

Title: INFECTIOUS ETIOLOGY OF SUBCLINICAL MASTITIS IN DIFFERENT BREED OF SHEEP

Author: Fim Júnior, G.A.¹, Vaso, C.O.², Lopes, N.S.S.², Pilon, L.E.¹, Santana, R.C.M.³, Zafalon, L.F.³

Institution: ¹ UNESP - Universidade Estadual Paulista (Via de Acesso Prof. Paulo Donato Castellán, Vila Industrial - 14884-900 - Jaboticabal - SP); ² UNICEP – Centro Universitário Central Paulista (Rua Miguel Petroni, 5111 - Vila Alpes - 13563-479 - São Carlos, SP); ³ Embrapa Pecuária Sudeste (Rodovia Washington Luiz, Km 234, Caixa Postal: 339 - 13560-970 São Carlos, SP).

Abstract:

Mastitis is an inflammation of the mammary gland characterized for physical-chemical and microbiological alterations of milk. The half mammary can be partial or totally destroyed when there is an evolution for a clinical picture, depending of the infecting microorganism, influencing negatively in survivor and the weight gain of the lamb. The objectives of the study were to investigate the occurrence of subclinical mastitis and identify the etiological agents in half mammary of sheep with aptitude for meat production. The flock sheep was located in a property in Sao Carlos-SP, formed for Santa Inês, Texel, Ile-de-France and Dorper breeds. The physical exam of mammary half and the *California Mastitis Test* (CMT) were realized for the preliminary diagnostic of mastitis, in conjunction with microbiological analysis for the confirmation of infectious disease etiology. The total of 1457 half mammary was investigated, belonged to 414 sheep, of which 203 (13.9%) presented subclinical mastitis. The disease was highest in Santa Inês (21.3%), followed for Ile-de-France (9.4%), Texel (5.1%) and Dorper (4.4%). Coagulase-negative *Staphylococci* sensitive to novobiocin (CNSN) were the microorganism more frequent (46.8%), followed for *Streptococcus* spp. (19.7%), coagulase-negative *Staphylococci* resistant to novobiocin (CNSRN) (11.3%), enterobacteria (5.4%) and *Corynebacterium* spp. (5.4%). Coagulase-positive *Staphylococci* (CPS), *Staphylococcus aureus* and microorganism in association were also isolated (11.2%). Among the species of coagulase-negative *Staphylococci* (CNS) identified, *S. xylosus* (87.7%) was the more frequent, followed for *S. saprophyticus* (7.4%), *S. capitis* (1.5%) and *S. simulans* (0.8%). We observed that the technique for identification of CNS species by fermentation of carbohydrates was not capable to identify 2.5% of the samples. There was occurrence of cases of subclinical mastitis in all breeds. The greatest number of cases was in Santa Inês sheep, which the etiologic agents of more frequency were CNSRN, described as responsible of reduction in production of milk. Among the CNS found in Santa Inês, *S. xylosus* (87.7%) were more frequent, in addition of *S. saprophyticus* (5.8%), *S. capitis* (1.9%) and *S. simulans* (1.0%). In others breeds studied were isolated *S. xylosus* and *S. saprophyticus* in the Ile-de-France sheep, while in the Texel and Dorper just *S. xylosus* were isolated.

Keywords: subclinical mastitis, microorganism, sheep.

Development agency: FAPESP (Process 2013 / 23054-9)