

## Study of the Effect Of "Panaroot-98" Food Supplement On Luteinizing And Follicle Stimulating Hormone Indicators In The Blood Of Ostriches

**Babaeva Shakhlo Alievna**

Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology

**Abstract:** The article describes the effect of "Panaroot-98" nutritional supplement on luteinizing and follicle-stimulating hormone indicators in the blood of ostriches.

Egg production depends on the quality and intensity of the feed received by the bird every day. due to adequate nutrition stimulates the pituitary gland to release FSG (follicle stimulating hormone) and LG (luteinizing hormone) via the optic nerve. Food energy also affects the skull, skin and feathers. FSG increases the growth of ovarian follicles. After reaching maturity, the egg is released under the influence of LG (Romanov A., Romanova A., 1959).

There are two stages of regulating the secretion of follicle-stimulating and luteinizing hormones: fast and slow. In the rapid phase, exocytosis of hormone-containing granules from the cytoplasm of gonadotropes is stimulated. In the slow phase, the expression of genes encoding these hormones changes.

It is widely recognized that the open period of the ovulatory cycle is the result of synchronization of luteinizing hormone (LG) secretion (Dubocovich ML, 2007; Teubner BJ Freeman DA, 2007) controlled by neuroendocrine releasing factors. the master circadian clock located in the suprachiasmatic nucleus (SCN).

With an optimal microclimate, normalized feeding and light conditions, egg development and maturation, the formation and laying of chicken eggs determined by the genome occur. Under the influence of neurohormonal activity of the body, the process of egg formation takes place in the body of birds, which is regulated by the central nervous system. The synchronicity of maturation of follicles, ovulation of egg yolk, formation and laying of eggs is mostly related to functional activity of hypothalamus and pituitary gland, ovarian hormones (estrogen, progesterone).

Egg production is related to the length and intensity of light received by the bird each day. The light stimulates the anterior pituitary gland to release FSG (follicle stimulating hormone) and LG (luteinizing hormone) via the optic nerve. Light energy also penetrates the skull, skin and feathers. FSG increases the growth of ovarian follicles. After reaching maturity, the egg is released under the influence of LG (Romanov A., Romanova A., 1959).

Egg production depends on feeding, poultry, breed (cross) conditions. One important factor is light. Additional artificial light can lengthen or shorten daylight hours and extend the laying period. In this case, not only hormones are affected, but with longer days, hens consume more nutrients to produce eggs. Shortening the duration of lighting is used in raising pullets. Light stimulation (usually an increase

in daylight hours by 1 hour) directly affects the production of sex hormones. The optimal subjective day length for chickens is 14-16 hours (Golovkina O.O. et al., 2018; Christensen HH et al., 2007).

As a result of complex neurochemical reactions, the light signal turns into a nerve impulse. Photosensitive protein - pinopsin plays a major role in this process (Yashiro Y. et al. 1994, Petersen J. et al. 1999). Gonadotropin produced in the hypothalamus stimulates the release of follicle-stimulating and luteinizing hormones, thereby affecting the ovaries of chickens. Hormones affect the maturity of the ovaries, egg release and maintaining a continuous cycle of egg laying in laying hens (Yurkov V.M., 1985; Yoshikawa T. and others 1998).

Thus, by changing the intensity of light, it is possible to influence growth, development and productivity, and influence many organs and systems of the bird's body.

#### **List of used literature:**

1. Aliyevna, B. S. (2022). The Clinical and Physiological Condition Ostriches with" Panaroot-98". Central Asian Journal of Theoretical and Applied Science, 3(1), 1-3.
2. Alievna, B. S. (2021). Prospects for the development of ostraw in veterinary. *Academicia Globe*, 2(05), 351-355.
3. Aliyevna, B. S. (2023). Morpho-Functional Structure of the Organs of the Reproductive System of Ostriches. *AMERICAN JOURNAL OF SCIENCE AND LEARNING FOR DEVELOPMENT*, 2(6), 88-90.
4. Shakhlo, B., Shokhrukhbek, K., Xursanali, Q., & Muqaddas, J. (2022). Application Of Biological Additives-premixes In Ostrich Farming. *International Journal on Orange Technologies*, 4(1), 4-7.
5. Aliyevna, B. S. (2022). Effect of "Panaroot-98" on the Clinical and Physiological Condition of Ostrich. *International Journal on Orange Technologies*, 4(1), 1-3.
6. Alievna, B. S. (2023). Study of the effect of the drug" Panaroot-98" on the morphological and functional characteristics of ostrich ovaries and egg productivity. *Nexus: Journal of Advances Studies of Engineering Science*, 2(6), 52-55.
7. Alievna, B. S. (2023). Effect Of" Panaroot-98" on Some Hematological Parameters in the Blood of Ostriches. *Web of Scholars: Multidimensional Research Journal*, 2(6), 145-148.
8. Shakhlo, B., Shokhrukhbek, K., Xursanali, Q., & Muqaddas, J. (2022). Application Of Biological Additives-premixes In Ostrich Farming. *International Journal on Orange Technologies*, 4(1), 4-7.
9. Alievna, B. S. (2023). Effects Of" Panaroot-98" on Egg Production in Ostriches. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 3(6), 108-110.