
Thunnus tonggol

(/ / : // :)

Thunnus tonggol

to K L∞

- / / /

(ó)

(Darvishi, 2003)

Carrara (2003) Darvishi (1994) Yesaki
(1993) James (1993) Khorshidian
(2007) Pauly Froese (1999) Tomoyuki
(2011) Griffiths

Thunnus)
Auxis) (*Etynnis affinis*) (*tonggol*
(*Thunns albacares*) (*thazard*
(*Kastuwons pelamis*)
% %
(Darvishi, 2003)
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(Darvishi, 2003)

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(Darvishi, 2003)

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(Yesaki, 1994)

(Darvishi, 2003)

(F.L)

(Gulland and Rosenberg, 1992) (Smooth) (Gayanilo *et al.*)

al., 1996



(Gulland and Rosenberg, 1992)

(K) [1983] Pauly

$$[\text{Log} (t_0) = \frac{1}{K} \frac{\text{Log} (L_\infty)}{\text{Log} (L_\infty - t_0)} - \frac{1}{K} \text{Log} (L_\infty)]$$

$$\hat{O} = \text{Log}(K)$$

(Pauly and Munro, 1984)

$$[L_t = L_\infty (1 - e^{-K(t-t_0)})]$$
 (Von Bertalanffy)

(Pauly and Morgan, 1987)

$$K = \frac{\text{Log} (L_\infty / (L_\infty - L_t))}{t - t_0}$$

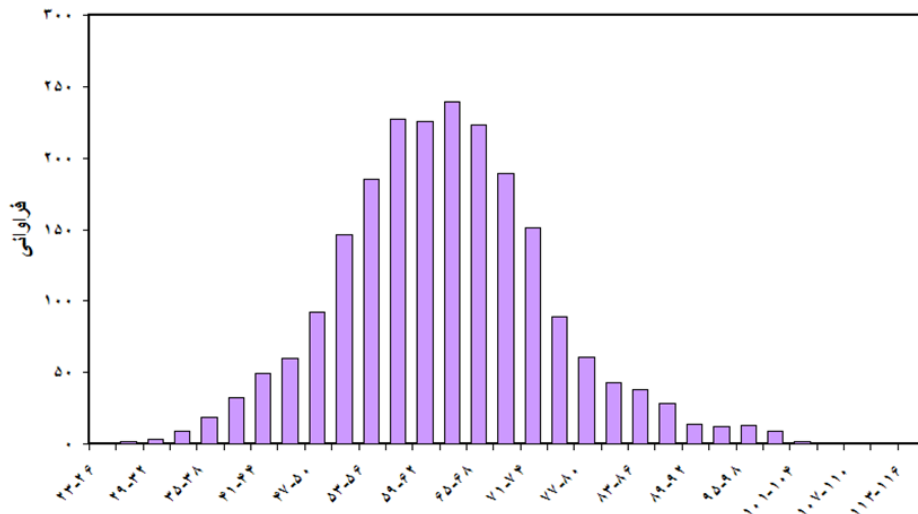
$$t_0 = \frac{\text{Log} (L_\infty / (L_\infty - L_t)) - K(t - t_0)}{K}$$

FISATII
%

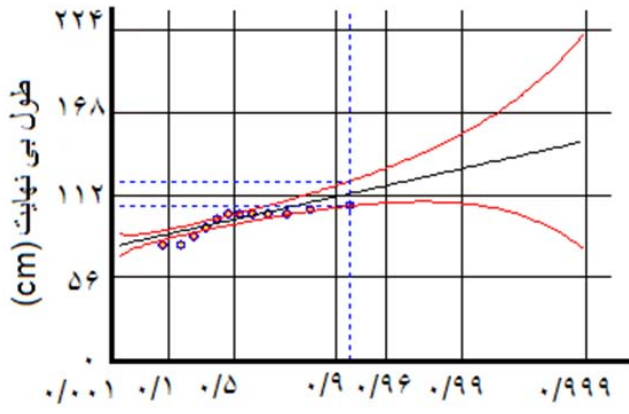
(Shepherd's method)

K

L_{∞}
 /
 .()
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 () %
 / (K)
 .()



