

Production of Hybrids between Female Red Seabream and Male Black Seabream in Korea

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Hybrids between female red seabream, *Pagrus major* (Temminck et Schlegel) and male black seabream, *Acanthopagrus schelegeli* (Bleeker) were produced to improve productivity via hybrid vigor effect, using artificial propagation. To confirm the genotype of the hybrids, genomic DNA of 100 hybrid red and black seabream, at 15 days after hatching, were analyzed by RAPD analysis. The genotype of the hybrids was identified from parental control fish using specific genetic markers, Universal Rice Primers (URP) 1~12. The mean fertilization rate of the hybrids was similar to those of the parental pure cross controls ($P > 0.05$). The mean abnormality rate of the hybrids was significantly higher than those of the parental pure cross controls ($P < 0.05$). However, the mean hatching and early survival rates of the hybrids 10 days after hatching were significantly lower than those of the counterpart controls ($P < 0.05$). The external morphology and meristic characteristics of the hybrids were intermediate compared to those of the counterpart control groups. Application of the hybrids for practical aquaculture would require evidence of superiority at the adult stage, with the possibility of improved larval survival.

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