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TALABALAR VA PROFESSOR-O‘QITUVCHILARNING

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# IJODKOR YOSHLAR VA INNOVATSION TARAQQIYOT

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8. Esanov H. K. et al. High Plant Species Distributed in and around Dengizkul, Bukhara Region //American Journal of Plant Sciences. – 2021. – T. 12. – №. 02. – C. 266.

9. Mukhtorovich K. A. et al. Distribution and Taxonomy of High Plant Species in Lake Karakir Bukhara Region //American Journal of Plant Sciences. – 2020. – T. 11. – №. 4. – C. 589-594.

10. Mukhtorovich K. A. et al. Distribution of High Water Plants of Lake Karakir in Bukhara Region in Ecological Groups //American Journal of Plant Sciences. – 2019. – T. 10. – №. 12. – C. 2203.

11. Buriev, S.B. and Kobilov, A.M. (2019) The Region's Aquatic Vegetation of Lake Kara-Kira Bukhara. ACADEMICIA: An International Multidisciplinary Research Journal, 9, 5-11. <https://doi.org/10.5958/2249-7137.2019.00072.7>

12. Buriev S. B., Yuldoshov L. T. ECOLOGICAL BIOTECHNOLOGY OF HIGH WATER CONSUMPTION IN WASTEWATER TREATMENT //Scientific Bulletin of Namangan State University. – 2019. – T. 1. – №. 10. – C. 95-102.

13. 10. Yuldoshov L. DETERMINATION OF THE HYDROCHEMICAL COMPOSITION OF THE DENGIZKOL WATER BASIN AND INCREASE OF MICROSCOPIC ALWAYS // ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buhdu. Uz). - 2020. - T. 6. - №. 2.

14. Yuldoshov Laziz Tolibovich, Xolliyeva Dilnavoz Hamroqulovna, Teshaeva Dilnoza Chori Qizi. Biological Treatment of Wastewater from Production Enterprises. Eurasian Research Bulletin, 2020. – T. 1. – №. . – C. 1-5.

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## ECOLOGICAL BIOTECHNOLOGY OF SEWAGE CLEANING

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Annotation: In this article was written information about growing great water grass little duckweed in foul water of poultry farms and its increasing and cleaning water with them. In the event that the article has

not been published, there is a need for information on the use of small duckweed and medium-sized firearms and other poultry farms, as well as the establishment of a pesticide and mineral fertilizers

**Key words:** great water grass, little duckweed, increasing, poultry, foul water, soiling, organic, inorganic minerals.

In Uzbekistan, the little duckweed (*Lemnaceae*) water supply is a small-sized lake, 3 rounds of water. Routes of all kinds of wild animals, birds and legumes are considered as food. Routes are available in both foodstuffs, 25-30% of people, 20% of lipid, 35% of white carbohydrates, and 10 or more vitamins.

**Ryaska (*Lemna minor*)** is a perennial aquatic plant, belongs to the category of Ryaska (*Lemna*) generation and the family of Agaseae. The organs of growth are oval, round or inverted ovary in the spread form (tumor) up to 2-4,5 mm in length (10 in some cases), 2-3 mm in width (7 in very rare cases). up to three (in some cases 4-5 pieces) blister-stain strips, from the bottom to the bottom, in the form of a smooth, fat, crispy or non-glossy, in the form of a bump, in the form of a bump or a narrowed protrusion (width not larger than 1 mm). If it occurs in a case consisting of 4-5 blister stain strips, then from the side ends the blister stains will be formed from the inner part under the tumor. The water plant is greener than from above, shiny, around the line between some unclear roots (the roots are located on the underside and on the underside), in some cases the reddish spots are harder on the underside. The Ryaska (*Lemna minor* L) plant is rich in nutritional elements, containing 25-30% of proteins, up to 20% of fats, up to 35% of carbohydrates and more than 10 vitamins

The composition of the wastewater of the oil refinery includes various poisonous substances-naphthenic acid, mercanines, nitrogenous and sulfur compounds, phenols, hydrogen sulfides', arsenics, etc. Whitewash waters with such a composition are dangerous for human life, including plants, animals, soils, if they are thrown into nature. Biological methods of purification of wastewater containing petroleum products have been created [7].

It is necessary to reduce the size of the small particle size, the lower the size of the layer, the nitrogen, the phosphorus, the methacrylate and the elements of the molecular chemical substances.

The fact is, in the composition of the chemical composition, organic matter is also well-known in the environment. This is the only way to

ensure that the utility of the utility and the agricultural industry is the only solution to the problems of water and sanitation. For this reason, we are analyzing in Bukhara farmland and poultry farms.

Laboratories have been given experience in 3 different conditions in the 20 liters acres. Wine, oily water, 75% + 25% vodka, water oily 50% + 50% hydrocarbons. 3 various types explored of wastewater. Each various planted little duckweed from 100 g/m<sup>2</sup>. 1 and 2 tables showed little duck's planted in the farmland and poultry farms.

**Table 1.**

**Development of small duckweed plant in municipal sewage treatment plants.**

	Kind of types	Development of duckweed, g/m <sup>2</sup>					
		1	2	3	4	5	6
	Sewage + duckweed	100	130	290	390	640	750
	Sewage 75%+25% piped water	100	165	228	360	510	63
	Sewage 50%+50% pipped water	100	175	260	310	325	392

The growth and growth of small duckweeds in municipal wastewater generated a biomass of 750 g, 633 g for dilution and 392 grams in 50% slaking figure 1.

**Table 2**

**The development of small duckweed plant in sewage of poultry farms.**

	Kind of types	Development of duckweed, g/m <sup>2</sup>					
		1	2	3	4	5	6
	Sewage+ duckweed	100	150	285	400	625	765
	Sewage 75%+25% piped water	100	185	230	375	520	623
	Sewage 50%+50% pipped water	100	190	255	320	350	420



The development and breeding of small seedlings in poultry farms continued for 6 days, 765 gr on the surface of wastewater, 623 g in 25% liquefied wastewater, and 420 g of biomass in



**Figure 1 reproduction of high-water plants in leaky waters**

50% of liquefied wastewater. From this experiment, it has been established that utility farms and poultry farms can produce large quantities of biomass without increasing the wastewater into the tap water, while the duckweed can be actively developed.

**Used Literature**

1. Muzaffarov AM, Taubaev TT, Abdiev M. The small duckweed and methods for their mass cultivation. Tashkent, 1970
2. Taubayev T.T. Flora and vegetation of water bodies of Central Asia. Tashkent, 1970
3. Taubayev T. T., Buriev S. Biological sewage treatment. Tashkent. 1980
4. Lurie Yu.Yu. Analytical chemistry of industrial sewage. M. 1984
5. Stroganov N.S., Buzinova N.S. A practical guide to hydrochemistry. M.1980 g
6. Buriev S., Rashidov N., Hayitov Y., Yuldoshov L. Extraction of high water plants in the sewage treatment plants. Problems of biodiversity and rational use of flora of Uzbekistan. Samarkand -2011.

7. Buriev S .B., Yuldoshov L.T. Ecological biotechnology of sewage cleaning.//Asian Journal of Multidimensional Research. Vol 8,Issue 5, May 2019

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## **BUXORO VILOYATI YER USTI VA YER OSTI SUV RESURSLARI**

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## **SURFACE AND UNDERGROUND WATER RESOURCES OF BUKHARA REGION**

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