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Infectious Mastitis Disease Incidence Rates in Dairy Farming in Tashkent Region by Season

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Abstract: This article describes the results of determining the amount of vitamin C in cow's milk and colostrum.

Keywords: Protein, fat, milk sugar, mineral salts, water, organic acids, vitamins, enzymes dichlor phenol, filtrate.

Relevance and necessity of the dissertation topic. Today, dairy cattle breeding, which is the main branch of livestock farming, occupies a leading position in meeting the needs of the world's population in food products and ensuring food security. For the intensive development of this industry, one of the important urgent tasks is to increase the number of highly productive cows, extend their exploitation periods, fully use their genetic potential, and obtain environmentally friendly and high-quality milk and dairy products. Infectious mastitis in highly productive cows is on average 22-60%1, causing significant economic losses due to a decrease in milk productivity and milk quality, calf morbidity, and increased costs for other veterinary and sanitary measures. The timely diagnosis, effective treatment and prevention of mastitis and subclinical mastitis caused by opportunistic pathogens in cattle: staphylococcus, streptococcus, escherichia, pseudomonas, pasteurellosis are urgent problems that are waiting for their solution. [3;5]

In most countries of the world, mastitis infection in cattle breeding practice occurs in 20-25% of cattle during manual milking, and 35-40% during machine milking. [2;4]

It occurs in 17.5% of weaned cows, and in 20-23.7% during the dry period. Due to these diseases, the total amount of milk produced decreases by 15-20%, and its fat content decreases by 0.8-1%. The period of use of high-yielding animals on the farm is reduced to 6-8 years. The sanitary quality of milk decreases, that is, dairy products made from such milk are of poor quality. Cows become infertile. It causes dyspepsia (diarrhea) in young animals and scarlet fever (scarlet fever) when consumed by young children. This leads to a decrease in productivity in cattle, their forced slaughter or death, and increased veterinary costs. In most cases, unfavorable environmental factors negatively affect the resistance of the livestock organism, and also create opportunities for the spread of mastitis pathogens. Diagnostics of infectious mastitis in cattle, effective methods and means of treatment and prevention, determination of the state and extent of the spread of diseases, early diagnosis, modern treatment and systematic measures of control are considered one of the urgent tasks. [1,6,7]

Infectious mastitis is widespread in all livestock farms of our republic, which, in turn, is known from scientific literature. Despite the fact that in the 80s-90s of the last century, the course of this disease, its diagnosis, treatment, and the importance of drugs were studied by some researchers in all regions of the republic, with the passage of time and the emergence of a new system in livestock farming, it is now an urgent task to study the epizootological situation of infectious mastitis in cattle with clear evidence and guidelines, to develop measures for the treatment and prevention of the disease, and to introduce it into veterinary practice. It has been determined that the incidence of infectious mastitis in

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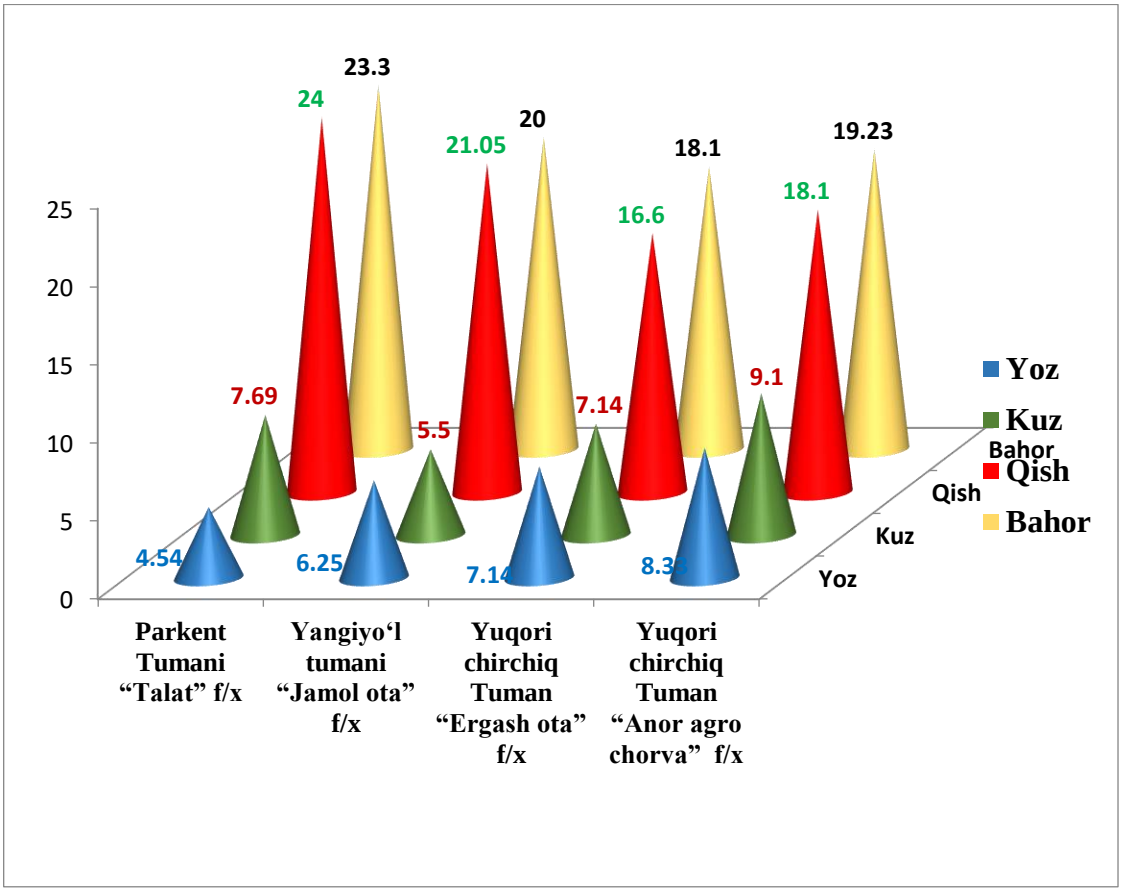
cows among 211 million cattle in all countries of the world is about 40%, including 8% to 32% in our country's livestock farms. This disease negatively affects the milk yield of cows, the technological quality of milk, and often causes the unfitness of dairy cows due to atrophy of the mammary glands.

