

Supplementary Materials

Relationship between body and otolith morphological characteristics of sabre squirrelfish (*Sargocentron spiniferum*) from the southern Red Sea : difference between right and left otoliths

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Table S1. Summary of descriptive statistics and paired t-test results for left and right otoliths of *S. spiniferum* (n=185).

Parameters (side)		Minimum	Maximum	Mean	Std. Deviation
OL	Left	9.54	14.11	11.91	0.91
	Right	9.56	14.11	11.88	0.93
OH	Left	5.75	9.97	7.55	0.86
	Right	6.04	9.97	7.57	0.83
OW	Left	0.0365	0.1574	0.0648	0.0017
	Right	0.0255	0.1572	0.0643	0.0017
OSL	Left	8.18	13.75	10.47	1.11
	Right	8.15	13.73	10.31	1.13
OOs	Left	2.56	5.86	4.21	0.60
	Right	2.58	5.98	4.26	0.64
OCu	Left	4.84	8.04	6.27	0.72
	Right	4.87	8.03	6.05	0.72
OA	Left	43.44	91.29	66.89	0.729
	Right	44.44	91.33	66.90	0.727
OP	Left	25.01	40.01	32.278	0.194
	Right	25.01	40.00	32.276	0.194
AS	Left	0.500	0.730	0.633	0.040
	Right	12.680	20.680	15.697	0.038
CO	Left	0.150	0.250	0.201	1.389
	Right	0.580	1.010	0.746	1.389
FF	Left	0.490	0.740	0.601	0.019
	Right	0.160	0.330	0.226	0.018
RE	Left	12.680	20.680	15.697	0.072
	Right	0.580	1.010	0.746	0.069
RO	Left	0.530	0.740	0.637	0.058
	Right	12.680	20.680	15.693	0.056
EL	Left	0.150	0.250	0.201	0.031
	Right	0.590	1.000	0.746	0.029
CI	Left	0.490	0.780	0.605	1.389
	Right	0.150	0.310	0.223	1.389
SQ	Left	12.680	20.680	15.693	0.072

	Right	0.590	1.000	0.746	0.069
Otolith parameters: OL, length, OH- width, OW- weight, OSL- sulcus length, OOs- ostium length, OCu- caudal length, OA- area, OP- perimeter; lengths in mm, weight in g, area in mm ² .					

Table S2. Relationship between TL and each otolith descriptor was showed according to the significance of side effect, OL, otolith length; OH, otolith width; SU, sulcus; OS, ostium; OA, otolith area; OP, otolith perimeter, FF, form factor; AR, aspect ratio; C, compactness; RE, rectangularity, RO, roundness; EL, ellipticity; C, circularity y; SQ, squareness.

Otolith descriptor	Relationship between TL and otolith descriptor	R ²
OL	Left side TL = 0.719+ 0.065OL	R ² = 0.665
	Right side TL = 0.636+ 0.072OL	R ² = 0.852
OH	TL = 0.896+ 0.078OH	R ² = 0.736
Sulcus length	TL = 0.904+ 0.057SU	R ² = 0.777
Ostium length	TL = 1.116+ 0.087OS	R ² = 0.586
Caudal length	Left side TL = 1.117+ 0.069CA	R ² = 0.384
	Right side TL = 1.047+ 0.007CA	R ² = 0.806
OA	TL = 1.095+ 0.006OA	R ² = 0.851
OP	TL = 0.689+ 0.025OP	R ² = 0.813
AR	TL = 1.063+ 0.675AR	R ² = 0.138
C	TL = 1.331+ 0.010C	R ² = 0.037
FF	TL = 1.656- 0.833FF	R ² = 0.043
RE	TL = 1.807- 0.427RE	R ² = 0.166
RO	TL = 1.734- 0.327RO	R ² = 0.111
EL	TL = 1.686- 0.872EL	R ² = 0.132
CI	TL = 1.331+ 0.010CI	R ² = 0.037
SQ	Left side TL = 1.734- 0.328SQ	R ² = 0.111
	Right side TL = 1.785-0.396SQ	R ² = 0.138