# Growth Performance and Feed Utilization of Tilapia (*Oreochromis niloticus*) Fed with Diets Containing Animal Protein Source from Expired Sausage

| | |
|---|---|
| **Publons ID** | (not set) |
| **Wos ID** | WOS:000911392400003 |
| **Doi** | 10.17576/jsm-2022-5109-03 |
| **Title** | Growth Performance and Feed Utilization of Tilapia (*Oreochromis niloticus*) Fed with Diets Containing Animal Protein Source from Expired Sausage |
| **First Author** | |
| **Last Author** | |
| **Authors** | Fitriadi, R; Palupi, M; Nurwahyuni, R; |
| **Publish Date** | SEP 2022 |
| **Journal Name** | SAINS MALAYSIANA |
| **Citation** | |
| **Abstract** | This study aimed to evaluate the effect of diets with different levels of expired sausage flour as a source of animal protein on the growth performance of tilapia (Oreochromis niloticus). A completely randomized design (CRD) was used with five treatments and three replications. Furthermore, a total of 330 tilapia fish (5-7 cm and 4 +/- 1.92 g) were reared in aerated 50 x 30 x 15 cm(3) aquaria with a stocking density of 22 fishes per aquarium. The feed contains an equal ratio of plant and animal protein, where the plant protein contains soy flour and rice bran flour in a ratio of 90:10. Meanwhile, the animal protein contains fish flour, added with five sausage flour levels: 0, 10, 20, 30 and 40% of the total dietary protein. The levels were then designated as A-D, respectively, while the diet with no sausage flour was used as the control (A). Feed conversion ratio (FCR) protein efficiency ratio (PER), protein retention (PR), energy retention (ER), and protein digestibility (PD) were calculated and compared among treatments. The data were analyzed using a one-way ANOVA on SPSS version 16. The results showed that diet containing 10% sausage flour significantly increased the protein efficiency ratio, protein retention, energy retention, and protein digestibility, and improve feed conversion ratio. Based on the results, 14.07% expired sausage flour protein is recommended as the best concentration for growth performance and food efficiency in tilapia. |
| **Publish Type** | Journal |
| **Publish Year** | 2022 |
| **Page Begin** | 2763 |
| **Page End** | 2774 |
| **Issn** | 0126-6039 |
| **Eissn** | |
| **Url** | https://www.webofscience.com/wos/woscc/full-record/WOS:000911392400003 |
| **Author** | REN FITRIADI, S.S.T, M.P |