Infectious diseases are treated with various antibiotics, sulfonamides, and other drugs. However, before using these drugs, it is necessary to determine the sensitivity of pathogens to antibiotics and other antibacterial drugs. Using infectious diseases for treatment without studying their sensitivity to antibacterial drugs does not give a good result. Therefore, before treating cows with infectious mastitis, our research has studied the sensitivity of their pathogens to antibacterial drugs: staphylococcus, streptococcus, enterococcus, escherichia, proteus, citrobacter, and pseudomonas. The sensitivity of staphylococci, streptococci, enterococci, Escherichia, Proteus, and pseudomonas to penicillin, streptomycin, sulfadiazine, levomycetin, tetracycline, enrofloxacin, kanamycin, monomycin, polymyxin, erythromycin, oleandomycin, tylosin, and anti-mastitis drugs: masticane and masticide was studied using the indicator disk method. Sinalay If the zone of inhibition of growth of the culture is from 15 mm to 25 mm, it indicates medium susceptibility, if it is more than 25 mm, it indicates susceptibility, the absence of a zone of inhibition of growth indicates that the microorganism is resistant to this or that antibiotic. The results of testing the sensitivity of the above-mentioned staphylococci, streptococci, enterococci, escherichia, proteus and pseudomonads to antibacterial drugs.

Research object. The experimental part of the scientific research is planned for 2021-2023 and was carried out at the “Talat” farm in the “Bo‘ston” neighborhood of the Parkent district of the Tashkent region and the “Jamol ota” farm in the Yangiyul district of the Tashkent region, the “Ergash ota” LLC livestock farm in the Yukorichirchik district, and the “Anor-agro chorva” farms in the Yukorichirchik district. In this case, the preparations mastisan, mastopret, gentam, ketoject, perfoceft, and for early diagnosis, the reagents mastoprim, mastidiagnosis, kerbatest, mastidine, and dimastidine were used to identify the disease.

INCIDENCE OF MASTITIS IN CATTLE FARMS IN THE DISTRICTS OF TASHKENT REGION



During our research, we studied the incidence of infectious mastitis in experimental farms by season, and found that 4 out of 25 cows (24%) that gave birth in the winter months, 7 out of 30 cows (23.3%) that gave birth in the spring months, 1 out of 22 cows (4.54%) that gave birth in the summer months, and 2 out of 26 cows (7.69%) that gave birth in the fall months were infected with infectious mastitis.

During our inspections at the Jamol Ota farm in Yangiyul district of Tashkent region, 19 cows that gave birth in the winter months were examined, and 4 of them had 21.5% of the cows, 5 of them had 20% of the cows that gave birth in the spring months, 1 of them had 6.25% of the cows that gave birth in the summer months, and 1 of them had 15.5% of the cows that gave birth in the autumn months. At the Ergash Ota farm in the Yukorichirchik district of Tashkent region, 18 cows that gave birth in the winter were examined and 3 of them (16.6%), 4 of them (18.1%), 1 of them (7.14%) and 1 of them (7.14%) were diagnosed with infectious mastitis. At the Anor Agro farm in the Yukorichirchik district of Tashkent region, 22 cows that gave birth in the winter were examined and 4 of them (18.1%), 5 of them (19.23%), 1 of them (8.33%) and 1 of them (9.1%) were diagnosed with infectious mastitis.

CONCLUSION

1. During our research, it was proved that 54.96% of staphylococci, 35.03% of streptococci and 7.01% of other types of microorganisms are present in milk with infectious subclinical mastitis.
2. As a result of bacteriological tests, 53.85% staphylococci, 38.46% streptococci and 7.69% other species (pseudomonas, escherichia, proteus, citrobacteria and enterobacteria) were found in the milk of cows with clinical mastitis under the care of the population. strains were determined to be isolated.
3. As a result of our research, it was shown that the main causative agents of infectious mastitis in cattle are staphylococci and streptococci, and their etiological role is 92.82% in clinical mastitis, and 92.82% in subclinical mastitis. It was found to be 94.99%.

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