ABSTRACT

Effects of Mixture of Sweet Potato Meal and Tape Yeast as a Synbiotic in Performance and Small Intestine of Broiler

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The effects of feeding different mixture of sweet potato meal (prebiotic) and tape yeast (probiotic) as a synbiotic mixed with commercial diet on performance and small intestine of broiler were evaluated in this trial. One hundred and eighty broiler aged 7 days of CP 707 strains obtained from the PT.Charoend Phokphand were assigned to a Complete Randomized Design with 2 x 3 factorial (sweet potato meal levels and tape yeast levels) and three replicates of 10 broilers/plot for the starter period from 7 to 21 and finisher period from 22 to 34 days old. The first factor was level of sweet potato meal, divided into 3% and 6% at starter and 1.5% and 3% at finisher. The second factor was level of yeast, divided into 0.5%, 1.0% and 1.5% at starter and 0.25%, 0.5% and 0.75% at finisher. Results showed that at starter period the addition of 3% sweet potato meal and 0.5% tape yeast gave better (P<0.01) weight gain, final body weight and feed conversion than other levels of sweet potato meal and tape yeast. At finisher period the addition of 1.5% sweet potato meal and 0.25% tape yeast gave higher (P<0.05) feed intake than other levels of sweet potato meal and tape yeast. Duodenum weight and length, jejunum length and jejunum thickness were significantly different (P<0.05) among the treatments. It can be concluded that mixture of 3% sweet potato meal and 0.5% tape yeast at level at starter period and 1.5% sweet potato meal and 0.25% tape yeast at finisher period, respectively added into ration can give better performance of broiler.

Key words : tape yeast, sweet potato, performance, small intestine, synbiotic