Study on the Influence of Environmental Factors on the Reproductive Performance of Rams

Mu Zhiping

College of Animal Science and Technology, Chongqing Three Gorges Vocational College, Wanzhou District, Chongqing 404155, China

muzhiping@126.com

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Abstract: Sheep is an important target for poultry farming. Wool and lamb can create high economic returns, so more and more farms have started sheep farming. In the process of sheep breeding, environmental factors will have a greater impact. The reproductive performance of rams is also closely related to environmental factors, so reasonable control is needed to improve the efficiency of reproduction. Based on this, this paper analyzes the six factors of temperature factor, humidity factor, Chinese herbal medicine additive factor, illumination factor, stocking density factor and toxic gas factor, and explores the influence mechanism of environmental factors on reproductive performance of ram. I hope to give it to the ram. Relevant research on culture provides advice.

1. Temperature factor

Temperature has a great influence on the reproductive performance of rams, because temperature can directly affect the metabolism of rams. When the temperature is too low or too high, the health and growth of rams will decrease. First, if the temperature is high, the vitamins in the feed will be unsTable, and the lack of essential vitamins such as vitamin E and vitamin A will be lost, and the lack of these vitamins will affect the reproductive activity of the ram. In addition, long-term exposure to high temperatures, the male hormone secretion of the ram will also be reduced, long-term low temperature environment is the problem that the ram does not estrus. From the actual situation, when the temperature of the sheep house is 30 degrees Celsius, the time for the ram to lie still is obviously prolonged, and the feed intake of the ram will also decrease, which will cause the problem of ram growth retardation, which in turn will cause Its reproductive capacity has declined.

In a high temperature environment, not only will the ram's libido be reduced, but the quality of its sperm will also decrease. In general, when the ambient temperature is higher than 30 degrees Celsius or below 16 degrees Celsius, the sperm activity of the ram will be significantly reduced, and even the ability to insemination will be directly lost. Generally speaking, the sheep house does not have the problem of too low temperature, so it is necessary to pay special attention to the high temperature. When the outside temperature is too high, the sunshade facilities can be added, and ventilation and the like are used to control the temperature of the sheep house to avoid High temperatures affect the health and reproductive performance of the ram.

2. Humidity factor

The effect of humidity on the reproductive performance of rams is mainly reflected in the mixed effect of temperature and temperature. In high temperature and high humidity environment, the ram will have elevated body temperature and difficulty in breathing, which will cause problems in the function of the body and thus affect To its reproductive capacity. Moreover, the high-humidity environment can cause problems such as ram arthritis and neuralgia, and its health is affected to some extent, so the ram's sexual desire will also drop significantly. Moreover, the humidity of the sheep house is also affected by factors such as rainfall, so this requires a reasonable way to reduce the

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humidity of the sheep house.

The ambient air humidity is relatively high, and the heat release of the ram's body will be affected. In this case, the proportion of dead sperm in the ram will rise, resulting in a significant decrease in conception rate. In addition, in high-humidity environments, various pathogens and microorganisms are more likely to breed, and rams are more susceptible to diseases such as eczema, and the number of parasites in the body will also increase, and their health will be affected, resulting in decreased reproductive capacity. Therefore, in sheep breeding, pay attention to ventilation and heat, maintain a suiTable temperature, in order to improve the reproductive capacity of the ram. In the summer, due to rainfall and other reasons, the sheep house will be damp, so the problem of waterproofing and drainage should be considered in the process of building the sheep house. Once there is water in the sheep house, it should be removed in time to avoid excessive humidity. problem. In addition, the sheep will also discharge urine, which is one of the main reasons for the dampness of the sheep house. For this, the loft bed of the sheep house can be built into a slatted plate, so that the sheep's excrement can be left on the next layer. At the same time, it is also possible to lay a layer of absorbent material, such as sawdust and hay, in the sheep house, and clean and replace it regularly to protect the dry environment in the sheep house.

