

SEROEPIDEMIOLOGICAL STUDY OF *BLUETONGUE* VIRUS IN THE POPULATION OF IRAN DOMESTIC RUMINANTS

Vahid Otarod, Mehran bakhshesh and Arsalan Moezzie
Razi Institute, Iran

Bluetongue is one of the infectious diseases of ruminants which transmit by insects. It causes heavy economic losses to countries and is very important in terms of livestock business and livestock products. Due to the World Organization for Animal Health (OIE) notifications, the range of the disease was limited to 35° South and 40° North, but then due to climatic changes the carrier's activity increased and the disease spread to other areas including Europe. The disease in Iran has been reported clinically from many years ago, however, due to the nature of the disease in the country, its real face and its heavy economic losses are still unknown. In the present study, the prevalence of the virus in the country which is based on completely randomized sampling method determined regarding type of livestock and age and sex of the animals. The results of this study revealed that 92.95% of the epidemiological units of the country have different levels of antibodies (mostly high grade) against the virus. The prevalence of antibody by type of animals is as follows: cattle 24.5%, sheep 55.7% and goat 64.3%, which their difference was statistically significant. According the role of environmental factors affecting the propagation and survival of the virus carrier, as well as the effects of livestock displacement on the epidemiology of the virus, efforts were made to analyse the antibody quantity using specific statistical methods in the epidemiological units studied to determine high-risk units with regard to contacting the virus in the geography of the country. The results of this study indicate the high prevalence of the virus in the population of the livestock of the country and the existence of a large geographic area (near the west of the country) with high risk due to suitable conditions for the propagation and survival of the virus carriers and the presence of focal lines with the risk of entry and survival of the infection through unnecessary livestock movements. It is recommended to implement more research on the status of the disease especially isolation of the virus and doing comparison with common strains in the region and other parts of the world for better understanding the situation of the disease and its carriers.

vahid.otarod@gmail.com