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Detection of Verotoxigenic *E. coli* O157:H7 in Raw Milk Using Duplex PCR in Basra City- Iraq

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Abstract

One hundred fifty milk samples were collected from three different markets in Basra city during a period extend of from November 2010 to March 2011. All samples were cultured in selective media to detect the presence of non-sorbitol fermenting colonies (NSF) 86 (57.34%) isolates were found non-sorbitol fermenting *E. coli*. Latex agglutination test was used to detect serotype O157:H7 in non- sorbitol fermenting isolates for 13 (27.08%) isolates. Multiplex PCR were done to all *E. coli* O157:H7 isolates and the result showed 7/150 (4.67%) from raw milk were positive to this test. All the multiplex PCR positive *E. coli* O157:H7 isolates were positive to VT1 gene which was observed in 100% except one isolates which was positive to (VT1and VT2) genes at 14.28% from 7 isolates of raw milk samples.

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