

Comparison of anti-leptospira antibodies by microscopic agglutination test in ruminants and equines

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Abstract

Leptospirosis as a zoonotic disease, is characterized by fever, jaundice, abortion and hemoglobinuria. It is widespread and the determination of the dominant serotype in the animal species of each region accelerates the control and prevention program. The 862 blood samples were collected from cows (Holstein and Simmentals), buffaloes, sheep, goats, horses and mules. Sera were examined by microscopic agglutination test (MAT) with six live serotypes. The overall prevalence was 19.54%, with the highest (37%) and the lowest (6.6%) in Holsteins and mules, respectively. Meanwhile, 25.4% of buffaloes, 19.3% of sheep, 13.7% of Simmental, 19.2% of goats, and 12.3% of horses were positive. The highest and lowest frequency was for pomona and canicula, respectively. In all studied species prevalence of infection in male was higher than in female but not significant. In ruminants, the prevalence of infection increased with age. In conclusion, leptosiral infection in ruminants was higher than in equidae and in ruminants, Holstein cattle was higher than the others, therefore vaccination in Holstein cattle is necessary to prevent the more infection in animals and also in human beings.

Key words: Ruminants, Equines, Leptospira, Pomona, Gender, Age

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