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Effect of *Aspergillus niger* fermented rice bran on quality of pig product to ensure food security

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Rice bran as agricultural waste available abundantly and as major component in pig ration, but this material has a high content of phytic acid as inhibitor of phosphorus metabolism. The objectives of this research were to study the effects of rice bran fermented with *Aspergillus niger* fungus on back fat thickness, meat cholesterol content, bone hardness degree and feed efficiency. Sixteen castrated pigs of Chaster White at 12-week-old with live weight of between 32-44Kg, put in individual cages. The treatments were R1=40% rice bran non-fermented, R2=40% rice bran fermented 2 days, R3=40% rice bran fermented four days, R4=40% rice bran fermented 6 days. Treatment was given to 4 groups of pigs with different body weight each B1=32Kg; B2=36 Kg; B3=40Kg; B4=44 Kg. The experimental design used was Randomized Block Design. The variables measured were back fat thick, meat cholesterol content, bone hardness degree and feed efficiency. The results show that utilization of fermented rice bran along six days (R4) has back fat thick and meat cholesterol content significant ($P<0,05$) lower than the other treatments. On the other hand, treatment R4 has bone hardness and feed efficiency significant better ($P<0, 05$) compared to the other treatments. Based on this result, it can be concluded that utilization of 40% of rice bran fermented along six days with *Aspergillus niger* were able to improve feed efficiency and quality product of meat for human health.

Biography

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