Effect of Chelate on the Growth Performance and the Immune Response to Swine Fever Disease in Weaning Pigs

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ABSTRACT

The effect of chelated minerals on growth performance and immune response were studied. A total of 60 male and female pigs aging 5 wks were divided into three groups, which each group contained the equal passive immune. The animals were randomly fed three diets as following: diet 1 was formulated to meet the nutrients requirement of young pigs and using the inorganic minerals premix (control diet), diet 2 was the control diet added with the chelated minerals in rate of 16% of total mineral content and diet 3 using the mixture of inorganic : organic minerals in ratio of 75:25. All animals were vaccinated with swine fever disease at the beginnig of the experimental period. The animals were fed until aging of 9 wks and the blood collection has been performed at 7 and 12 wks of age to determine the immune response. The results showed that the immune titer of each group decreased at 7 wks of age and increased at the 12 wks of age. No significantly different have been found at both ages. Adding of the chelate mineral to the control diet can improved the growth performance, espectially the feed conversion ratio (P<0.05).

Key words: organic mineral, immune response, performance, and pig

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