



## Discovery and characterization of a first set of polymorphic microsatellite markers in *Siganus oramin*

Y.-X. Liu<sup>1,2</sup>, C.-Y. Ma<sup>1</sup>, H.-Y. Ma<sup>1</sup>, C.-L. Feng<sup>1</sup>, S.-J. Li<sup>1</sup> and L.-B. Ma<sup>1</sup>

<sup>1</sup>Key Laboratory of East China Sea and Oceanic Fishery Resources Exploitation, Ministry of Agriculture, East China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Shanghai, China

<sup>2</sup>College of Fisheries and Life Science, Shanghai Ocean University, Shanghai, China

Corresponding authors: C.-Y. Ma / L.-B. Ma  
E-mail: mcy0527@yahoo.com.cn / malingbo@vip.sina.com

Genet. Mol. Res. 14 (4): 15320-15324 (2015)

Received February 3, 2015

Accepted June 25, 2015

Published November 30, 2015

DOI <http://dx.doi.org/10.4238/2015.November.30.8>

**ABSTRACT.** Nine microsatellite DNA markers were developed and characterized for *Siganus oramin* by the 5'-anchored polymerase chain reaction technique. A total of 42 alleles were identified in 30 individuals, and the number of alleles per locus ranged from 3 to 7, with an average of 4.7. The observed and expected heterozygosity per locus ranged from 0.5333 to 1.0000 and from 0.5254 to 0.8474, respectively, with an average of 0.7422 and 0.6906, respectively. A significant deviation from the Hardy-Weinberg equilibrium was detected at one microsatellite locus after a Bonferroni's correction ( $P < 0.0056$ ). No significant linkage disequilibrium was found between any of the pairs of the nine loci. The microsatellite loci developed in this study will improve our understanding of the genetic background of *S. oramin*.

**Key words:** *Siganus oramin*; Microsatellite marker; Polymorphism