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Faculty of Agricultural Technology Rajamangala University of Technology Thanyaburi  
Project Title : Effects of Tamarind kernel powder as prebiotic and  
*Lactobacillus reuteri* as probiotic on Characteristics Villi and  
Productive Performance in Broilers  
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### Abstract

The study was conducted to find the effect of Tamarind kernel powder (TKP) as a Prebiotics and *Lactobacillus reuteri* as a probiotic on productive performance and characteristics of Villi on Broilers. The observed parameters of this study are productive performance (Feed intake, Average daily gain, Mortality, and Feed conversion ratio ) and Villi-ratio. 360 Arbor acres broilers were used (10 day aged), The experimental design was used Completely randomized design (CRD) factorial, Divided into 4 of treatment combination and two factors with 5 replications each treatment. There are 20 experimental units, Each replication 18 broiler chicks. The 1<sup>st</sup> treatment is non supplement with both factors ( control ). The 2<sup>nd</sup> treatment is supplemented with 10<sup>6</sup> CFU/g of probiotics in the feed intake. The 3<sup>rd</sup> Treatment are supplemented with 3 % of TKP in the feed intake. The 4<sup>th</sup> treatment is supplemented with 3 % of TKP and 10<sup>6</sup> CFU/g of probiotics in the feed intake. The result revealed that the supplement with probiotics are significantly increasing the growth of chickens ( $P < 0.05$ ) in the 10<sup>6</sup> CFU/g levels, the others observation parameters had no significant effect those levels. Prebiotics no significant effect on the performance parameters also Villi- ratio ( $P > 0.05$ ) in the levels 3 % of tamarind kernel powder.

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**Keywords:** Tamarind kernel powder, *Lactobacillus reuteri*, productive performance, Villi