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Abbreviations and Symbols

Abbreviations		Full
MT	:	Metric Ton
%	:	Percentage
Ha	:	Hactor
et al.	:	Associates
Kg	:	Kilogram
A	:	Alpha
ANOVA	:	Analysis of Variance
G	:	Gram
L	:	Liter
B	:	Beta
Mg	:	Miligram
Mm	:	Millimeter
Wt	:	Weight
Cm	:	Centimeter
Min	:	Minute
μL^{-1}	:	Microgram per Liter
H	:	Hour
S.E.	:	Standard Error
SPSS	:	Statistical package for social science
°C	:	Degree Celcius
Ppm	:	Parts Per Million
mg/l	:	Miligram Per Liter
cells/µl	:	Cells Per Microliter
Dl	:	Decilitre
Fl	:	Femtoliters
Pg	:	Picograms
<	:	Smaller than

ABSTRACT

This study was conducted to investigate the effects of exogenous protease enzyme (pepsin) on the growth performance, feed utilization and hematology parameters of juvenile Thai pangus *(Pangasius hypophthalmus)* using 90 days feeding trials. The 35% crude protein diet was prepared by adding different feed ingredients along with 0, 0.25, 0.50, 0.75, and 1.0 g of pepsin per kg feed as T1(control), T2, T3, T4 and T5 respectively. Experimental results showed significant ($P < 0.05$) differences in growth performance in terms of average weight gain , specific growth rate (SGR) and feed utilization in terms of feed conversion ratio (FCR), feed conversion efficiency (FCE) and protein efficiency ratio (PER) in fish fed with 0.5g pepsin per kg feed (T3) compared to control (T1). In case of hematological parameters, results showed significant ($P<0.05$) differences in red blood cells (RBCs), white blood cells (WBCs), blood glucose, hemoglobin (Hb), and mean corpuscular volume (MCV) in fishes fed with 0.5g pepsin kg^{-1} (T_3) compared to control. There was no significant differences ($P>0.05$) in hematocrit (HCT), mean corpuscular hemoglobin (MCH) and mean corpuscular hemoglobin concentration (MCHC) in fishes fed with 0.5g pepsin per kg (T_3) compared to control. This results suggest that pepsin enzyme supplementation with formulated feed improve the growth, feed utilization, and blood parameters *of P. hypophthalmus*.

Key words: Aquarium, Feed utilization, Growth performance, Hematology parameters, *Pangasius hypophthalmus*, Pepsin.