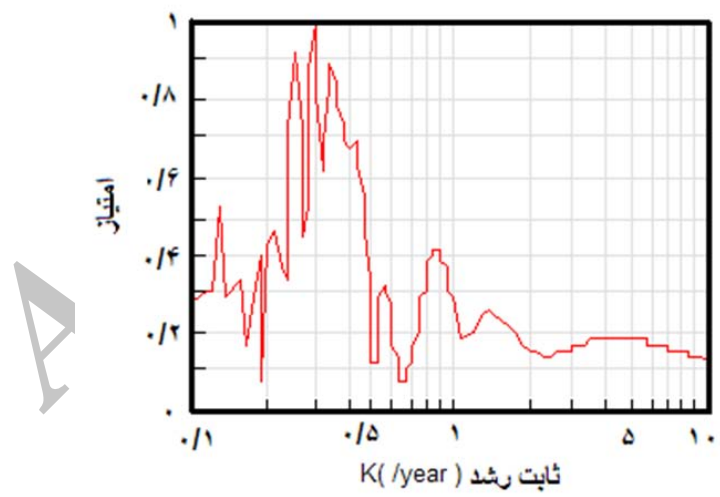
کلاس طولی (سانتی متر)



احتمال تجمعی

L_{∞}

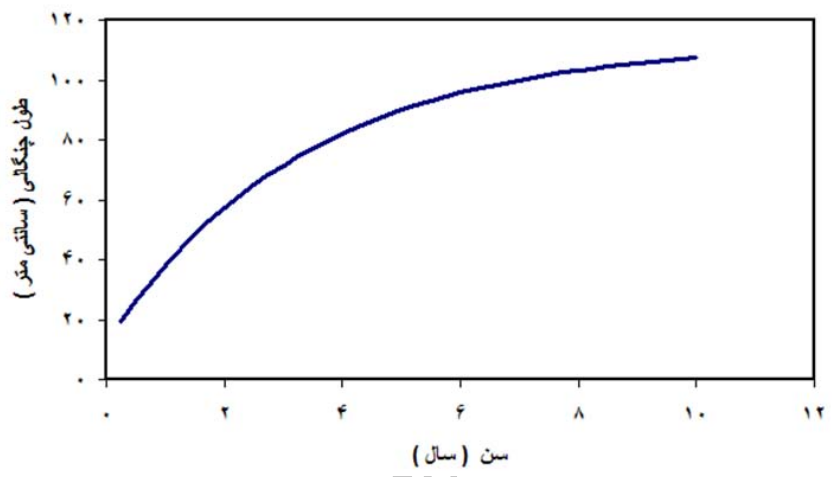
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...

$$L_t = L_0 (1 - e^{-k(t-t_0)})$$

$$t_0 = - \dots$$



Archive

(Siddeek, 1995)

(Biswas, 1993)

(Siddeek, 1995)

(Dudley et al.,

1992)

(Biswas, 1993)

(1982) Pillai Sila

Griffith .

(Siddeek, 1995)

(2011)

/ /

(Dudley *et al.*, 1992)

(2011)

Griffith

Venema Sparre ()
(1998)

(Begg

and Sellin, 1998)

$K L^\infty$

(Pauly, 1980)

(Griffith *et al.*, 2011)

t_0 $K L^\infty$
- / / /
/ \emptyset

(Griffith *et al.*, 2011)

Pillai .

(1993)

(Siddeek, 1995)

...

L_{∞} (cm)	K (1/year)	t_0 (year)	ϕ			
	/		/			Yesaki, 1994
/	/	/	/			Khorshidian & Carrara, 1993
	/		/			James <i>et al.</i> , 1993
	/		/			Tomoyuki <i>et al.</i> , 1999
/	/	/	/			Griffiths <i>et al.</i> , 2011
	/		/			Froese & Pauly , 2007
	/		/			Darvishi ,2003
/	/	/	/			

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Growth Parameter and Estimation of Age of Longtail Tuna (*Thunnus tonggol*) by Modal Progressing Method in Hormozgan Province Coast

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Abstract

Longtail tuna (*Thunnus tonggol*) is one of the most important and commercial species in the Persian Gulf and Oman Sea. In order to come up with the responsible fishing pattern, there was a need to identify some of the biological characteristics and population dynamic parameters. Data were collected randomly from six major artisanal fish-landing sites Hassineh, Kong, Bandar Abbas, Salakh, Sirik and Jask in Hormuzgan Province, from April 2010 to March 2011. The mean of fork length was estimated 63cm. The growth parameters, L_{∞} , K and t_0 were calculated as 112.23(cm), 0.3 (1/ year) and -0.38 year, respectively and our result showed that *T. tonggol* grows fast during first two years. These parameters indicated that *T. tonggol* is found to attain a fork length of 38 cm at the end of first year. The fork length attained at the end of two, three and four year to be 57, 72 and 82cm, respectively. Growth performance index (ϕ) was calculated as 3.6 which was according to other findings in the Indian Ocean.

Keywords: Longtail tuna, Growth parameters, Estimation of age, Modal progressing, Hormozgan Province