Letter to Editor

ISOLATION OF Bordetella avium IN WHITE LEGHORN HENS IN CUBA: FIRST REPORT

Dear Editor:

The animal bacteriology laboratory of the National Center for Animal and Plant Health has worked on the isolation, identification and characterization of bacteria associated to pathological lesions of avian respiratory tract. Recently, pure cultures of small, smooth, greyish-white convex and non-haemolytic colonies were obtained from paranasal sinuses, trachea and lungs exudates by streaking on blood agar. Clinical samples were taken from a respiratory syndrome outbreak in a layer farm in western part of the country.

Three isolates were Gram negative rods, no positive to *Ornithobacterium rhinotracheale* PCR and grew with a particular colour change in MacConkey Agar. These isolates were negative to various biochemical tests, and the numerical profile (index) API NE was 0000063, which corresponds to *Bordetella avium* with an identification rate of 95%. This bacterium is an important pathogen of young turkeys and an opportunistic pathogen in young chickens, associated to the avian respiratory disease complex and produces great economic losses in the poultry industry.

Other bacterial isolates obtained in the same study were identified as *Ornithobacterium rhinotracheale* and *Escherichia coli* by molecular and biochemical methods.

This is the first report about the incidence of Bordetella avium in Cuba.

Futures studies about this pathogen and its interaction with other bacterial species affecting poultry will be carried out.

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