The use of isoquinoline alkaloids in broiler chickens

Isoquinoline alkaloids (IQ) are known for their anti-inflammatory properties. The aim of the trial was to evaluate IQ in fast-growing broilers. 640 male Ross 308 birds were kept in floor pens for a trial duration of 35 days (day of life 0 – 35). Birds received standard vaccination as well an in-feed coccidiostat. Birds received a commercial-type broiler diet, divided into four feeding phases and were based on corn, soybean meal and wheat. Two treatments were applied: 1) Negative control (NC; 0 ppm IQ) or 2) IQ (60 ppm IQ, applied as Sangrovit® Extra). IQ improved final body weight gain compared to NC by 1.4% (2,168 and 2,139 g, respectively, p > 0.05), while daily feed intake was not affected between treatment groups (91 g in both groups; d 0-35). Consequently, FCR was improved significantly (p ≤ 0.05) in birds supplemented with IQ (1.48 and 1.50, respectively). Due to lower losses in treatment group IQ compared to NC (6.2 and 7.9%, respectively), European Production Index was higher in treatment IQ (384 and 373, respectively). Therefore, IQ support an efficient and sustainable broiler production.

**Keywords: broiler performance, feed additive, alkaloid, inflammation, intestinal health**