**INFECTIOUS BRONCHTIS ELISA ANTIBODY TITERS AS INDICATOR OF PRODUCTIVE IMPACT IN NATURALLY INFECTED BROILER FLOCKS**

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Infectious bronchitis (IB) virus affects respiratory and renal systems leading to poor production performance and increased airsacculitis condemnation rates at the slaughterhouse. The BR-I variant strain (GI-11) is highly prevalent and has a high and wide distribution in South America, especially in Brazil. Usually, high ELISA antibody titers are found in broiler flocks severely affected by IB. A correlational study was conducted between the humoral immune response of naturally challenged flocks and farm and slaughterhouse performance parameters affected by IBV. IB antibody titers were quantified by IDEXX ELISA kit of twenty 6-week-old broiler flocks, which were detected positive for the presence of BR-I variant virus by RT-PCR. The production parameters and condemnation causes of the twenty flocks were analyzed for detection of association using the Pearson correlation coefficient. As expected, flocks presenting higher mortality and airsacculitis condemnation rates had the highest ELISA titers. A positive association was found between ELISA GMT and late mortality (after 35 days of age), transportation mortality (during transportation from the farm to slaughterhouse), and airsacculitis condemnation rate. The Pearson correlation coefficient indicated strong and medium linear association among the analyzed parameters (p<0,05): late mortality (0,78), transportation mortality (0,47) and airsacculitis rate (0,69). The results show that in cases of high IBV seroconversion caused by field challenges, the effect of the IBV infection on mortality and airsacculitis rates is more accentuated.