PRESENCE OF ANTILEPTOSPIRA ANTIBODIES IN BEEF CATTLE FROM HUAJINTEPEC, GUERRERO, MEXICO

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Bovine leptospirosis is economically important because it affects bulls' and cows' reproductive behavior. In Huajintepc, Guerrero in Mexico there are several estates raising beef cattle, mainly cross breed (Cebu x Swiss) hybrids. In the area there is a lack of information about the presence of leptospirosis in all animal species. The aim of this study is to determine the presence of seropositive cattle in some ranches of Huajintepec and to identify the different serovars of Leptospira spp. In total 15 bulls and 143 cows from 16 ranches were sampled. In the microagglutination test 12 different serovars were used and sera were considered positive ≥ 1:100. Seropositive of 91% of the bovine sampled were positive and the most frequent serovars were Grippotyphosa (63.8%), Tarassovi (13.8%), Icterohaemorrhagiae y Pomona (4.6%), Hardjo strain H-89 isolated in Mexico (3.8%), Portland-vere strain Sinaloa ACR isolated in Mexico (3.1%), Hardjoprajitno and Bratislava (2.3%), Icterohaemorrhagiae strain Palo Alto isolated in Mexico and Wolffi (0.8%). This result indicates that the seroprofile of the cattle studied is different from other regions of Mexico because the serovars Hardjo and Wolffi belonging to the Sejröe serogroup are not the most frequent in Huajitepec. Grippotyphosa serovar was the most frequent one. On the one hand, this serovar is related to wild animals that are its natural reservoirs. For this reason, some research on these animals is needed in order to understand distribution of leptospirosis in this area. On the other hand, Tarassovi is related with bovines and pigs, so an analysis of swine population will contribute to the epidemiological control of bovine leptospirosis. The results gathered in this study will be useful to determine the best vaccine to prevent leptospirosis in this area.