
Two hundred ninety-five pigs (initially 5.6 kg and 21 ± 2 d of age) were used to determine the effect of different soy protein sources fed during phase I (d 0 to 14 postweaning) on subsequent growth performance. Six experimental treatments were fed to pigs from d 0 to 14 postweaning. A control treatment (D) was fed corn-soybean meal (CSBM) diet that contained 18% protein and 7% fat. The other treatments included soy protein isolate (SPI), soy protein concentrate (SPC), and a soy protein isolate-derived dietary L-carnitine (L-CAR) source (SPI-CAR) at 0.02% in the diet. The results of the study showed that pigs fed the SPI-CAR diet had lower ADG (P < 0.01) and ADG14-28 (P < 0.05) compared to pigs fed the CSBM diet. Pigs fed the SPI-CAR diet also had lower percentage weight gain in phase I and II compared to pigs fed the CSBM diet. The results of this study indicate that the use of SPI-CAR as a protein source in the diet may have potential for improving growth performance in early weaned pigs. Key Words: Soy protein isolate, dietary L-carnitine, growth performance.