Effects of plant extracts on zootechnical parameters of broilers

*T. Steiner¹, J. Arce Menocal², E. Avila Gonzalez³, C. Lopez Coello³

¹Biomin Holding GmbH, Herzogenburg, Austria
²Michoacana University, Mexico (UMSNH), Faculty of Veterinary Medicine, Morelia, Mexico
³National Autonomous University of Mexico (UNAM), Department of Poultry Science, Mexico City, Mexico

The impact of matrix-encapsulated plant extracts on performance of broilers was investigated using as-hatched Ross 308 broiler chicks.

Birds were allocated to 4 treatments, with 9 pens per treatment and 50 birds per pen. Treatments were A: Negative Control; B: Plant extracts (Digestarom® P.E.P. MGE, 100 mg/kg); C: Zn-Bacitracin (50 mg/kg); D: Plant extracts + Zinc Bacitracin. The feeding program included starter (1 to 10 d), grower (11 to 24 d) and finisher diets (25 to 42 d) based on sorghum and soybean meal. The additives were added to the basal diets at the expense of cellulose.

42-d live weight was increased (p<0.01) in comparison with treatment A by supplementation with plant extracts alone or in combination with Zn-Bacitracin. There was no difference (p>0.05) in live weight between treatments A and C. Feed intake did not differ (p>0.05) between treatments. Feed/gain ratio was reduced (p<0.001) by supplementation with plant extracts or Zn-Bacitracin, while mortality was unaffected (p>0.05) by dietary treatments.

In conclusion, plant extracts have potential to improve growth performance and feed efficiency in broilers.