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Bio-Ecological Characteristics of Ryaska Plant Distributed in Uzbekistan

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Abstract: The occurrence of ryaska plant in nature, Small ryaska grows even in ditches, canals, lakes polluted with oil products. Therefore, the morphophysiological and biochemical characteristics of small ryaska adapt to nutrition with organic substances; Ryaska is very rich in nutrients. It contains 21-30% protein, which is more than alfalfa plants (9.5%), fat is 4-20%, starch is 20-30%. They are also rich in vitamins: 85-103 mg/ km of dry carotene, 35-36.5 vitamins 2.0-2.1 V 2.1-2.6 V6. also the importance of it in agriculture was discussed.

Keywords: Ryaska, small ryaska, curved ryaska, pointed ryaska, Wolfia.

Ryaska is a plant that floats freely on water. The ryaska plants sometimes cover the surface of the water like a carpet together with the aquatic plants that grow in the swamps. The main vegetative body consists of a small stem. The length of the small ryasksa leaf is 2-4.4 mm, the width is 2-3 mm, and there is a root of 5-7 cm below the leaf. The leaf of the curved ryaska is larger than the leaf of the small ryaska, the length is 5-7 mm, the width is 3-5 mm, the length of the root is 7-10 cm. Three-sided ryaska differs from others in the appearance of its leaf. Its leaves are oblong, 3-10 mm long and 1.5-4 mm wide.

Small ryasksa is distributed in lakes, canals, ponds polluted with organic matter. It grows especially abundantly in Chirchik's sewage waters, in the lakes of Tashkent city, and in the lakes of the hydrolyzvin plants of the New Road. They grow in layers in water (up to 2-4 g). A lot of products are available.

Especially in June-July, 5-7 kg/m2 mass can be obtained. Small ryaska even grows in ditches, canals, lakes polluted with oil products. So, it can be seen that the small ryaska adapts to feeding on organic matter. It is a plant that grows mainly in stagnant fresh water. It rarely grows in running water. It forms many layers in places where there is a lot of nutrients and oxygen. The pH in the waters where ryaska grows varies from 6.2 to 7.5. It does not grow well in brackish waters. In deserts and semi-deserts, it is not found at all in waters with a salinity of 7.5 g/liter. The root is especially important in its life, and it feeds while standing in water. It reproduces vegetatively by forming shoots.

In a good environment, it produces a new leaf stalk in 2 days. In the territory of Uzbekistan, there was no remote breeding of ryaska. So, in the new environment, they must have lost the method of reproduction from seeds. Although its flowering has not been observed in Central Asia, observations from the Chirchik River indicate flowering and seed propagation. Flowering was observed even in November (temperature 5-2 C°). They grow especially fast at 25-35 C°. Growth slows down at temperatures above 40 C° and at 8-15 C° cold.

They also grow in the shade. It grows especially well among long-stemmed plants of reeds and sedges.

Ryaska is a small aquatic plant that is distributed in the brackish waters of the Holgalactica. There are 3 types of ryaska plant in Uzbekistan: small ryaska, curved ryaska, pointed ryaska. All species are valuable feed for agricultural animals, birds, herbivorous fish. Ryaska was until now reed as a fodder plant.

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This means that the biology and ecology of this plant have not been fully studied, and its cultivation in natural and artificial water bodies has not been established on the basis of scientific methods, and the lack of natural reserves has good bio-chemical properties. not studied.

For many years, scientists have studied the ecological and biological properties of small ryaska and curved ryaska. In order to study the biomass of ryaska, they conducted experiments by feeding it to pigs, sheep and poultry. Ryaska is very rich in nutrients. It contains 21-30% protein, which is more than alfalfa plants (9.5%), fat is 4-20%, starch is 20-30%.

They are also rich in vitamins: 85-103 mg/km dry carotene, 35-36.5 vitamins 2.0-2.1 V 2.1-2.6 V6.

In addition to carotenoid and ascorbic acid, vitamins V2, V6, PP and others were found in the biomass of Wolfia, belonging to the family of the ryaska plant.

Ryaska contains only fat, protein, carbohydrates, vitamins and valuable nutrients, as well as minerals. Experiments show that it contains 1.1-6% calcium 0.48-2.28%contains phosphorus, 0.35-2.11% magnesium. Sulfur is found in ryaska 5-6 times more than in other plants. It is known that sulfur is part of amino acids necessary for animals: methionine, cystine, cysteine.

