of Lekok. Fish obtained directly measured weight and length. Each location was taken as many as 35 tails to a total of 105 tails with sizes ranging from + 15-18 cm. Furthermore, the fish was dissected and taken the fish's stomach was put into 75 plastic film bottles containing 7% formalin and put in a box. Fish hulls are analyzed based on the Index of Preponderance or the Largest Part Index [3].

$$IP = \frac{Vi \times Oi}{\sum Vi \times Oi} \times 100\%$$

Where :

IP: Index of Preponderance or the Largest Part Index (%)
Vi: Percentage of volume of one type of food
Oi: Percentage of frequency of occurrence of one type of food
$\frac{Vi \times Oi}{\sum Vi \times Oi}$: The amount of Vi x Oi from all types of food

3 RESULT AND DISCUSSION

Based From the location map you can see 3 sampling locations, namely:
- Station I = Water with a position of 7 ° 39'14.46 "S and 112 ° 59'19.36" T is a fishing area by fishermen with a depth of ± 5 meters, around the waters there is a step on the chart. The waters are current, the water is turbid when rain comes and the substrate is sandy mud.
- Station II = Waters with position 7 ° 39'7.76 "S and 112 ° 59'19.51" T. At this location has a depth of ± 15 meters, substrate muddy sand, current, turbid water and around the waters there is a step on the step and
- Station III = Waters with position 7 ° 39'2.36 "S and 112 ° 59'19.61" T, and the depth is ± 20 meters, with muddy sand substrate, calm currents and clearer water.

Data of physical and chemical parameters of curved waters in the study are temperatures ranging from 29.2 - 31.5 ^{o}C, brightness between 0.67 - 1.05 meters, dissolved O_2 content between 4.3 - 14.6 ppm, pH between 6, 6 - 7.9 and salinity of 20 - 31 ppm. Palnkton found is Lucifer sp., Lauderia borealis, Striatella interupta, Chaetoceros sp. Euphasia brevis (nauplius stage 2 and stage 3), Cerataulina bergonii, Thalasiosira sp., Oscilatoria sp., Rhizosolenia spp., Calanus sp., Ceratium tripos.

***Fig 1**. Research Location (Lekok Waters), Pasuruan*

The composition of food types from Yellow Selar fish are Copepoda, Ochrophyta, Charophyta, Chlorophyta, Cyanobacteria and Myzozoa. From the composition of these food types, it is known that the types of organisms that are predominantly eaten by fish are the zooplankton group. So it is said that the Yellow Selar fish is a carnivorous fish. Variations in food habits are thought to be due to differences in water column habitats which states that this carnivorous fish group occupies depths that vary between 40 - 250 meters. [6]
The difference in depth allows for differences in environmental

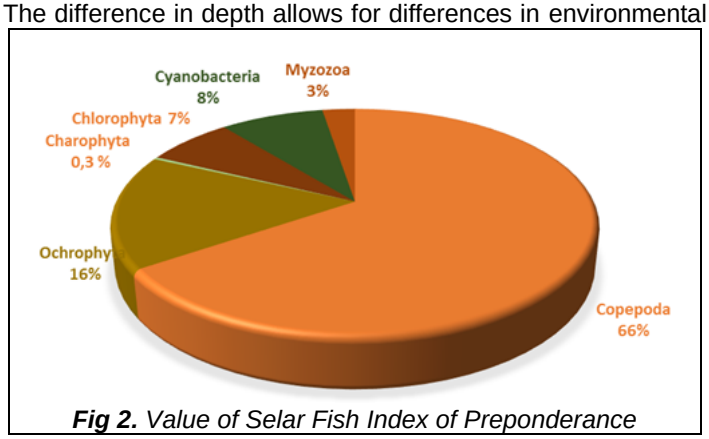

***Fig 2.** Value of Selar Fish Index of Preponderance*

conditions such as the physical-chemical quality of waters and food availability. The results of 105 fish samples analyzed, there are empty intestines and stomachs of fish or at the time of analysis found no organisms or food from the fish samples being studied. This can happen because at the time of catching, fish may not have consumed food or the food has been properly digested. Carnivorous fish generally have a shorter intestine length than their body length. Therefore, carnivorous fish usually do not require a long time to digest their food. In addition, such as if the contents of an empty stomach then it shows the intensity and frequency of low food. Some fish have a high level of food digestibility, so when caught the stomach of the fish in an empty state [4]. Some fish also don't eat when migrating. The availability of food in the waters for fish is also influenced by external factors, namely environmental conditions and factors in the age, sex and species differences that also affect growth and reproduction. if fish eat with a normal food supply but their activity is reduced, then the value of growth and reproduction will increase[5].

4 CONCLUSION

It can be co The conclusions from the results of the study can be concluded that: Yellow selar fish (Selaroides leptolepis) including carnivorous fish with the types of food found, namely Copepoda, Crustacea, Metridia lucens, Mesopodopsis slabberi, Gleocystis gigas, Spirogyra sp., Diatoma anceps, Corethron hystrix, Hemialus hauckii, Ankistrodesmus sp., Skujaella thiebauti, Gymnodium lunula, Surirella sp., Oscilatoria sp., Skeletonema sp., Pleurosigma sp., Rhizosolenia sp., Nodularia hawaiiensis, Clausocalanus sp., Aphanothere stagnina, Cerataulina, Striatella sp. and Thalassiosira sp. From the research results it is known that the Selarides (Selaroides leptolepis) are a group of carnivorous fish which can be seen from the Prefonderance Index value which consumes Copepoda (60%) as the main food. Ochrophyta (16.3%), Cyanobacteria (8.3%), Chlorophyta (7%) are categorized as a complementary food and Myzozoa (2.6%) and Charophyta (0.3%) as additional food.

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