

Field comparison of broilers zootechnical results between vaccines for Gumboro disease, immunocomplex strain V877 and vaccine with strain M.B.

DIRCELIO VANDRE NASCIMENTO JUNIOR¹, Eduardo Correa Muniz², Gleidson Biasi Carvalho Salles², Antônio José de Lima Neto³, Josias Rodrigo Vogt⁴, Camila Marinelli Martins⁵

¹Zoetis, ²Zoetis (Aves) , ³Zoetis (Técnico) , ⁴Zoetis (Laboratório Saúde Animal) , ⁵AAC&T Consultoria em Pesquisa Ltda (Pesquisa)

e-mail: dircelio.junior@zoetis.com

There are many options for immunization against Gumboro disease in Brazilian poultry health market, live replicating vaccines applied in hatcheries are one of the most technological tools and with good deliveries in field. These vaccines have as main qualities the ability of vaccines viruses to occupy the bursas of Fabricius and to spread vaccine strains in houses, making this environment with lower sanitary pressure. The aim of this study was to compare the effects of two live vaccines applied in hatcheries on broilers zootechnical results in field. The study was developed in a broilers company located in the city of Pará de Minas in the state of Minas Gerais. The two treatments of the study, eggs vaccinated with the immune complex vaccine with strain V877 and eggs vaccinated with live vaccine with strain M.B., were applied weekly in an alternating order, it means that in one week the vaccination was with one treatment and the following week with the another treatment for 16 weeks. Approximately 7 million eggs were vaccinated with the vaccines from the treatments in this study. There was a statistically significant difference between the treatments in the average slaughter weight (V877: 2.98 kg and M.B.: 3.04 kg, $p=0.001$), in the daily weight gain (V877: 64.89 g and M.B.: 63, 64 g, $p=0.002$) and in the IEP (production efficiency index) (V877: 341.04 and M.B.: 335.12, $p=0.005$). And there were no statistical differences between treatments in mortality (V877: 6.06 and M.B.: 6.23) and adjusted feed conversion (V877: 1.735 and M.B.: 1.755). Birds that were vaccinated in egg with the immune complex vaccine with strain V877 had better zootechnical results than birds vaccinated by the same route with the vaccine with strain M.B. This difference between the performances of the vaccines can be explained by the different characteristics existing between them, such as the presence of antibodies forming the immune complex with the V877 strain, which does not happen with the M.B. strain, and the different degrees of pathogenicity, aggressiveness to the bursa of Fabricius, present between these two vaccine viruses.