Table S1. Results of discriminant analysis between left and right otoliths

	Number	Accuracy%	Predicted result	
			Left otolith	Right otolith
Left otolith	102	54.9	56	46
Right otolith	102	54.9	46	56

Table S2. ANOVA results of different geographic stocks

Shape index	Group I	Group II	Group III
Roundness	5.830 ± 2.036^a	4.543 ± 2.952^a	4.922 ± 4.103^a
Format factor	0.863 ± 0.024^a	0.864 ± 0.034^a	0.866 ± 0.032^a
Circularity	14.569 ± 0.432^a	14.561 ± 0.598^a	14.420 ± 0.525^a
Rectangularity	0.767 ± 0.022^a	0.768 ± 0.019^a	0.770 ± 0.019^a
Ellipticity	0.151 ± 0.030^b	0.166 ± 0.034^a	0.136 ± 0.035^b
Radius ratio	1.792 ± 0.150^b	1.898 ± 0.198^a	1.779 ± 0.188^b
Feret ratio	1.130 ± 0.022^b	1.143 ± 0.030^a	1.119 ± 0.028^b
Aspect ratio	1.360 ± 0.080^b	1.403 ± 0.101^a	1.319 ± 0.093^b

Note: The same superscripts mean the differences are not significant, different superscripts mean the differences are significant.

Table S3. Comparing otolith shape among three stocks using an ANOVA like permutation test

Method	df	Var	F	P
Fourier				
Model	2	0.0511	3.5295	0.001
Residual	116	0.83969		
Wavelet				
Model	2	0.073	4.546	0.001
Residual	116	0.93141		