



## The Results of The Study of the Epizootology of Bovine Infectious Rhinotracheitis and Measures to Combat it In the Farms of the Samarkand Region

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**Abstract:** The article describes the results of long-term research on the epizootology of infectious rhinotracheitis in cattle in some farms of the Republic of Uzbekistan. Information on epizootology, clinical manifestations and pathoanatomical autopsies is presented. Based on the research results, conclusions and practical recommendations are given.

**Keywords:** rhinotracheitis, eruption, virus, pustular vulvovaginitis, conjunctivitis, epizootology, pustular vulvovaginitis, clinical signs, young calves.

### Introduction.

Infectious rhinotracheitis is one of the most common infectious diseases of cattle. Infectious rhinotracheitis - pustular vulvovaginitis (IRT) is an acute infectious disease of cattle, characterized by respiratory tract damage, fever, general depression and conjunctivitis, as well as pustular vulvovaginitis and balanoposthitis in large animals. Belongs to the Herpetoviridae family.

Infectious rhinotracheitis of cattle is widespread in the most important branch of animal husbandry and causes great economic damage. This requires the improvement of existing methods of diagnosis of this disease and the development of modern means of prevention and combating it.

Observations conducted in recent years in livestock farms of the Republic of Uzbekistan showed the prevalence of pneumoenteritis among young animals. One of the most important diseases is infectious rhinotracheitis of cattle, which causes great economic damage to production.

However, reports on modern methods of diagnosing this disease are insufficient. This is one of the important issues facing animal husbandry, especially veterinary workers. Therefore, it is very important to study the epizootology of infectious rhinotracheitis in cattle and to improve preventive and effective measures to fight against them.

**Materials and research methods.** The object of epizootological and clinical study of the number of cattle (600 heads) was "Nortoy Tozhiev Baraka cattle" and "K. Eldor" multi-branch farm in Pstdargom district. Epizootological situation studies and statistical data were used to comprehensively study the causes of epizootic outbreaks and to determine the conditions that promote or prevent the spread of infectious rhinotracheitis of cattle. We investigated the spread of the disease using the serological diagnostic method (BGAR). In order to make a comprehensive diagnosis of infectious rhinotracheitis of cattle, we comprehensively analyzed the epizootic situation, clinical signs, pathologoanatomical examination results and laboratory tests.

**Research results.** According to the results of the conducted epizootological investigation, it was found that preventive measures against infectious rhinotracheitis of animals are not being taken in farms. Countermeasures are not implemented. Inspections for infectious rhinotracheitis of animals are not carried out on farms, which means that the disease is not detected, which increases the risk of spreading the disease.

Cattle are infected with infectious rhinotracheitis regardless of breed and age. The disease is especially severe in young calves. The source of the infectious agent is sick and recovered animals that carry the virus for 6-12 months. As a result of a long study of the epizootological situation in the investigated "Nortoy Tojiev Baraka Livestock" and "K.Eldor" farms, it was shown that characteristic clinical signs were observed in cattle infected with infectious rhinotracheitis, regardless of the age and breed of the animals.

Studies have shown that the disease manifests itself in different seasons of the year, but the highest incidence was observed in the autumn-winter period. The study of epizootic data also showed that the percentage of disease of young animals is directly related to the level of zoohygiene, zootechnical and veterinary-sanitary measures in each individual warehouse. The results of clinical observations revealed the following symptoms in young animals suffering from infectious rhinotracheitis: tears, salivation, runny nose, hyperemia, bleeding on the skin of the nasal glass. There was a dry cough, as well as serous-purulent discharge from the nose and eyes.

No. 0301 of dead calves at the farm "Nortoy Tajiyev Baraka Chervasi"; No. 0440, catarrhal, catarrhal-purulent bronchopneumonia was revealed at the pathanatomical examination. "The same pathological changes were observed when three young calves were dissected at K. Eldor farm. Croupous pneumonia was detected in all cases. We found that 42 young animals were infected with infectious rhinotracheitis when the blood samples taken from calves were examined in the laboratory by the BGAR method. Death was recorded in 7 of the sick calves. Based on the above, we carried out special preventive measures for the remaining relatively healthy young livestock.

The effectiveness of the live culture vaccine against infectious rhinotracheitis, viral diarrhea, parainfluenza-3, and respiratory syncytial infections produced by "BelVitunifarm" OJSC for preventive purposes was tested in these farms.

**Conclusion.** Great economic damage to livestock is caused by diseases of the digestive and respiratory organs of young animals of viral etiology. This damage is associated with a decrease in the reproductive status and productivity of animals, their death, and high costs of treatment and preventive measures.

Timely correct diagnosis of infectious rhinotracheitis and special prevention in farms will significantly reduce the economic damage caused.

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