**Abstract**

Background: positive effects of organic acids and essential oils (MOE) on livestock are well documented. Microencapsulation allows the slow release of core materials in a specific moment or environment. Objective: to evaluate the effect of supplementing finishing pigs with microencapsulated blends of organic acids and essential oils (MOE) on growth performance, nutrient digestibility, fecal noxious gas emissions, and meat quality. Methods: 75 crossbred pigs [(Yorkshire × Landrace) × Duroc, 56.15 ± 3.77 kg] were used in this 10-week trial. Pigs were randomly distributed into 1 of 3 dietary treatments on the basis of body weight (BW) and gender. Each treatment had 5 replicate pens with 5 pigs (2 gilts, 3 barrows) per pen. Treatments were as follows: CON (a basal diet); MOE1 (CON + 0.025% MOE); MOE2 (CON + 0.050% MOE). Results: pigs fed the MOE2 diet had higher final BW at 5th and 10th week than those fed the CON diet (p<0.05). During weeks 0 to 5, MOE1 and MOE2 groups had greater average daily gain (ADG) than the CON group (p<0.05). Overall, ADG in MOE2 was greater than that in CON treatment (p<0.05). MOE2 group had higher dry matter (DM) and energy digestibility than the CON group (p<0.05). Conclusion: the present results indicate that dietary supplementation with 0.05% MOE improves growth performance and nutrient digestibility in finishing pigs.

**Keywords**

Average daily gain, dry matter digestibility, meat quality, micro-encapsulation.