

10.18686/ahe.v6i21.6711

# Research on the Application of Chinese Medicinal Materials in the Production of Livestock and Poultry Products

### Wenfu Dong

Taiyuan Tourism Vocational College, Taiyuan 030032, Shanxi

Abstract: In recent years, China's economic development level has been significantly improved, but also make our people's material living standards also have a greater degree of improvement, which also makes people for livestock and poultry products have a significant increase in demand. With the growth of people's health awareness, the requirements for food safety are getting higher and higher, which also puts forward higher requirements for the livestock and poultry industry. With the continuous improvement of the development level of the livestock and poultry breeding industry, Chinese medicinal materials have begun to be widely used in the production of livestock and poultry products. Compared with traditional chemical synthetic veterinary drugs, Chinese medicinal materials are safer and can effectively improve The quality of livestock and poultry products is the main trend of livestock and poultry product production in the future. This paper analyzes the application value of traditional Chinese medicine in the production of livestock and poultry products, and puts forward the application points of traditional Chinese medicine in the production of livestock and poultry products, aiming to provide reference for future research.

Keywords: Traditional Chinese medicine; Livestock and poultry products; Application value; Key points of application

### **Fund Project:**

- 1. Key research and development project of Luliang City: Astragalus membranaceus and jujube powder cooperate to improve black-bone chicken production performance and product added value research and development (project number: 2021NYGG-2-35)
- 2. Education Science Planning Project of Shanxi Education Science Planning Leading Group Office: research on the Integration and Education Path of Shanxi Medicinal Tea Tour under the Background of New Era (Project No.: GH-21564)

### Introduction

In the process of traditional production of livestock and poultry products, in order to prevent and control diseases of livestock and poultry animals, a large number of veterinary drugs are usually used. Although it can play a certain prevention and control effect in the short term, in the long run, most of the chemical veterinary drugs have certain toxic and side effects and are easy to remain in livestock and poultry animals, which not only affects the health of livestock and poultry animals, but also affects the quality of their products. In recent years, traditional Chinese medicine has been widely used in the production of livestock and poultry products, which greatly improves the quality of livestock and poultry products and ensures people's food safety.

### 1. Application Value of Traditional Chinese Medicine in Livestock and Poultry Products

### 1.1 Improve the effect of disease prevention and control

As the wisdom crystallization of ancient medicine in my country, Chinese medicinal materials still have high application value at present. In addition to the treatment and prevention of diseases on the human body, they are also widely used in the livestock and poultry industry. First of all, in the process of the growth of livestock and poultry animals, due to the high probability of disease, it is necessary to do a good job in the prevention and treatment of diseases to reduce the impact of diseases on livestock and poultry

animals. In the traditional prevention and control of livestock and poultry animal diseases, because the breeding concept is relatively outdated, the prevention and control can only be carried out using veterinary drugs, which can only have a short-term prevention and control effect. After the use of Chinese medicinal materials, because Chinese medicinal materials have high medicinal value and nutritional value, they can enhance the immunity of livestock and poultry animals, increase their immune function, and reduce the incidence of diseases. For example, Bupleurum, Codonopsis pilosula and Astragalus can be added to livestock and poultry animal feed. Alkaloids and organic acids can significantly improve the immunity and resistance of livestock and poultry animals, and the probability of disease is significantly reduced [1].

At the same time, traditional Chinese medicine can also play an important role in improving the stress ability of livestock and poultry animals. Because livestock and poultry animals are greatly affected by external factors during their growth, such as changes in temperature, pain, poisoning, and changes in breeding sites, it is easy to cause non-specific defensive systemic reactions to livestock and poultry animals. It will also increase the chance of disease. The use of traditional Chinese medicine can improve the physical quality of livestock and poultry animals and better resist the effects of stress on their bodies. Hawthorn or malt can be added to the feed of livestock and poultry animals to increase the feed intake of livestock and poultry animals, promote their digestion and enhance their anti-stress ability. At the same time, livestock and poultry animals are also greatly affected by parasites and viruses during their growth. Chinese medicinal materials such as Radix Isatidis and Galla Chinensis can be added to improve their antiviral ability [2].

### 1.2 Promoting the Growth of Livestock and Poultry Animals

Chinese medicinal materials have high medicinal value and high nutritional value, and can also play an important role in promoting the growth of livestock and poultry. From a specific point of view, it can supplement nutrition for livestock and poultry animals. Farmers can add certain Chinese medicinal materials to the feed to improve the nutritional value of the feed. For example, cockscomb seeds can be added in the process of raising chickens. Add 1-2 grams per day, which can make the chicks gain weight quickly. Some hawthorn or tangerine peel can also be added to promote food digestion and increase the intake of livestock and poultry animals, which can not only improve the utilization rate of feed, but also promote the growth of livestock and poultry animals. Chinese medicinal materials can also play a role in regulating growth, such as organ function regulation, nourishing the kidney and replenishing qi, etc., to improve the production capacity of livestock and poultry animals. Taking pig breeding as an example, Eucommia extract can be added to the feed to promote the ovulation of sows and the improvement of their postpartum breastfeeding ability [3].

