

## ***(Oncorhynchus mykiss, Walbaum)***

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FCR  
(p < / )  
(p > / )

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UFFDA

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1. Iso energetic

\*(As fed)

/ ± /	/ ± /	/ ± /	/ ± /	%
/ ± /	/ ± /	/ ± /	/ ± /	<b>kcal/kg</b>
/ ± /	/ ± /	/ ± /	/ ± /	%
/ ± /	/ ± /	/ ± /	/ ± /	%
/ ± /	/ ± /	/ ± /	/ ± /	%
/ ± /	/ ± /	/ ± /	/ ± /	%
/ ± /	/ ± /	/ ± /	/ ± /	%
±				*

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/	/	
/	/	<b>C</b>
/	/	
/	/	

( ± )

/ ± /	/ ± /	%
/ ± /	/ ± /	<b>kcal/kg</b>
/ ± /	/ ± /	%
/ ± /	/ ± /	%
/ ± /	/ ± /	%
/ ± /	/ ± /	%
/ ± /	/ ± /	%

$\text{ }^\circ\text{C}$  )  
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 ( )  $\text{ }^\circ\text{C}$   
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 /  $\pm\text{g}$  /  
 ( )  
 ( mm ) ( / g ) %  
 ( % / / )  
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 ( )  
 :  
 ( /  $\pm$  / ) pH ( /  $\text{ }^\circ\text{C}$   $\pm$  / )  
 ( / mg/L  $\pm$  / )  
 .[ ]  
 (  $\pm$  ) /  $\pm$  /  
 .[ ]  
 (SGR %day ) (WG) ICP  
 (PER) (FCR) (CF)  
 (EER) (PPV) ( )  $\text{ }^\circ\text{C}$   
 (LPV) (LER)  
 .[ ]

5. Vecstor Furnaces

1. Foss Teecator (2006 Digestor)  
 2. IKA 5000  
 3. GBC Integra XL  
 4. Heraeus (FO.J FO 538)

(Wi) (SGR) ) WG: Weight gain = W -W  
 (G) (SR) (WG) ) SGR: Specific growth rate (%day ) =  
 (CF) ) CF: Condition factor=  
 ) FCR: Feed conversion ratio =  
 ) \*NER: \*N efficiency ratio=g live weight gain/\*N intake  
 ) \*NPV: \*N productive value=g \*N retained / \*N intake

(L) (P) N\*  
 (.ER) (E)  
 (FCR) (PV)  
 (LER) (PER)  
 (EER)  
 (LPV) (PPV)  
 (EPV)  
 (FCR) arcsin  $\sqrt{x}$

SPSS /

Minitab

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1. Shapiro -Wilk
2. Kolmogorov\_Smirnove
3. Wilcoxon
4. Bonferroni

\*( ± )

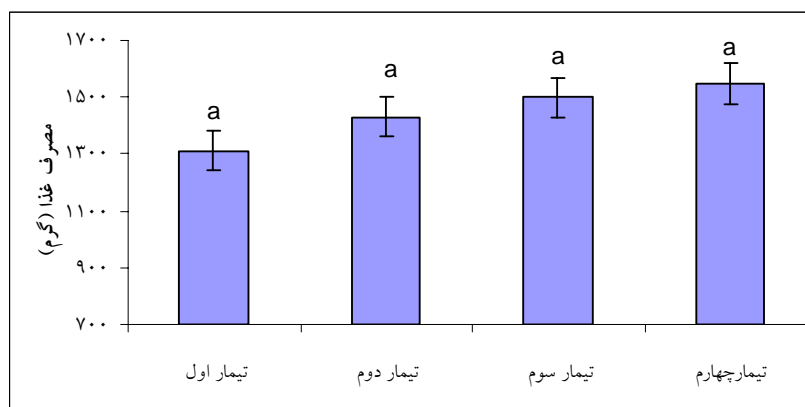
<b>P</b>					
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	
					*

\*( ± )

<b>P</b>					
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	<b>PER</b>
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	<b>PPV</b>
/	/ ± / <sup>b</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>a</sup>	<b>EER</b>
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	<b>EPV</b>
/	/ ± / <sup>b</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>a</sup>	<b>LER</b>
/	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	/ ± / <sup>a</sup>	<b>LPV</b>
/	/ ± / <sup>a</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>ab</sup>	/ ± / <sup>b</sup>	<b>FCR</b>
					*

( ± )

P				
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		( )
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		( )
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		kcal
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
/	/ ± / <sup>b</sup>	/ ± / <sup>a</sup>		
*				



FCR

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(r= p = / )

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(P= / ) ( )

(P= / )

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( ) PPV PER

%

%

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%

%

FCR

FCR

( % / )

( % / )

FCR

PPV PER

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FCR %

(E)LER

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(E)LPV

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% ( )

%

FCR

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%

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2. Azevedo

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1. Gelineau

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«*Oncorhynchus mykiss*»