

Aim of the study was to investigate the effect of a microencapsulated supplement containing citric, sorbic acids, and natural identical flavors on piglets growth performance, mortality, and productivity during the 9 post-weaning weeks. The study was conducted at Danish Pig Production with the approval of the Danish Plant Directorate. Piglets were weaned at 5 weeks (7.6 kg BW), immediately divided in 2 groups (38 pens each, 7 pigs per pen), and were fed 2 experimental diets: the control non-medicated diet (CTR), or the control diet added with the microencapsulated blend at 3,000 ppm (AviPlus®; EP1391155B1, Vetagro Srl, Italy). Piglets received a 2-phases diet: the phase 1 was fed from d0 to d14 (20.7% CP, 6.3% EE), and the phase 2 from d14 to d63 (19.7% CP, 5.7% EE). The pigs were weighed per pen on d0, d14, and d63; the feed consumption was calculated at the same time intervals; mortality and treatments for diarrhea and other diseases were recorded. Performance data were analysed for normal distribution and prevalence of outliers, and were subjected to ANOVA with SAS; mortality was analysed with chi-square test. The AviPlus® group had higher ADG and G:F values than CTR in phase 1 (+22%, and +18%, respectively, P<0.05), and higher G:F in phase 2 (+2%). The improvement registered in phase 1 was reflected in the overall period of the study (0-63 d: +5.7%, and +2.9% for ADG, and G:F, respectively, P<0.05). Mortality was numerically higher for CTR than AviPlus® fed piglets (2.6% vs 1.2%, respectively, P=0.2). The production value index calculated according to the Danish Pig Production procedure, was significantly higher for the AviPlus® group than for the CTR one (+7%, P<0.05).These results demonstrated that the supplementation of the diet with the lipid micro-encapsulated blend can improve productivity of weaners during the first weeks after weaning, thus improving the growth rate during the 7-30 kg body weight interval.