### 1.3 Improving the Quality of Livestock and Poultry Products

Chinese medicinal materials also have high application value in improving the quality of livestock and poultry products. They usually exist as feed additives and can play an important role in improving product flavor and color. Taking layer breeding as an example, seaweed powder can be added to the feed, which can make the egg yolk darker and better in taste; in broiler breeding, cloves or nutmeg can be added to the feed, and the meat quality can be more tender. The preservation time is longer. Due to the darker color of some Chinese medicinal materials, they can be left in the muscles or skin of animals, making the color of the product better. Taking pig breeding as an example, adding astragalus and hawthorn can not only improve the feed intake of pigs, but also improve their flesh color.

## 2. Key Points of Application of Traditional Chinese Medicine in Livestock and Poultry Products

### 2.1 Reasonable preparation

The use of Chinese medicinal materials for the production of livestock and poultry products has great advantages, but because Chinese medicinal materials have certain requirements in use, it needs to be reasonably prepared to play its effect. For farmers, it is necessary to deepen their understanding of traditional Chinese medicine and communicate with veterinarians to reasonably prepare traditional Chinese medicine and improve its efficacy. Take pig breeding as an example. In the prevention and treatment of diseases, it can be carried out in different seasons. In the spring of each year, the Qingwen Baidu Powder can be used to prevent and control the cold of pigs; in the summer of each year, the heat relief powder can be used to reduce the occurrence of pigs. The probability of heat stroke; in the winter of each year, Maxing Shigan Powder can be used to reduce the probability of respiratory diseases in pigs. When preparing, it is necessary to strictly follow the instructions, such as the dosage and usage of drugs, to avoid unreasonable preparation that will affect the growth of livestock and poultry animals .

### 2.2 Pay attention to compatibility taboos

Chinese medicinal materials also have more incompatibility in the process of use. Once the incompatibility is not recognized in

the compatibility, it will also affect livestock and poultry. In the application, it needs to be formulated according to the incompatibility, and avoid the use of drugs that can offset the efficacy of the drug. For farmers, they can use the Internet or consult professional veterinarians to understand the incompatibility of Chinese medicinal materials. For example, when using licorice, they must not be used together with seaweed, and when using sulfur, they must not be used together with Pu Nitrite. In order to reduce the chance of incompatibility, it is necessary to choose prescriptions that have been tested as far as possible to avoid random collocation and improve the safety of the use of Chinese medicinal materials. At the same time, when purchasing Chinese medicinal materials, it is also necessary to choose formal channels for purchasing, to ensure that the purchased medicinal materials have relevant test reports, and to avoid purchasing poor quality Chinese medicinal materials, not only can not play a therapeutic effect, but will cause physical damage to livestock and poultry animals.

### 2.3 Control dosage usage

Because there are many types of Chinese medicinal materials, different Chinese medicinal materials are also different in efficacy, and there are obvious differences in usage and dosage. Once there is no reasonable control, it will also affect livestock and poultry. After clarifying the selected Chinese medicinal materials, farmers need to calculate the amount of Chinese medicinal materials based on the actual situation, and the number, age, weight, growth cycle, and disease occurrence of livestock and poultry animals need to be taken into consideration. Calculate the dosage and use it in strict accordance with the prescribed usage. Usually, ruminants use water for filling in the use of Chinese medicinal materials, while other livestock and poultry use mixed feed. If Chinese medicinal materials are used to treat diseases, they can be administered by irrigation; if only Chinese medicinal materials are used to enhance the immunity of livestock and poultry, they can be administered by mixed feed.

### **Conclusion:**

The use of traditional Chinese medicine in the production of livestock and poultry products can effectively improve the prevention and control effect of livestock and poultry diseases, promote the growth of livestock and poultry animals, and improve the quality of livestock and poultry products, which has a very positive effect. In the process of applying Chinese medicinal materials, it is necessary to prepare reasonably, pay attention to incompatibility and control the usage and dosage, maximize the positive role of Chinese medicinal materials in the production of livestock and poultry products, and improve the development of my country's livestock and poultry breeding industry Level.

### **References:**

- [1]Shao Yan, Wang Wei, Pang Heming, et al. Development Prospect of Chinese Herbal Medicine Additives in Meat Sheep Production [J]. Journal of Animal Husbandry and Veterinary Medicine, 2022,41(3):69-70,74.
- [2]Tian Kui, Xu Lidan, Mao Yan, et al. Research Progress on the Function Characteristics of Chinese Herbal Medicine Additives and Their Application in Poultry Production [J]. Feed Research, 2021,44(20):151-153.
- [3] Liu Huanyu, Cui Lianhua, Gao Qingshan, et al. Research Progress on Application Effect of Chinese Herbal Medicine Feed Additives in Laying Hen Production [J]. Feed Research, 2021,44(13):123-125.

### **About the Author:**

Wenfu Dong (1981-), male, Han, graduate student (master's degree), associate professor, research direction is food quality and safety