



IDENTIFICATION OF VIRULENT PASTEURELLA MULTOCIDA STRAINS FROM SHEEP AND GOATS WITH PNEUMONIA BY MOUSE PATHOGENICITY TEST IN SHIRAZ-IRAN

JAMALI H¹, TAHAMTAN Y^{2*}, SARCAHANI M¹, MOEIN F¹, POURDANESH MA¹, HAYATI M¹, NAMAVARI MM¹, KARGAR JAHROMI Z⁴ AND RAHMANIAN E³

1: Department of Microbiology, Jahrom Branch, Islamic Azad University, Jahrom, Iran

2: Razi Vaccines and Serum Research Institute- Shiraz

3: Department of Anatomy and Embryology, International branch, Shiraz University, Shiraz, Iran

4: Zoonoses Research Center, Jahrom University of Medical Sciences, Jahrom, Iran

***Corresponding Author: E Mail: h.jamali1970@gmail.com; Tel: +989171311319**

ABSTRACT

To identify the virulent strains of *Pasteurella multocida*, four hundred samples were collected from nasal and tonsils of sheep and goats with pneumonia of different regions in Fars province. The results of the cultural, morphological and biochemical characteristics identified 38 isolates of *P. multocida*. The virulent strains were proved by mouse pathogenicity test in two steps and indicated that 25 isolates are belong to the virulent strains. In this study 6.25 percent of pneumonia in sheep and goats was related to the *P. multocida*. In addition outbreak of pneumonic pasteurellosis was more in sheep and warm regions.

Keywords: Pasteurella Multocida, Fars, Sheep, Goat

INTRODUCTION

Pasteurella multocida a gram-negative coccobacillus, is a member of the normal flora of the upper respiratory and gastrointestinal tract of many domestic and wild animals [1]. *P. multocida* causes a number of diseases in various domestic and

wild animals resulting in heavy economic losses. The most important diseases are haemorrhagic septicaemia (HS) and septicaemic pasteurellosis in cattle and buffaloes; pneumonia and septicaemic pasteurellosis in sheep and goats; pneumonia,