

## Letter to the editor

### NEW OUTBREAKS OF BOVINE CORONAVIRUS IN DAIRIES OF HAVANA

Dear editor:

Bovine coronavirus (BCoV) is the etiological agent of the winter dysentery (WD), a seasonal onset disease, characterized by explosive diarrhoea, animal loss condition, sudden decrease in milk production and respiratory symptoms, reaching morbidity values of 100% and low mortality (1-2%).

After the first report of BCoV in Cuba a control program was adopted based on hygiene and biosafety measures resulting in a disease control in 2006. However, after this date it has been demonstrated by hemagglutination (HA) and hemagglutination inhibition (HAI) techniques, the presence of BCoV as the etiological agent of diarrhoeal outbreaks with clinical and epidemiological features similar to WD, occurring in adult cattle from Havana dairy farms, on January 2008 and January and February 2009.

The emergence of new outbreaks in dairy farms, where the previous infection with BCoV did not occurred, may indicate a new introduction in the analyzed herds. There are several current ways of WD transmission: through animals from other herds with history of acute and persistent subclinical WD infection or via mechanical transmission by birds, dogs and even man himself. The frequency of outbreaks in Havana Province has been more than in other regions. It could be speculated about the influence of its geographical conditions, resulting in lower temperatures compared to the rest of the country in winter, in the occurrence of outbreaks. Molecular epidemiological studies are in course in order to reveal which of the several ways of BCoV transmission or geographic conditions are influencing on the so increasing frequency of WD in Cuba.

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