EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 01, Issue 06, June, 2025
brightmindpublishing.com
ISSN (E): 3061-6972

EFFECT OF EICHORNIA WATER WEED ON PHYSIOLOGICAL INDICATORS OF GOATS

Nakhalboyev Alisher Aliboyevich 1
Assistant Professor at Samarkand Zarmed University.

Eshimov Dusmurat 2
Samarkand State Veterinary Medicine, Animal Husbandry and Biotechnology PhD in Biology, Associate Professor, University

Nuridinova Mukhlisa Isomiddin kizi 3
Samarkand State Veterinary Medicine, Animal Husbandry and Biotechnology University Student

Abstract
In the articlegoat dietWhen supplemented with eichhornia seaweed, goats' productivity, immune system, and milk production are improved.impact on the amount information is provided about.

Keywords: Amino acid, physiological state sugar, organism, coefficient Eichornia crassipes,, fatty acids, minerals, vitamins, diet, milk heredity, protein.

Introduction

Goats, which have been studied for many years in the field of animal husbandry, are currently one of the main problems. Goat milk is considered one of the most healing milks in the world and is a product in high demand among people. Goat milk is a biological fluid with a complex composition. Goat milk contains more than 100 different substances. The composition of milk produced by goats is not constant, but varies under the influence of a number of factors. Such main factors include the breed of goats, the heredity of various indicators of milk productivity, physiological conditions, live weight, age, etc. External environmental factors include (feeding, storage and care conditions, seasons, etc.).[1.3]

Special breeds of goats are bred to obtain milk from goats. However, regardless of the importance of goat breeds, it should be remembered that the level of breeding

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 01, Issue 06, June, 2025
brightmindpublishing.com
ISSN (E): 3061-6972

work carried out in this area, the selection of animals, feeding and housing conditions are of decisive importance.[1]

Materials and Methods

During the lactation period, the daily energy intake of milked goats was reduced to 1-1.05 units, which indicates a 7.62% decrease in the daily energy intake.

The nutrients and nutritional value of the diet of imported Zanen goats, formulated from the feed available under farm conditions, are presented in Table 1.

The main part of the diet was roughage, with roughage accounting for 78% and concentrates for 22%. 10% of the dry matter in the diet of goats in the experimental group was replaced with eichhornia seaweed.

Chemical composition of the feed included in the diet (by the VIJ method); - the amount of feed consumed (by measuring the daily intake and residual feed on scales); - the digestion and assimilation of nutrients in the feed (in comparative experiments, by the VIJ method); - the amount of nitrogen, calcium, phosphorus and sulfur (by the VIJ method); milk productivity of goats, its composition and its physicochemical properties (by generally accepted methods);

The study of the increase in feeding efficiency in dairy goats due to the use of non-traditional protein-rich Eichhornia algae in the feeding of farm animals was carried out in 2 groups of goats formed in an analogous manner. Goats of the control and experimental groups were fed with mixed feed under identical conditions, that is, in the field during the day, and in the evening after milking, in separate pens. The difference here was that the mixed feed in the diet of goats of the experimental group was mixed with Eichhornia food supplement.

The goats in the control group were fed with green grass from the pasture during the day and 300 g of mixed feed in the evening, while the goats in the experimental group were initially fed with 3.0 kg of alfalfa hay and from the 2nd month of lactation with 4 kg of green alfalfa mass. The main part of the feed given by hand was legumes (78% in terms of nutritional value), while concentrate feed was 22%. Due to the eichhornia algae, the amount of dry matter in the diet of this group increased by 10% and its nutritional value by 10%.

The scientific production part of the research work continued for 6 months by feeding the goats with diets formulated based on the data obtained in comparative experiments. The immune system of goats is the body's innate defense mechanism,

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 01, Issue 06, June, 2025
brightmindpublishing.com
ISSN (E): 3061-6972

which is the first line of defense against pathogens - viruses, bacteria, fungi, parasites and some diseases. It is genetically formed and protects the body from various diseases without special training. Natural immunity exists from birth and provides a general, rapid and relatively short-term response to any foreign substances. Natural immunity has the following main features. the organism has it from the first stages of its life. Lack of immune memory - it does not “remember” pathogens and responds exactly the same next time. A type of immune response that develops in the body throughout life and creates specific protective mechanisms against specific pathogens. It is capable of forming specific antibodies and immune memory to protect the body from a specific virus, bacteria or other harmful microorganisms. Adaptive immunity is formed naturally or artificially and has the ability to “remember” pathogens that the body has encountered.This protection is achieved through specific biological processes called immune responses. Immune responses can be innate or adaptive.

When Eichhornia alga was used as a supplementary feed in the diet of dairy goats, an increase in their milk yield was observed during 240 days of lactation by 43.13 kg (4.99%, P>0.999); mass fraction of fat by 0.30% (P>0.999); mass fraction of protein by 0.08%; milk fat content by 12.4% (P>0.999); milk protein by 9.10% (P>0.95); and live weight of goats by 3.17% (P>0.99).

Conclusion

In conclusion, we can say that the addition of biotechnologically processed eichhornia alga to the dry matter ratio of goats' diets has been found to have a sufficient effect on goats' milk productivity. Goats in the experimental group significantly increased the amount of milk produced than the control group, or the dry matter, total protein, calcium, and phosphorus indicators in milk were superior to those in the control group, indicating that the addition of eichhornia alga to the diet was a protein-rich diet.

References

1. Naxalboyev A. et al. Hayvonlarni spiroulina bilan oziqlantirish tarixi //Збірник наукових праць SCIENTIA. – 2021.
2. Aliboyevich N. A., Jumanazarovich S. O. Effects on the Microflora of the Gastrointestinal Tract When Feeding Goats with High Algae //Central asian

EduVision: Journal of Innovations in Pedagogy and Educational Advancements
Volume 01, Issue 06, June, 2025
brightmindpublishing.com
ISSN (E): 3061-6972

journal of social sciences and history. – 2023. – Т. 4. – №. 4. – С. 30-34.

3. Иванов А. Изучение микробиоты рубса коров методом Т-РФЛП. Современные нормативы // Дайджест Селское хозяйство. Наука и Практика. 2017. – № 4. – С. 1-6.Naxalboyev A. A. Yuksak suv o‘tlari va ularni o‘rganish tarixi (adabiyot tahlili bo‘yicha) //Scientific progress. – 2021. – Т. 2. – №. 4. – С. 999-1002.
4. Азаубаева, Г.С. Продуктивность по анализу крови / Г.С. Азаубаева //Животноводство России. – 2004. – №11. – С. 21.
5. Мастерских, Д.Г. Свойства молока коз зааненской породы разного возраста / Д.Г. Мастерских, А.С.Шувариков // Овцы, козы, шерстяное дело. -2004.-№3.-С. 39-40.
6. Маркин Ю.В. Развитие исследований по физиологии пищеварения// Ю.В.Маркин.// Зоотехния.-1999.-№ 8.- С.19-21.
7. Мустафина Г.Н.«Продуктивные ибиоморфологические качества помесей коз русской белой и зааненской пород»,Автореф. дисс. на соиск. уч. степени канд. с.-х. наук. Йошкар-Ола, 2008. 147 с.