

Nemacheilus malapterurus

Nemacheilus ()

malapterurus

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/ (/) / (/) / (/)
/ (/) / (/) / (/)
($P < /$)

/ /
($P < /$)

(RLG <)

/ ()

N.malapterurus



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(Email: Tabiee@iaua.ac.ir)

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Nemacheilus

N.malapterurus

Balitoridae

N.malapterurus

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(Cyprinidae)

(Balitoridae)

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N.malapterurus

Nemacheilus

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Crest

Wester Crested Loach

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River Loach

Berg

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Banarescu and Nalbant

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N.malapterurus

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N.malapterurus

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N.malapterurus

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N.malapterurus

N.malapterurus

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Nemacheilus spp.

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N.malapterurus

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DC

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Food Habits
Fodd Selectivity

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[W(SD)]

[TL(SD)]

$$d = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

()

$$w = aL^b$$

a

b

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$$t = \frac{sdLn x}{sdLn x} * \frac{1b - 31}{\sqrt{1 - r^2}} * \sqrt{n - 2}$$

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/

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$$k = \frac{10^5 w}{L^b}$$

Catch per Unit of Effort

Pauly

Condition Factors

Surber Sampler

Edmondson

Elliott *et al.*

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<i>Capoeta capoeta gracilis</i>	<i>Albernoides bipunctatus</i>	<i>N.malapterurus</i>	
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/	/	/	
()	()	()	(SD)

Relative Gut Length
 Ivlev Index

/		Ephemeroptera	
/		Diptera	
/		Chironomidae	
/		Simuliidae	
/		Tabanidae	
/		Tipulidae	
/		Larvae Diptera	
/		Tricoptera	
/		Plecoptera	
/		Coleoptera	
/		Oligochata	

.($P < /$)

N.malapterurus

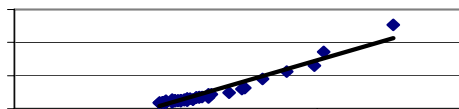
(SD)			(SD)		(SD)				
/ (/)	/	/	/ (/)		/ (/)				
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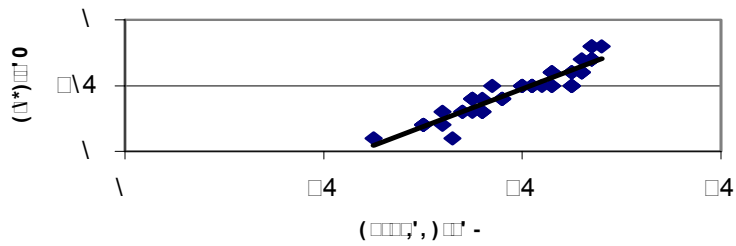
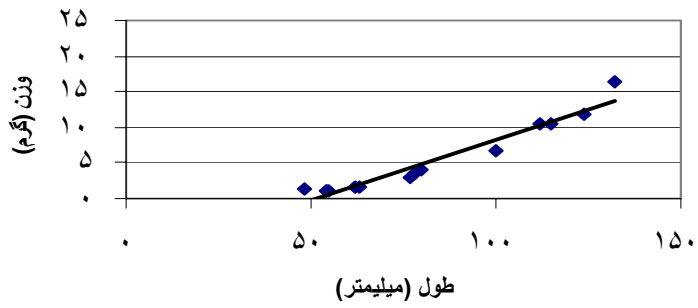
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N.malapterurus

	r^2	b	Loga		
$\log w = / \log l /$	/	/	/		
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b
($P < 1$)

(b=)

Archive

b (*N. malapterurus*)

b

(b=)

N. malapterurus

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RLG

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RLG

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Fulton's Condition Factor
Allometric

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N.malapterurus

/		Diptera	
/		Ephemeroptera	
/		Tricoptera	
/		Plecoptera	
/		Insect	
/		Oligochata	

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N.malapterurus

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N.malapterurus

/	/	/	/	/	/	/		Chironomidae	
/	/	/	/	/	/	/		Simuliidae	
		/	/	/	/	/		Larvae Diptera	
/	/	/	/	/	/	/		Ephemeroptera	
/	/	/	/	/	/	/		Tricoptera	
/	/	/	/	/	/	/		Plecoptera	
	/	/	/	/	/	/		Insect	
/	/	/	/	/	/	/		Oligochata	

Blood Worm (*Chironomidae*)

N.malapterurus

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/	/		/			/	/		Chironomidae	
/			/	/		/	/		Simuliidae	
/	/		/	/		/	/		Larvae Diptera	
/	/		/			/	/		Ephemeroptera	
/	/		/	/		/	/		Tricoptera	
/	/		/	/		/	/		Plecoptera	
	/			/			/		Insect	
			/	/		/	/		Oligochata	

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(Balitoridae)

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N.malapterurus

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		W(SD)	(TL(SD)		
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N.malapterurus

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($P < /$)

N.malapterurus

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(b=)

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N.malapterurus

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N.malapterurus

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RLG

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N.malapterurus

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N malapterurus.

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(*Nemacheilus spp.*)

Nemacheilus malapterurus ...

Nemacheilus malapterurus

Nemacheilus

malapterurus

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A Study of Some Biological Aspects of *Nemacheilus malapterurus*, Zarringol River, Golestan Province

O.Tabiee¹ A.Abdoli²

Abstract

This study was conducted to determine some of the biological aspects, namely weight, total length, relative gut length (RLG/Index), growth, condition factor, food habits and food selectivity of river loaches, *Nemacheilus malapterurus*, in Zarringol river, Golestan province, northern Iran. A total of 149 specimens were caught using an Electro-shocker and immediately fixed in 10% formalin. The frequency for males, females and immature was 37.5, 9.3 and 35.5% respectively. Sex ratio was 4:1(male: female). Statistical means for total length and body weight were significantly different for males and females ($P<0.01$). Average total length and body weights were 59.07(14.8); 82.42(28.86); 39.73(6.27) mm; and 1.89(1.8); 5.31(4.98); 0.53(0.21) g for males, females and immature, respectively. Condition factor was 2.6 for females and 1.97 for males. The regression coefficient for males and females is less than 3 indicating the length to weight growth to be allometric. The low RLG index ($RLG<1$) shows that *N.malapterurus* is carnivore. In this study food selectivity (Ivlev Index) was mainly for family Blood worm (Chironomidae) with a frequency of 65.3% in the diet.

Keywords: Loaches, Growth, RLG, Condition factor, Food habits, Food selectivity.

¹ -Scientific Staff Board, Azad University of Arsajan (E-mail: Tabiee@iaua.ac.ir)

² -Scientific Staff Board, Agricultural and Natural Resources University of Gorgan