Aritificial Hybridization between Red Seabream, *Pagrus major* and Black Seabream, *Acanthopagrus Schelegel*: Characteristics of Morphometric Trait

Bong Seok Kim, Sang Jun Lee, Soo Jin Lee, Young Chae Song, Jong Soo Yoo, Jin Hee Jo, In Soon Park, and In -Seok Park Biotechnology Research Center, National Fisheries Research and Development Institute, Busan 619-902, Korea
Division of Ocean Science, College of Ocean Science and Technology, Korea Maritime University, Busan 606-791, Korea
Division of Civil and Environmental System Engineering, Korea Maritime University, Busan 606-791, Korea
Research of Marine Science and Technology, Korea Maritime University, Busan 606-791, Korea

*Corresponding author: ispark@kmaritime.ac.kr

Morphometric characteristics of red seabream (*pagrus major*) female and black seabeam (*Acanthopagrus schelegeli*) male hybrids is described. From the result of our study, it seems that the morphometric characters of hybrid may be 3 paternal-like, 6 maternal-like or oven out of the range of parental species. The pigmentation of the hybrid is intermediate in some respects and resembles that of the parental species in others.

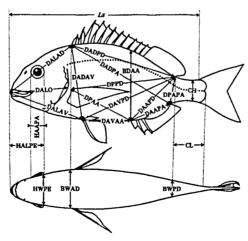


Fig. 1. Morphometric measurements of red seabream, black seabream and red seabream (?) × black seabream (?) hybrids used in this study.

Means and standard deviation for morphometric dimention of red seabream, black seabream and red seabream (?) × black seabream (?) hybrids, and results of ANOVA-test for differences among groups*

Morphometric dimention	Red seabream (%)	Black seabream (%)	Hybrid (%)
HALPE/LS	10.08±0.88 ^a	9.73±1.25 ^a	9.27±1.03 ^b
HAAPA/LS	8.26±0.56 ^{n.s.}	8.10±0.61 ^{n.s.}	8.16±0.68 ^{n.s.}
DALAD/LS	41.11±1.79 ^a	39.42±5.24 ^b	39.68±1.86°
DALO/LS	29.41±0.99 ^a	30.86±2.31 ^b	29.14±1.48 ^a
DALAV/LS	35.84±1.22 ^a	41.05±3.31°	37.83±2.08 ^c
DADAV/LS	39.79±2.71°	38.98±2.96 ^{ab}	38.41±2.20 ^b
DADPD/LS	52.10±1.10 ^a	50.53±4.56°	49.43±2.84 ^b
DADPA/LS	59.06±1.81 ^a	59.35±3.80 ^a	57.90±1.63°
DPPD/LS	53.90±0.80 ^a	52.37±6.91°	49.69±2.06 ^b
DPAA/LS	39.54±1.71°	43.30±7.19 ^b	40.49±2.30 ^b
DAVPD/LS	54.17±0.97°	51.40±4.66°	49.99±1.72°
DAVAA/LS	31.28±1.53 ^a	33.19±3.02 ^b	33.29±1.80°
BDAA/LS	35.78±1.58 ^a	33.50±2.68 ^b	32.27±1.30°
DAAPD/LS	31.51±1.34°	29.09±2.08°	28.50±1.93 ^b
DAAPA/LS	17.17±0.80 ^a	14.73±1.26°	16.19±3.36°
DPAPA/LS	18.96±0.94ª	17.13±1.47°	16.61±1.29°
CH/LS	10.68±0.52 ^{n.s.}	11.10±1.41 ^{n.s.}	10.78±1.21 ^{n.s.}
CL/LS	21.76±0.57°	16.14±2.71°	21.36±1.99 ^a
HWPE/LS	13.44±1.35°	15.95±0.89b	13.76±1.00°
BWAD/LS	16.04±1.69 ^a	17.45±0.95⁵	16.08±1.22°
BWPD/LS	7.56±1.55 ^a	7.43±0.30 ^a	7.07±1.30 ^b

^{*} Dimensions abbreviation are presentated in Fig 1. Data were anlaysed using one-way ANOVA on data transformed to arcsine of square root. Mean values in each row having same superscript were not significantly different (P>0.05). n.s.: not significant.

Reference

Park, I.S., G.C Choi and D.S. Kim. 1997. Production of hybrid and allotriploid between rainbow trout, *Oncorhynchus mykiss* and cherry salmon, *O. masou*. II. Characteristics of sex ratio and morphometric traits. *J. Aquaculture*, 10: 49-54

Park, I.S. J.H. Im, D.K. Ryu, Y.K. Nam and D.K. Kim. 2001. Effect of starvation on morphometric change in *Rhynchocypris oxycephalus* (Sauvage and Dabry). *J. Appl. Ichthyol.*, 17: 227-281.