



Effect of Sex, Age and Location on Prevalence of *Brucellosis* among Goats in Baghdad, Iraq

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Abstract: The present study aimed to estimate the prevalence of brucellosis in goat in Alrusafa and Alkarkh by using ELISA and serological test (Rose Bengal plate test) along with estimation of the IgG antibodies titer and interleukin-10 to evaluate these two markers for detection of disease by using the receiver operation characteristics curve. A total of 96 local goats (11 males and 85 females) were chosen randomly. Blood samples were collected from jugular veins of these goats in order to diagnose brucellosis. Prevalence of Brucellosis was significantly high by using ELISA (39.6%) as compared with RBT 33.3%. Highest sensitivity rate was to IL-10 (84.21%) followed by IgG (78.95) and RBT (71.05). The highest specificity rate was detected for IgG (82.76%) followed by RBT (81.03) and IL-10 (74.14). The infection rate of goat was significantly higher in Al-Resafa (48%) as compared with Al-Karkh (35%). The Odds Ratio (OR) was 2.98. Goats in the age of about 25 months recorded the highest infection rate (50%) while goats in age of 12 and 12-24 month recorded 28% and 20% respectively. The effect of sex on the infection rate showed significant difference between females and males.

Keywords: *Brucellosis, Goats, ELISA, IgG, IL-10*
