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Control of mastitis in dairy sheep - a review (Part I)

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Abstract

The economic losses caused by mastitis in dairy sheep are very significant and the technological quality of milk from ewe has become more important, particularly in the Mediterranean area with great tradition of production and consumption of cheeses made with raw milk obtained from sheep. The most important aspects regarding the impact of mastitis on milk and dairy products, especially cheese are reviewed here, studying the compositional changes associated with milk somatic cell counts (SCC), assuming particular relevance the pathophysiology of mastitis, etiology, nature and possible sources of contagion. The review covers descriptive the epizootiological measures – incidence, prevalence and persistence, the relationship between the CCS and sub-clinical mastitis; the use of CCS for indirect estimation of the variation in the incidence of sub-clinical mastitis; and analytical epizootiological measures - reservoirs of primary etiological agents; animals carriers of the major etiologic microorganisms, making a comparison with the dairy cow more investigated in this context. The susceptibility factors - genetic and environmental factors are also described. The importance of comparative and microbiological analysis, Somatic Cell Counts and the Mastitis Test Californian (TCM) is highlighted and also the major mastitis control measures recommended in the case of dairy sheep: optimization of milking hygiene; teat disinfection after milking; treatment of clinical cases with antibiotics, antibiotic selective drying, reform of animals with chronic infections, proper use of the machine milking; vaccination, hygiene environment, and the animal breeding.