

Productivity of commodity young stock of silverblack foxes grown in modified shads

Goal. To study the productivity of commercial young animals of silvery-black foxes, grown in light-shielded 2-row shields modified by light shields. **Methods.** Experiments were carried out on commercial young animals of silvery-black foxes. The control group was kept in a typical room, experimental - in a modified, equipped with light shields. **Results** It was established that during the creation of a 7-hour light day during the cultivation of commercial young young foxes, it is possible to improve the quality of the products obtained. **Conclusions** The introduction of a 7-hour light day contributed to the reduction of the maturation period and the formation of furs in experimental animals, increasing the size of their hides and improving their organoleptic properties.

Key words: silvery-black foxes, content, crayfish, natural light, illumination mode, productivity, quality of furs.

Formulation of the problem. The cultivation of fur animals requires strict observance of microclimatic parameters, among which illumination is one of the main [8]. So, according to the norms, the natural illumination in the heels should be > 50 lux, and for artificial lighting $\rightarrow 75$ lux [3, 5-7]. However, during the establishment of this standard, the ergonomics of the work of the animals were guided, without regard for the needs of the animals. It is assumed that the light that enters the mesh wings of the animals in the open patterns is sufficient for their normal development. However, the analysis of recent studies and publications suggests that the reduction of the light day for keeping animals in typical runs has a positive effect on the quality of furs and reduces the period of cultivation. Yes, Ye.O. Wagin and his co-authors note that the duration of the light day affects the duration of the latent period [4]. Its reduction can be achieved by increasing the duration of the light day. N.S. Perieldukka and VV Gubsky managed to reduce the latent period in the sobol. It is proved that the females, which are additionally illuminated (in January - February), the latent period was 2 or more days shorter than that of females without additional illumination [1]. DK Belyaev and O.V. Traps have achieved an increase in the fertility of the horse for increasing the duration of illumination, moreover, in the colored mink, this was followed more than the standard [2].

The purpose of the research is to investigate the productivity of commercial young young silk-black foxes grown in 2-row shields modified with light-shields.

Materials and methods of research. Experiments were carried out on stock young serebryno-black foxes (120 ch.) According to the scheme (Table 1).

The experiment lasted from April to December 2013. Animals were placed in two 2-row passes. The control group was kept in a single room, experimental - in a modified one, which was equipped with light shields from July 20, 2013 (figure).

In the main period of the experiment, which coincided with the beginning of summer mating, the animals were kept in the same natural light, in the final - the experimental group was kept on a 7-hour light day with sunblinds. The rest of the microclimatic parameters and feeding the foxes were the same and within the limits of the rules [9]. During the experiment, the length of summer mating and the terms of full maturation of furs were determined, as well as the evaluation of the quality of fresh-dry skin of the flaxseed stock of common flails according to generally accepted methods [8, 11]. The resulting digital material was processed biometrically [10].

Research results. It has been experimentally established that the quality of the product obtained from it can be improved by creating a 7-hour light day during the cultivation of commercial young silk-black foxes in a typical 2-row shell. Thus, the fresh and dry skins of the experimental animals were longer than controls at 0.25 cm, wider by 0.04 cm, their area was greater by 0.17 dm². Therefore, they are estimated at 3.55% higher, the selling price is 1.03 times higher than the control group (Table 2).

From the commercial young, grown for a 7-hour light day, skins of the highest dimensional category were obtained. In addition in the experimental group, there were 5.6% more skins in the group I of color, 9.43% more skins in the group I of silver, and 3.79% more in the number of skins, and less defects were detected (Table 3). In order to study the effectiveness of raising the stock of young animals under different conditions and lighting regimes in 2-row typical runs, we have taken into account the length of the summer mating of animals and the period of ripening of fur (Table 4).

Data tab 4 indicate that the animals of the experimental group were characterized by more stringent terms of summer maturation and maturation of fur, which resulted in a reduction in the cost of their maintenance and contributed to the increase in profitability of the products obtained from them (Table 5).

The cost estimate of one 2-row shelf light shield was as follows:

1. Material costs of building materials: slate - 30 sheets \times 62 UAH / sheet = 1860 UAH; wooden beams (50 \times 50) - 120 m \times 4 UAH / m = 480 UAH; Nails - 5 kg \times 12 UAH / kg = 60 UAH.

2. Payment of labor (installation of shields) - 51 m² \times 20 UAH / m² = 1020 UAH.

General production costs for the provision of sunscreens of one The 2nd row in 2013 was 3420 UAH. The calculations show that for 1 UAH of additional costs for the creation of a 7-hour light day for the cultivation of marketable young silk-black foxes, thanks to the arrangement of 2-row typical sheds, light-shielding shields, about 1.96 UAH of net profit can be obtained. Payback is not more than 0,5 years. In the future, the profitability of the innovation will grow and will amount to approximately UAH 6.22 (UAH 6712.25 / UAH 1078.4), since the cost of production will include only depreciation and the cost of annual installation of shields (68.4 UAH depreciation + 1010 hryvnas for installation).

Conclusions

For a reduction of up to 7 hours of light day mode in a typical 2-row shade, an increase in the linear sizes of the skins of wild young, silvery-black foxes was achieved: length - by 3.2%, width - 3.04, area - 6.40%, increase in the share of products of the 1st category category - by 3.51%, the second - 4.79%, and the third - by 22.75%. This made it possible to get a share of skins of the first class more by 5.60%, and the group of silver - by 9.43, and grade - by 3.79%. For shortening to 7 hours of light day, the lines of summer melanization and maturation of furs of silver-black foxes are reduced.

Bibliography

1. *Беляев Д.К.* Теоретические и практические основы фотопериодизма в разведении пушных зверей/Д.К. Беляев//Световой фактор в повышении продуктивности пушных зверей. — М., 1976. — С. 7–30.
2. *Беляев Д.К.* Поведение норок и их репродуктивная функция/Д.К. Беляев, О.В. Трапезов//Кролиководство и звероводство. — 1987. — № 4. — С. 6–7.
3. *Будівлі і споруди для тваринництва: ДБН В.2.2-1-95.* — Видання офіційне. — К., Держкоммістобудування України, 1995.
4. *Вагин Е.А.* Пушное звероводство и кролиководство/Е.А. Вагин, А.И. Квапиль, П.Т. Клецкин. — М.: Агропромиздат, 1977. — 324 с.
5. *Гигиенические требования к микроклимату производственных помещений: СанПиН 2.2.4.548-96.* — М., 1996.
6. *Естественное и искусственное освещение: СНиП 23-05-95.* — М., 1996.
7. *Животноводческие, птицеводческие и звероводческие здания и помещения: СНиП 2.10.03-84.* — Взамен СНиП II-99-77. — М., 1985.
8. *Звероводство: учебное пособие для вузов/[Е.Д. Ильина, А.Д. Соболев, Т.М. Чекалова, Н.Н. Шумилина].* — СПб.: Лань, 2004. — 304 с.
9. *Перельдик Н.Ш.* Постановка научно-хозяйственных опытов по кормлению пушных зверей/Н.Ш. Перельдик, В.К. Юдин//Методические указания. — М.: ВАСХНИЛ НИИПЗК, 1973. — 19 с.
10. *Плохинский Н.А.* Руководство по биометрии для зоотехников/Н.А. Плохинский. — М.: Колос, 1969. — 256 с.
11. *Шкурки лисицы клеточного разведения невыделанные. Технические условия: ГОСТ 2790-88.* — [Действ. от 01.10.1991]. — М.: Гос. ком. по стандартам, 1988. — 15 с. — Введ. 01.04.1994. — 12 с.