

Accepted Manuscript

Title: Slime-producing staphylococci as causal agents of subclinical mastitis in sheep

Authors: N.G.C. Vasileiou, D.C. Chatzopoulos, D.A. Gougoulis, S. Sarrou, A.I. Katsafadou, V. Spyrou, V.S. Mavrogianni, E. Petinaki, G.C. Fthenakis



PII: S0378-1135(18)30895-2
DOI: <https://doi.org/10.1016/j.vetmic.2018.08.022>
Reference: VETMIC 8054

To appear in: *VETMIC*

Received date: 26-7-2018
Revised date: 22-8-2018
Accepted date: 22-8-2018

Please cite this article as: Vasileiou NGC, Chatzopoulos DC, Gougoulis DA, Sarrou S, Katsafadou AI, Spyrou V, Mavrogianni VS, Petinaki E, Fthenakis GC, Slime-producing staphylococci as causal agents of subclinical mastitis in sheep, *Veterinary Microbiology* (2018), <https://doi.org/10.1016/j.vetmic.2018.08.022>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Slime-producing staphylococci as causal agents of subclinical mastitis in sheep

N.G.C. Vasileiou¹, D.C. Chatzopoulos¹, D.A. Gougoulis¹, S. Sarrou², A.I. Katsafadou¹, V. Spyrou³, V.S. Mavrogianni¹, E. Petinaki², G.C. Fthenakis^{1*}

¹ *Veterinary Faculty, University of Thessaly, 43100 Karditsa, Greece*

² *University Hospital of Larissa, 41110 Larissa, Greece*

³ *Department of Animal Production, Technological Educational Institute of Larissa, 41110 Larissa, Greece*

* Correspondence: gcf@vet.uth.gr

Highlights

- Prevalence of subclinical mastitis in sheep caused specifically by slime-producing staphylococci was studied.
- 2,918 ewes in 111 flocks across Greece were sampled.
- 708 staphylococcal strains obtained from milk samples were tested.
- Prevalence of subclinical mastitis caused by slime-producing staphylococci was 0.153.
- Milking mode and flock management system were risk factors associated with increased prevalence.

Abstract

Hitherto, research work in slime production from staphylococcal strains of mastitis origin has focused in laboratory properties of these organisms. Objective of present work was to study subclinical mastitis in sheep, caused specifically by slime-producing staphylococci: to investigate its frequency and to identify potential factors playing a role therein. Slime production was evaluated in 708 staphylococcal isolates recovered from cases of subclinical mastitis in a field study in 2,198 ewes performed in an extensive countrywide field investigation across Greece. Isolates were studied by means of microbiological and molecular methods. Of these strains, 262 were characterised as slime-producing, 227 as weak slime-producing and 219 as non slime-producing. Most frequently detected genes were *eno* and *icaB*; *Staphylococcus aureus* possessed more genes than coagulase-negative strains; greater number of genes was detected in slime-producing than in weak slime-producing or non-slime-producing strains. Subclinical

Download English Version:

<https://daneshyari.com/en/article/10137390>

Download Persian Version:

<https://daneshyari.com/article/10137390>

[Daneshyari.com](https://daneshyari.com)