

Association between Mannheimia haemolytica infection with reproductive physiology and performance in small ruminants: a review

ABSTRACT

Mannheimiosis or pneumonic pasteurellosis commonly occurs in small ruminants. Mannheimiosis is caused by Mannheimia haemolytica (*M. haemolytica*) a Gram-negative coccobacillus producing acute febrile and infectious condition resulting in death of animal if not diagnosed and treated promptly. *M. haemolytica* serotype A2 is a commensal of the nasopharynx, gaining access to the lungs when host defenses are compromised by stress or infection in small ruminants. Till date, there is a vast literature and research that has been conducted on the pathogenesis of *M. haemolytica* invariably on respiratory system and its related immune system and mechanisms. From the clinical point of view, infection or diseases involving vital organs will systemically affect the production and performance of the infected animal. Therefore, there is a huge gap of knowledge and research to answer the question whether there is any association between *M. haemolytica* infection with reproductive physiology and performance in small ruminants and how it affects the productivity level. This review will explore the possibilities of involvement and new potential research to be carried out to determine the involvement of male and female reproductive system with *M. haemolytica* infection among small ruminants.

Keyword: Mannheimia haemolytica; Performance; Physiology; Pneumonic pasteurellosis; Reproductive; Small ruminants