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Short Communication

Development and characterization of microsatellite markers for the walking goby (*Scartelaos viridis*; Gobiidae)

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ABSTRACT. *Scartelaos viridis* (walking goby) is a small edible fish that inhabits warm inshore environments. To provide molecular information of *S. viridis*, we developed and characterized microsatellite markers for this species. Using $(CA)_{15}$-enriched genomic libraries of *Scartelaos viridis*, 44 positive clones were sequenced; 34 sequences contained multiple repeat motifs (di-, tri- and tetra-nucleotide). In all, 23 primer pairs were designed and 15 were successfully amplified. Forty-two *S. viridis* individuals collected from the East China Sea were used to characterize the polymorphism at each locus. Three loci (13%) were polymorphic, with three to six alleles. The observed and expected heterozygosity ranged from 0.1000 to 0.4500 and from 0.4487 to 0.7580, respectively. The polymorphism information content per locus ranged from 0.4214 to 0.7510. Three loci significantly deviated from the Hardy-Weinberg equilibrium (adjusted P value = 0.017); the pairwise tests for linkage disequilibrium between Scvi-1-13 and Scvi-2-11 were significant ($P < 0.05$, adjusted P value = 0.017). The low number of polymorphic microsatellite loci may be due to the close genetic relationship of the individuals that we collected and the large size of the motifs.

Key words: *Scartelaos viridis*; Microsatellite; Molecular marker