3. Chinese herbal medicine additive factors

Chinese herbal medicines have many functions, which not only can effectively enhance the immunity of animals, but also improve production performance. In addition, Chinese herbal medicine additives have no side effects, so the addition of Chinese herbal medicine additives to sheep's feed has a wide range of applications. A dozen Chinese herbal medicines such as Epimedium, Cuscuta and Angelica can be used to improve the reproductive capacity of rams. It can be concluded from relevant research practice that the quality of sperm will be significantly increased after feeding rams with Chinese herbal additives. The sexual response time became shorter and the sperm density increased significantly. At present, there are already farms that add Chinese herbal medicine additives to the ram's feed. Compared with the un-added rams, the ram has a stronger desire to breed and the conception rate has increased significantly. Moreover, it has been found through testing that the ram of the Chinese herbal medicine additive has a significantly reduced sperm deformity rate, which is also extremely beneficial for the cultivation of the embryo.

The addition of Chinese herbal medicine additives to sheep's feed can indeed improve the reproductive system of the ram, and it is important to adjust the body functions of the ram, and it has positively helped to improve the health and immunity of the ram. Moreover, the cost of Chinese herbal medicine additives is not high, and it can be fully accepted by the breeder compared to the benefits. Compared with other additives, Chinese herbal medicine is purely natural and does not contain toxic or harmful substances. When the breeding period arrives, the Chinese herbal medicine additive can be appropriately added to the ram's feed to improve the ram's Reproductive capacity. Of course, there is no uniform market norm and standard for the current Chinese herbal medicine addition, and the relevant mechanism of action cannot be fully grasped. This also needs to be continuously improved in the subsequent development, so as to lay the foundation for the application of Chinese herbal medicine additives in the breeding capacity of rams. .

With the modernization of farming, the current feed industry has entered a new stage, and natural additives are also the main direction of future development. Therefore, adding Chinese herbal medicine additives to the feed of rams is a trend in the future market, which will also become a feed industry with Chinese characteristics. China has a long history of regulating animal physiology with Chinese herbal medicine, and has accumulated certain experience in long-term development. In modern sheep farming, the use of Chinese herbal medicine additives can stimulate the reproductive behavior of rams, so that rams can increase their sexual desire at the appropriate time, and at the same time improve the activity and quality of their sperm with the help of Chinese herbal medicines, thus effectively ensuring the reproductive performance of rams. . More importantly, Chinese herbal medicine additives do not cause side effects, so the stimulation of reproductive performance of rams

is based on maintaining the health of the rams. It is precisely because of these factors that in the industrial cultivation of sheep in the future, Chinese herbal medicine additives will surely become the focus of development.

4. Lighting factors

Illumination factors can also affect the sexual maturity of the ram, because the reproduction of animals is mostly seasonal. For the ram, it belongs to the short-day estrus animal. When the light is shortened from long to long, the secretion of androgen in the ram will increase significantly, and the quality of the semen is the highest. Therefore, to stimulate the ram into sexual maturity can be achieved by controlling the light, using short light time to stimulate the ram. In nature, sheep estrus in the fall, when the light is shortened from long to long, so the ram is stimulated by the light factor mainly to imitate the natural environment. This kind of light stimulation can make the reproductive activity of the ram more active, and the secretion of testosterone is more. Therefore, in the culture of sheep, the reproductive ability of the ram can be improved by the illumination factor.

The effect of light on the reproductive performance of rams is mainly due to the secretion of melatonin from the ram, which can increase the ram's desire to mate. Of course, the content of melatonin is closely related to day and night, light time and sheep breeds, and it shows regular changes. Therefore, after entering the breeding period, artificial light can be used to stimulate the ram to secrete more testosterone hormones, thereby improving reproductive performance.

The control of the lighting factor is relatively simple, and it can be realized by using fluorescent lamps and shielding materials, so the overall cost is low. However, from the current actual situation, sheep farms have less application to the control of illumination factors. This is due to the lack of relevant experience and the lack of specific guidance methods. Therefore, in the subsequent development of sheep breeding, we must pay attention to the influence of light factors on reproductive performance, and control the reproduction from various aspects to improve the conception rate.

