



Molecular investigation of Bovine Ephemeral Fever in Iraq

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Abstract

Bovine ephemeral fever (BEF) is an important viral disease of cattle and water buffaloes that causes severe economic losses. This study sought to detect BEF virus in Babylon Province by using

reverse transcriptase PCR (RT-PCR) during the period from May-September 2012. During the BEF outbreak, 150 blood samples were collected from cross breed cattle of different ages, from 4 different locations in Babylon Province. Only 37 cases (24.44%) showed positive result for BEF in RT-PCR, with significant result ($P < 0.05$) between positive and negative cases. It was proven that 6 blood samples were positive by using RT-PCR at age of less than 1 year, while the higher percentage 37.83% of positive cases was reported at the age of >1 year - 3 years. The results showed significant differences of ($P < 0.05$) between all positive cases in different age groups. According to the sex, the result showed that the highest percentage of BEF virus infection was reported in females (14%) and the lower percentage (10.66%) was in males. Statistically, there was no significant differences between female and male of all positive cases. The results of this study showed also variation in the distribution of the positive cases between the 4 different locations in Babylon Governorate. The percentage of positive cases was 30.10% and 16.66% in Al-Qasim Municipality and A-Madhatia respectively while the percentage of Al-Taleaha and Al-Hashemia Municipalities was 14.28%.

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