Anticoccidial sensitivity test performed on broiler company in Brazil Southeast region with Eimeira maxima.

DIRCELIO VANDRE NASCIMENTO JUNIOR[1], Eduardo Correa Muniz[2], Gleidson Biasi Carvalho Salles[2], Antônio José de Lima Neto[3], Josias Rodrigo Vogt[4], Giovanna Fernandes Esteves[5], Camila Casagrande Camporez[6]

[1]Zoetis, [2]Zoetis (*Aves*) , [3]Zoetis (*Técnico*) , [4]Zoetis (*Laboratório Saúde Animal*) , [5]Centro de Amparo à Pesquisa Veterinária, [6]Universidade Camilo Castelo Branco

e-mail: dircelio.junior@zoetis.com

Coccidiosis challenges cause zootechnical and financial losses for poultry productions across the planet. For this reason, there are different tools available on market to improve the control of coccidiosis, such as vaccines and ionophore and chemical anticoccidial agents. The objective of this work was to compare, in an experimental environment, the results of the principals anticoccidial agents used in Brazil against Eimeria maxima collected in commercial farms in a company of the Espírito Santo state. Five kilograms of feces were collected from 5 houses in 3 different farms, and these were placed in a plastic container with potassium dichromate solution. The sample was sent to research center in Amparo/SP, where it was processed and concentrated Eimeria maxima, the most present in the sample among the 3 species common in broilers. This work consisted of 10 treatments (T1: negative control, T2: positive control, T3: Lasalocida 90 ppm, T4: Nicarbazine plus Salinomycin 100 ppm, T5: Decoquinate 30 ppm, T6: Nicarbazine plus Semduramycin 66 ppm, T7: Monensin 120 ppm, T8: Salinomycin 72 ppm, T9: Nicarbazine plus Narazine 100 ppm and T10: Nicarbazine 125 ppm), each with 4 replicates of 6 birds. The chicks were housed on day 1, on day 12 they started to receive feed with anticoccidials of the treatments, on day 14 they received orally the challenge doses of Eimeria maxima and on day 20 the birds and the remaining feed in the feeders were weighed, and later the birds were euthanized and necropsied to measure coccidial intestine lesions. Comparing the ionophores, Lasalocida (T3) performed better than Monensin (T7) and Salinomycin (T8) in feed conversion (T3: 1.366, T7: 1.458 and T8: 1433). In the comparison between synthetics and combinations, Decoquinate (T5) obtained a better result in feed conversion than the others (T4: 1.359, T5: 1.290, T6: 1.360, T9: 1.433 and T10: 1.466). The two molecules with the best performance in food conversion, Decoquinate and Lasalocida, compared to similar ones had no history of use in this company.