Free versus microencapsulated organic acids in medicated or not medicated diet for piglets
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Aim of the study was to investigate the growth performance of weaned piglets fed either a medicated or not medicated diet supplemented with formic 64%+lactic 36% (FL) acid (11 kg/ton) or a microencapsulated blend of organic acids and flavors (T) (1 kg/ton, Tetracid®, EU patent 1391155B1, Vetagro srl, Italy). 480 three-weeks old SCAAPAG x Goland piglets were fed four diets (4 pens of 30 piglets per diet): FL or T with or without medication (M) comprising colistin 180 ppm + amoxicillin 600 ppm for the 1st phase and chlorotetraycline 1000 ppm + sulphadiazine 1250 ppm + trimetoprim 250 ppm for the 2nd phase. The piglets received a two-phase diet (I: 18% CP, 1.3% Lys, 7.5% EE and 2600 kcal/kg NE; II: 18% CP, 1.2% Lys, 5.6% EE and 2400 kcal/kg NE). All data were analysed by ANOVA. After 42 days, animals fed the medicated diets had higher feed intake (+14% group FL+M vs group FL-M and +13% group T+M vs group T-M; P<0.05) and lower mortality (0.3% vs 2.2%). Final weights were: 25.6±2.1 kg, 26.4±0.6 kg, 21.1±1.5 kg, 22±2 kg for FL+M, T+M, FL+-M, and T-M, respectively (P<0.05). Feed efficiency was not statistically different. The medication plan adopted resulted in maintaining animals in good health status. The microencapsualted acids and flavor blend at 1 kg/ton had similar performances to 11 kg/ton of formic and lactic acids.