A B S T R A C T

In Sharkia Governorate 2559 animals' blood samples (967 cows, 462 buffaloes, 591 sheep and 539 goats) were collected and examined serologically by Buffered Acidified Antigen Plate Test (BAPAT), Rose Bengal Plate Test (RBPT), Micro-Plate Agglutination Test (M.P.A.T.) and Rivanol Test on positive serum to M.P.A.T. to detect Brucella infection. (251) humans of different occupation, age, sex and duration of contact with animals, and (67) from Zagazig fever hospital were examined serologically by BAPAT, RBPT, M.P.A.T., 2MET and ELISA for detection of Brucella infection. The results of BAPAT were 6.72%, 5.62%, 7.61% and 10.95% in cows, buffaloes, sheep and goats respectively. The results of RBPT were 6.51%, 5.19%, 6.77% and 8.91% in cows, buffaloes, sheep and goats respectively and in human was 36.8%. The results of M.P.A.T were 5.38%, 4.11%, 5.58% and 7.61% in cows, buffaloes, sheep and goats respectively and in human was 33.96%. The results of 2 MET were 32.4% in humans while ELISA was 37.74%. Br. melitensis biovar (3) was isolated from both man and animals. Prevalence of infection among humans was studied according to occupations and their different characteristics.

KEY WORDS: Brucellosis, ELISA, Micro-Plate Agglutination, Rose Bengal test, Serological tests