Isolation and characterization of polymorphic microsatellite loci in the swimming crab

*Portunus trituberculatus* (Portunidae)

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**ABSTRACT.** The Swimming crab *Portunus trituberculatus* (Portunidae) is an important economically food species. To provide molecular markers for *P. trituberculatus*, we isolated and characterized polymorphic microsatellite markers. We developed a 5'-anchored genomic library of *P. trituberculatus* DNA, and derived 45 positive clones. We designed 30 pairs of primers from the sequences of these clones, and 10 of which were polymorphic. The loci were screened in 31 *P. trituberculatus* individuals; the number of alleles ranged from 2 to 5. The observed heterozygosity ranged from 0.20 to 0.49 and the expected heterozygosity ranged from 0.50 to 0.78. The polymorphism information content per locus ranged from 0.37 to 0.75. These polymorphic microsatellite markers may provide some useful information for the population genetic studies of swimming crab and other *Portunus* species.

**Key words:** *Portunus trituberculatus*; Microsatellite; Polymorphism; Molecular markers