Ryaska biomass is rich in various micronutrients. 1 kg of dried ryaska contains 0.48 mg of cobalt, 0.18 mg of bromine, 0.7 mg of nickel, 4.8 mg of titanium. In addition, manganese, iodine, zinc, vanadium, zirconium, cerium, and gold are also found in its composition.

Many small animals live in ryaska: butterflies, worms, slime worms, etc., which enrich the biomass of ryaska.

Use of ryaska plants in agriculture. These products contain very few vitamins. Therefore, as a result of giving these products to the subjects during the day, various diseases (avitaminosis) appear from them. Ryaska contains oxygen, carbohydrates, fats, and a large amount of vitamins. TTTaubayev, DAAbdullayev (1971) conducted a series of experiments to study the effect of ryaska plant on agricultural animals (sheep and pigs) when used as feed. To study the effect of ryaska on sheep, their daily feed was 2 kg of cotton slukha and 200 g of cotton kunjara. They were all kept in the same conditions.

In addition to the above feed, the experimental sheep were given 0.5 g of small ryaska every day. The experiment continued for 10 days. As a result of the experiment, the weight of the sheep in the ryaska variant increased by 10.6 kg in 10 days, and in the control variant, the weight of the sheep increased by 9.3 kg, that is, by 13.9% of the experimental variant. Experiments were conducted to study the effect of ryaska plant on pigs. The experimental pigs were given 1 kg of ryaska daily in addition to all feed, the weight of the experimental pigs in 26 days was 8.4 - 9.6 kg, compared to the control 2.4 kg excess. The average daily gain in the experimental variant is 323-369 g or 77-108 g more than the control.

So,of ryaska plant to the feed of sheep and pigsif addedincreasing their obesity and so onheals.Ryaska plants distributed in the conditions of Uzbekistanin poultry farmingand used in fishing.

Experimentsshowed that 30-50g of greens are given to chickens 1 day for 5 monthsryaska31.6 when added**%**was heavier. Compared to normal chickens. Similarly, the addition of ryaskan to chicken feed increases its egg laying by 40-56**%**increase by .

Raw ryska is a very important vitamin feed, especially for chicks, based on 3-day experiment chicks, 3 g when ryska is added to the ration feed for 30 days, 5 g at the end of the experiment after 10 days, 24.7**%**was heavier. Rather than normal cells. Dried ryaska is an excellent protein vitamin feed for chickens and other poultry during the winter. 25-30 in the shade-dried ryaska**%**protein, 3.5-5**%**fat, 60-95 mg/kg of carotene. Chickens to some experimentsmeat-when using dried rye flour instead of bone meal, etc.theiregg laying 30-35%, keratin vitamin A in the yolk 52%was found to exist.

Ryaska biomass is a growth stimulator and animals,of birdsused for development.

It is explained by the presence of micronutrients, which stimulates egg laying and egg quality. Ryaska is a concentrate that replaces feed in birds. Oil concentrate in 1-day duck feed, instead of 500/600 g of

green ryaska, which showed that 1 tsp of concentrate per 1000 head can be beneficial. The farm can make a profit of 100 soums for every hundred head of birds. At the beginning of the experiment, ryaskan was used as feed for sheep. 14 when 500 g of ryaska is given to 1 head in 1 day's ration for 60 days**%**it was determined that it was heavier. Ryaska is also an excellent feed for herbivorous fish. In the observations of FM Sukhoverkova (1971) ryaska diet for 2-year-old carp*4%*When g was increased, the feed given to fish decreased by 24.7%.

For the growth of 1 kg of Valik, when the feeding coefficient of the combicorn that feeds them is 5, for 50 tithes. If a vegetable is added to it, the price of the nutritional mixture is reduced by 12 shins. Therefore, it is important to grow ryaska plants from fish feeding waters for fish food, especially white and black carp that feed on them, because these fish like to feed on these plants.

The ryaska plant is important for the reproduction of other creatures in the water, and for the reproduction of fish. Because these plants are not only food for fish, but also important for their reproduction.

The following evidence showed how important ryaska is in fish breeding: when fish feeding on 22,000 plants per day digest 5 tons of excess mass, giving 500 kg of ryaska plants daily, each fish in 1 day weighs 20 increases by -30 g.

Ryaska is a very small and delicate plant. Although Klechatka is 10%, it can be given naturally without any treatment. Fish in the experimental plot grow much faster than normal fish and reach standard weight 60 days earlier.

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