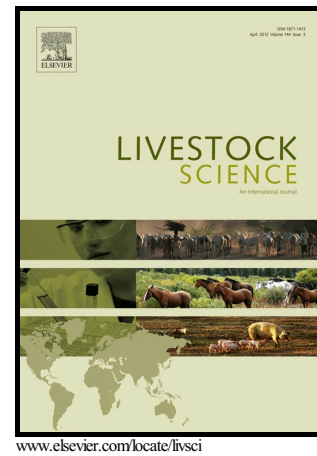


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R.E. Xing , H.Y. Yang , X.Q. Wang, H.H. Yu, S. Liu, X.L. Chen, P.C. Li *

Key Laboratory of Experimental Marine Biology, Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China

* Corresponding author. Tel.: +86 532 8289 8707; fax: +86 532 8289 8780.

E-mail address: xingronge@qdio.ac.cn (R.E. Xing); pcl@qdio.ac.cn (P.C. Li).

ABSTRACT

The purpose of this study was to investigate the potential of using dietary supplemental enzymatically hydrolyzed scallop visceral protein (EHSVP) and scallop visceral protein (SV) to replace fishmeal with regard to the growth performance, carcass characteristics, immune response, intestinal microbiota, and intestinal morphology of broiler chickens. A total of 300 1-d-old broiler chickens were randomly assigned to 6 treatments with 5 cages per treatment and 10 broiler chickens per cage. The broiler chickens received a basal diet supplemented with 3% fishmeal or different concentrations of EHSVP (1, 2, and 3%) and SV (2 and 3%) treatments until d 42. Broiler chickens fed a diet with 2% EHSVP supplementation exhibited a greater average daily weight gain ($P < 0.05$) and lower feed conversion ratio. The carcass yield, eviscerated yield, and leg muscle yield of broiler chickens fed a diet with 2% EHSVP supplementation were increased ($P < 0.05$) and the abdominal fat rate was decreased compared with broiler chickens fed fishmeal diet ($P < 0.05$). Broiler chickens fed a diet with 2% EHSVP supplementation were increased the activities of digestive enzymes ($P < 0.05$);

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