



Diagnosis of viral causative agents in neonate small ruminant using rapid card test

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Abstract

Diarrhea in lambs and goat kids is caused by various infectious agents. It may be occurred alone or in combination with each other's. The more common viral agents are including rotavirus, coronavirus, astrovirus and

calicivirus that lead to diarrhea in neonate small ruminant. This study intended to detect the viral agents of lambs and goat kids diarrhea in Al Muthanna province using rapid diagnostic Card test. One hundred fifty fecal samples (100 lambs and 50 kids) were collected from various areas in Al Muthanna province. One-step rapid field diagnostic Card test (Combo /Certest) was used for diagnosis the presence viral agents in fecal samples that collected from diarrheic animals. The viral agents were identified in 140 out of 150 at percentage 93.6 % of examined fecal samples, while 10 out of 150 at percentage of 6.4% revealed negative results in rapid card test. The percentages of viral infection were 123 (87.857 %), 2 (1.428 %) and 4 (2.857%) respectively for rotavirus, adenovirus and norovirus respectively. Besides, the percentages of mixed viral infections with rotavirus & adenovirus and norovirus, rotavirus & adenovirus, and rotavirus & norovirus were 6 (4.385 %), 3 (2.142 %), and 2 (1.428 % respectively. In conclusion, this study approved that one-step rapid diagnostic Cards test was efficient to diagnosis different viral agents in diarrheal lambs and goat kids. The author recommends to use this test to diagnosis viral diarrheal infection in the field to reduce the long diagnostic procedures that used routinely in order to apply the rapid preventive program to decrease the economic implication in the large number herds of sheep and goat.

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