Seroprevalence of avian metapneumovirus A and B in unvaccinated broilers in Brazil

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Brazil has faced serious health problems in poultry farms, especially in broilers. Metapneumovirus (AMPV) is an important pathogen involved in diseases of the respiratory complex of broilers although it is very neglected by the sector. Its damage goes beyond respiratory symptoms and the agent can be associated with respiratory syndromes, where it can primarily open doors to bacteria, as is the case of colibacillosis, the association of these two diseases can cause serious damage in slaughterhouses, increasing condemnations for airsacculitis, septicemia among others at very high levels. The objective of this work was to determine the seroprevalence of Metapneumovirus A and B in unvaccinated broilers in Brazilian territory. We selected 100 flocks of broilers distributed in different states in the national territory, based on their productive proportionality, 60% of the samples were collected in the South region, the remaining 40% were collected in the Southeast, Midwest and Northeast regions from Brazil. The flocks were selected based on their history of respiratory problems and the age of collection was performed close to the animals' slaughter. On average 25 birds had their blood sampled for serological evaluation of AMPV A and B using Elisa using the Bio-Check® kit. A total of 20% of the evaluated samples showed against AMPV A or B, this positivity distribution was concentrated in the southern region of Brazil, where 30% (number of positive flocks) of the positive samples were from the state of Santa Catarina and the other 70% were samples from the state of Paraná. The AMPV is present in Brazilian poultry flocks, mainly in regions with a high population density of broilers, pointing to the need for management and strategies to face AMPV in poultry.