



**APÉNDICE 4.1: CRECIMIENTO**

**Modelos de crecimiento adoptados por el SCRS para las principales especies**

Spp.	Área/Sexo	Parámetros	Referencia	n	Rango de L	Método
<b>ALB</b>	N. and S. Atlantic Sexes combined	$L_t = 124.74(1 - e^{-0.23(t+0.9892)})$ (used as default growth curve in the North)	Bard (1981)	352	46-113	Spines
<b>ALB</b>	North Atlantic Sexes combined	$L_t = 122.80(1 - e^{-0.217t})$ (used to compute catch-at-age) ages=8; $\bar{\sigma} = 3.593$ ; Ratio $\sigma = 1.391$	Anon. (1996)			MULTIFAN (size-freq. analysis)
<b>ALB</b>	South Atlantic Sexes combined	$L_t = 142.28(1 - e^{-0.145(t+0.674)})$	Lee and Yeh (1993)	353	85-117	Spines
<b>ALB</b>	South Atlantic Sexes combined	$L_t = 147.5(1 - e^{-0.126(t+1.89)})$	Lee and Yeh (2007)	344 125	51-130 81-117	Spines Vertebra
<b>ALB</b>	Mediterranean	$L_t = 194.7(1 - e^{-0.258(t+1.354)})$	Magalofonou (2000)	1136	57-92	Spines
<b>YFT</b>	Atlantic Sexes combined	$L_t = 37.8 + 8.93t + (137.0 - 8.93t)(1 - e^{-0.808t})^{7.49}$	Gascuel et al. (1992)	?	?	?
<b>BET</b>	All Atlantic Sexes combined	$L_t = 217.3(1 - e^{-0.18(t+0.709)})$	Hallier et al. (2005)	625 tags 255 otoliths	37-124 (tags) 29-190 (otoliths)	Otoliths and Tagging
<b>SKJ</b>	Equatorial Sexes combined	$L_t = 80.0(1 - e^{-0.322t})$	Bard and Antoine (1986)	341	40-65	Tagging
<b>SKJ</b>	Cap Vert -	$L_t = 97.258(1 - e^{-0.251t})$	Hallier and	222	40-65	Tagging; Meta-

	Senegal Sexes combined		Gaertner (2005)			analysis
<b>SKJ</b>	W-Atlantic Caribbean Sexes combined	$L_t = 94.9(1 - e^{-0.340t})$	Pagavino and Gaertner (1995)	?	38-96	MULTIFAN (size- freq. analysis)
<b>SKJ</b>	W-Atlantic South-Brazil Sexes combined	$L_t = 87.078(1 - e^{-0.22(t+2.071)})$	Vilela and Castello. (1991)	?	?	Spines
<b>BFT</b>	East Atlantic and Mediterranean Sexes combined	$L_t = 318.85(1 - e^{-0.093(t+0.97)})$	Cort (1991)	192	172-302	Spines
<b>BFT</b>	West Atlantic Sexes combined	$L_t = 382.0(1 - e^{-0.079(t+0.707)})$	Turner and Restrepo (1994)	903	50-300	Tagging
<b>BUM</b>	Atlantic	$L_t = 113.506 e^{-7.731 e^{-0.038t}}$ (time units in days)	Prince et al. (1991)	24	1-100	Otoliths
<b>BUM</b>	Atlantic Adults > 110 days	$L_t = 210.45(1 - e^{-1.533(t+0.1505)})$	Prince et al. (1991)	95	100-212	Otoliths
<b>WHM</b>	Atlantic	N/A				
<b>SAI</b>	Atlantic	N/A				
<b>SWO</b>	N. Atlantic Sexes combined	$DWT_t = 305.56 e^{-4.6235 e^{-0.30582t}}$ (DWT = dressed weight in lbs)	Anon. (1989)	85	7-360 lbs	Tagging
<b>SWO</b>	N. Atlantic Sexes combined	$L_t = [464.54 \cdot 3.2678 - (464.54 \cdot 3.2678 - 0.0001 \cdot 3.2678) e^{-0.0023(3.2678)t}] \cdot \frac{1}{3.2678}$	Arocha et al. 2003	4209	63-262	Spines
<b>SWO</b>	N. Atlantic Males	$L_t = [300.0 \cdot 3.921 - (300.0 \cdot 3.921 - 0.001 \cdot 3.2678) e^{-0.00465(3.921)t}] \cdot \frac{1}{3.921}$	Arocha et al. 2003	1817	63-246	Spines
<b>SWO</b>	N. Atlantic Females	$L_t = [375.49 \cdot 2.976 - (375.49 \cdot 2.976 - 0.0001 \cdot 2.976) e^{-0.00734(2.976)t}] \cdot \frac{1}{2.976}$	Arocha et al. 2003	2392	74-262	Spines
<b>SWO</b>	S. Atlantic	N/A				
<b>SWO</b>	Mediterranean Sexes combined	$L_t = 238.58(1 - e^{-0.185(t+1.404)})$	Tserpes and Tsimenides (1995)	1100	62-210	Spines

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