

The Prevalence of Environmental and Contagious Bovine Mastitis, Risk Factors Associated with Feed Supplements, Farm and Milking Hygiene in Albania Dairy Cattle

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Abstract:

Background: Despite the existence of a traditional mastitis control program, subclinical mastitis continues to be the most common infectious disease in dairy cattle. Typically in developed countries, a national mastitis council is established to address udder health issues. Despite subclinical mastitis is a significant problem in Albanian cattle farms, there is no dedicated program to address mastitis in dairy farms, neither is there an organizational framework to establish a mastitis council.

Aim: Assessing the prevalence of subclinical mastitis, identifying the type of bacteria involved, testing the antibiotic susceptibility of the primary pathogens, and evaluating the risk factors that influence the incidence of subclinical mastitis.

Methodology: The California Mastitis Test was used to screen 35 small to medium-sized dairy farms for the presence of subclinical mastitis as part of a cross-sectional investigation. Samples of milk and feed were collected together with farm metadata to determine mastitis risk factors. Samples of milk and feed were laboratory tested, for bacteria, their antibiotic susceptibility and mineral content, respectively.

Results: The overall prevalence of subclinical mastitis is 59.5% (95% CI 52.8 to 65.9%). The prevalence among dairy herds was 97.1% (95% CI 85.5 to 99.5%), meaning that 34 out of 35 dairy farms tested positive for subclinical mastitis. The dairy cows are impacted by environmental and infectious pathogens, according to bacteriological findings. *Staphylococcus aureus* was the most common isolated bacterium, followed by *Pseudomonas aeruginosa*, *Escherichia coli*, and *Enterobacter* species.