5. Feeding density factors

The stocking density can directly affect the reproductive behavior of the ram, and it also affects its growth and health. Therefore, stocking density is an important management target for sheep farming. Sheep will release heat in daily breeding, accompanied by carbon dioxide and water vapor emissions. If the breeding density is high, the temperature of the sheep house will rise significantly, and the surrounding air will be more humid, which will affect the body of the ram. The state of health is also not conducive to the reproductive behavior of the ram.

The effect of stocking density on the ram is also reflected in other aspects. When the density is high, the ram fights more frequently, so the sheep can not rest and eat normally, which will cause the health condition of the sheep to decline. In addition, high stocking density can also cause problems in the increase of feed consumption. The weight gain of rams is slow, and it is easier to get various infectious diseases, which is obviously affected by their reproductive ability. When the stocking density is high, the ram will have a chronic stress response, and the hormone released by the pituitary will stimulate the ram to reduce its metabolism, which will lead to a decline in the production capacity of the ram, resulting in low reproductive performance. Moreover, if the stocking density is large, the ram will be disturbed during breeding, which will greatly affect the success rate of conception. For adult rams, the density of feeding should be no more than 2 square meters / only, 4 square meters / only suiTable. Appropriate stocking density can provide a good environment for the growth and reproduction of rams, maintain their health, and thus improve reproductive performance.

6. Harmful gas factors

The physiological activities of the sheep's breathing, excretion and other activities will affect the

air environment of the sheep house, and the density of various harmful gases will also increase. For example, sheep's urine and feces can be decomposed to produce ammonia, hydrogen sulfide, carbon dioxide and methane. These harmful gases can cause rams to be hypoxic and debilitated. If the concentration is too high, it may damage the ram's center. Nerve, which in turn causes problems in the reproductive performance of rams. Especially in the north of winter, in order to keep the sheep house warm, coal is burned. If the coal is not burned enough, it will produce a lot of carbon monoxide. These carbon monoxide will combine with water and feed to form a toxic aerosol, which directly affects The ram's central nervous system, respiratory system and digestive system cause problems such as rams' lack of energy, poor breathing, and weakened system, which cause the reproductive performance of the ram to decline, and serious ram death.

For the breeding of rams, there are requirements for the content of various toxic gases in the sheep house. Ammonia, hydrogen sulfide, carbon dioxide and methane should not exceed the defined standards, otherwise it will directly affect the reproductive performance of the rams. According to relevant research, tea saponin and allicin can control microbial aerosol to a certain extent, and can also play a disinfecting role, so tea saponin and allicin can be used appropriately. Of course, in order to reduce harmful gases, it is necessary to pay attention to the ventilation and drying of the sheep house, and timely clean up the feces of the sheep. Through these measures, the influence of harmful gases on the body of the ram can be reduced, thereby ensuring its reproductive performance.

Environmental factors have a great impact on the reproductive performance of rams, and most of them are comprehensively applied to the rams. Therefore, it is necessary to rationally control in the process of control, and optimize the environment from various aspects. Of course, the conception of the ewes will also be affected by other factors, which requires a combination of the experience of self-cultivation on the basis of science to provide the most suiTable environment for the ewes to conceive, in order to improve the success rate of conception. Combined with the current actual situation, several important environmental factors and control methods are analyzed above, including nutrient factors, feeding factors and management factors, which make the whole process more uncontrollable. Therefore, we can only start from the environmental impact factors, create a suiTable environment as much as possible, and effectively improve the reproductive performance of the ram.

7. Conclusion

Through the control of environmental factors, the health of the ram can be effectively improved, and external stimuli can be used to enhance the reproductive performance of the ram. In order to protect the health of the ram, it is necessary to properly control the humidity and temperature of the sheep house and increase the ventilation facilities. During the breeding period, the Chinese herbal medicine is added to stimulate the reproductive performance of the ram, supplemented by reasonable illumination, which can effectively improve the reproductive performance and enable the farm to obtain higher economic benefits. This paper analyzes the specific effects of environmental factors on the reproductive performance of rams from six aspects: temperature factor, humidity factor, Chinese herbal medicine additive factor, illumination factor, stocking density factor and toxic gas factor. Each farm can refer to its actual situation. This will improve the reproductive performance of the ram.

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