**Effects of a specific blend of essential oils and oleoresins of spices compared to an antibiotic growth promoter program on the broiler performances**

Allan Junsay1. and J.F.Gabarrou1

1 Laboratoires PHODE (Phodé Sciences), France

Considering the simple removal of antibiotic growth promoters might have a negative economic impact, search for alternative additives has been incentivised.

The main goal of this experiment is to evaluate the efficiency of a blend of essential oils and oleoresins of spices on performance of broiler between 0 to 36 days compared to usual conditions of production based on antibiotic growth promoter (AGP).

288 day old chicken (Ross-308) were randomly distributed into two groups with 6 replicates (6x24 birds) in each group. They received Coxivac-B at 5 times the normal dose of vaccine at the time of their arrival. Positive control feed was supplemented with Coyden (0-21 days), Salinomycin (22-36 days) and 55 ppm of Bacitracin Methylene Disalicylate (BMD) like growth factors (0 - 36 days of age). In the tested group, BMD was substituted by a phytogenic feed additive (Oleobiotec®, Laboratoires PHODE - France) at 100 g/MT. *Statistical analysis -* Statistical analysis was carried out using the Mixed procedure of SAS® software (SAS v. 9.3 Cary, N.C.).

Both groups (phytogenic *vs* BMD) obtained the same performance on mortality rate, growth performance and feed efficiency. The final live-weight (LW) at 36 days of age showed a significant improvement in the antibiotic free group (Oleobiotec®): + 68.9 g/bird, i.e. +2.77%.

The phytogenic feed additive Oleobiotec® (Laboratoire PHODE), formulated as a specific blend of essential oils and oleoresins could be proposed as an efficient alternative to substitute antibiotic growth promoter (BMD in this case).