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Growing African Lakka Fish in Households and Housing Areas

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In his Address to the Oliy Majlis on December 29, 2020, President Shavkat Mirziyoyev stressed that the most effective factor in reducing poverty and increasing the income of the rural population is a sharp increase in productivity and efficiency in agriculture.

Fish meat is a good food in human life because of its high biological value and dietary properties. In the developed countries of the world - Japan, Western Europe, North America, Australia, the average annual consumption of fish meat per capita is 25-45 kg. Worldwide, this figure is 22 kg. According to the World Health Organization, each person should consume an average of 12-16 kg of fish a year.

Unfortunately, in our country a person consumes an average of 7 kg of fish a year. Therefore, fish farming has become the most important issue in our country today.

Due to the availability of land and water supply in the homes and plots of land, it is possible to grow African trout in several directions.

Figure 1.General view of the African trout.

The water temperature is allowed to be 20-35^{0}C degrees for the African trout to feed and live normally.

The optimum water temperature for growing African squid is 25-30^{0}C degrees.

When the water temperature is below 16 degrees, the fish start to get sick and die. When the water temperature is above 35 degrees, the body of the fish begins to show wrinkles and various negative changes.

The African trout receives oxygen not only from water but also from the atmosphere. Therefore, there is an opportunity to grow these fish intensively. The world has experience in growing up to 500 kilograms of commercial fish per 1 m3 of water. Growing this fish requires proper organization of water exchange depending on the density of the fish and the amount of feed provided.

This fish can be grown in soil ponds, concrete and plastic pools, cages, depending on the growing season and the amount of harvest.

The following different methods can be introduced to the cultivation of African trout in residential areas: digging soil ponds, covering the pond with plastic sheeting (film, geomembrane, etc.) to prevent water filtration, or feeding in pools made of concrete, steel and various plastic mixtures.

In addition, households have the opportunity to grow fish on the basis of small-scale indoor water supply system (UZV) technology. In this case, the device is placed in a building or basement, the advantage of which is low water consumption and the possibility of fish farming throughout the year.

In this case, when choosing the type of pond or pool for cultivation, first of all, great care should be taken to ensure that the water temperature and exchange during the growing season at the required parameters. Pools and swimming pools can also be located in existing buildings or basements. In this case, there is a need to heat the water on a permanent basis.

In order to organize the efficient use of natural (solar) energy, the use of greenhouses covered with a film of iron, plastic, wooden frame gives good results. In this case, greenhouses are built according to the size of the pool or pools. Until the time when the water temperature can be maintained at the required level (May-August), the fish are fed in the open, with the installation of a film greenhouse with a decrease in air temperature, partly to maintain the required water temperature.

It is also necessary to protect these carcasses from direct sunlight by covering the surface of summer swimming pools.

It is possible to gain around 2 kg of weight in 6 months due to the correct feeding of African trout. At the same time, it is necessary to ensure water temperature and metabolism, as well as the timely supply of the required amount of high-protein nutrients.

It is necessary to feed African squid every 5-6 hours. In turn, the fish will need to be fed at least 4 times a day. It should be noted that the time between feedings is the same, i.e. 4 times every 6 hours or 5 times in 4.5 hours.

In the process of breeding African fish, it is important to carry out sorting of fish according to their size. As a result of the presence of cannibalism in these fish and the fact that the adult fish do not allow them to feed on fish weighing less than themselves, they may become larger and eat small fish after a certain period of time. In order to prevent these cases, the first time is 1 week after the start of feeding, the second time is 10 days, the 3rd time and then every 20 days.

Separation of fish by size (sorting) in the process of breeding African fish.

It is recommended to take fish that are at least 20 days old and weigh more than 5 grams when purchasing to grow fish. The higher the weight of the fish to be raised, the better the yield.

If fish fry weighing 5-15 grams are obtained for breeding, at the initial stage it is necessary to arrange feeding of these fry with high-protein starter feeds or specially grown live feeds. Once the chicks reach a weight of 150 grams, their nutrient spectrum expands and can also be grown using foods that are not high in protein in the diet. When the amount of protein in the feed was low, it took longer for the fish to reach commercial weight

To the size of a small fish when the water temperature is 25-27^{0}C depending on the daily feeding ration

In% of total biomass daily feeding ration	Fishweight, gr
5,7	10
5,2	20
4,8	30
4,5	40
4,3	50
4,1	70
4	90
3,9	110
3,8	130
3,7	150

Daily feeding ration depending on water temperature in commercial fish farming

Fishweight, gr	Watertemperature, ^{0}C		
	20	26	30
	In% of total biomass daily feeding rati		
100	2	3,9	3,6
200	1,5	3	2,7
300	1,2	2,4	2,2
400	1	2	1,8
500	0,9	1,7	1,6
600	0,8	1,6	1,4
700	0,7	1,5	1,3
800	0,7	1,4	1,2
900	0,6	1,3	1,1
1000	0,6	1,2	1
1200	0,5	1,1	1
1400	0,5	1	0,9
1600	0,5	1	0,9
1800	0,4	0,9	0,8
2000	0,4	0,9	0,8

References:

1. KamilovG.,UrchinovZ.U.FishandfisheriesinUzbekistanundertheimpactofirrigated agriculture // Inland fisheries under the impact of irrigated agriculture: CentralAsia.FAOFisheries Circular. 1995. No. 894: 10-41.
2. SheralievB.M.Thesystematicanalysisofthefishfaunaoftheferganavalley//EuropeanJournalofBiomedical andLifeSciences. Vienna,2015.2:80-84.
3. SparreP,VenemaC.S.Introductiontotropicalfishstockassessment.PartI.Chapter17:Manual. FAO. Rome, 1998, 1-16.
4. WeatherleyA.H.,GillH.S.Thebiologyoffishgrowth.Academic Press,London.1987.
5. WuY.F.,Wu,C.Z.TheFishesoftheQinghai-XizangPlateau.Chengdu:SichuanPublishingHouse of Science& Technology, 1992. 599pp.
6. ZhuS.Q.TheloachesofthesubfamilyNemacheilinaeinChina(Cypriniformes:Cobitidae).Nanjing: JiangsuScience&TechnologyPublishingHouse,1989.150pp.
7. BaltabaevA.Ixtiofaunabasseynarekikaradari.Avtoref.dis.…kand.biol.nauk.Tashkent,1971.– 42 s.
8. Berg L.S. Ribipresnixvod SSSR i sopredelnixstran. CHast II. Moskva,