DETECTION OF COXIELLA BURNETII IN BOVINE MILK SAMPLES USING POLYMERASE CHAIN REACTION

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Abstract:

Q fever is a highly contagious zoonotic disease caused by the intracellular pathogen Coxiella burnetii. It colonizes mammary glands of cattle and is shed in milk. This study was aimed to detect C. burnetii in raw bovine milk using Polymerase Chain Reaction (PCR). A total of 100 random bovine milk samples were collected from both dairy farms and shops in Assiut City, Egypt (50 samples each). A pair of primers served to amplify a targeted 448-bp fragment of genomic DNA. Our investigation showed that 22(22%) of samples were found to be positive for C. burnetii. This result proves that cattle are an important reservoir for C. burnetii organism and raw milk may be a main source of infection to humans.

Keywords:

Coxiella burnetii, milk, PCR

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