



Research Report

Development and characterization of 32 microsatellite loci in the giant grouper *Epinephelus lanceolatus* (Serranidae)

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Genet. Mol. Res. 10 (4): 4006-4011 (2011)
Received August 19, 2011
Accepted October 26, 2011
Published December 12, 2011
DOI <http://dx.doi.org/10.4238/2011.December.12.3>

ABSTRACT. An economically important marine fish species, the giant grouper *Epinephelus lanceolatus* (Serranidae) is widely cultured in Taiwan and coastal areas of China. We isolated and characterized 32 polymorphic microsatellite loci from a CA-enriched genomic library of giant grouper. The number of alleles per locus ranged from 3 to 7, with a mean of 4.69. Observed and expected heterozygosities per locus varied from 0.387 to 1.000 and from 0.377 to 0.843, respectively. Six loci significantly deviated from Hardy-Weinberg equilibrium. After sequential Bonferroni's correction, only two loci showed deviation from Hardy-Weinberg

equilibrium, and no linkage disequilibrium was found between any pair of loci. These microsatellites can be useful tools for the study of population genetics in the giant grouper.

Key words: Giant grouper; Microsatellite; Population genetics; Isolation