



## Isolation and characterization of 19 highly polymorphic microsatellite markers in the devil stinger, *Inimicus japonicus* (Synanceiidae)

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**ABSTRACT.** *Inimicus japonicus*, the devil stinger, has an extensive distribution along the coast of China, Japan and the Korean Peninsula. Nineteen highly polymorphic microsatellite markers were isolated and characterized in *I. japonicus*. Twenty-eight individuals from a wild population were tested for polymorphism using this set of polymorphic microsatellite markers. The number of alleles per locus ranged from 4 to 14. The ranges of observed and expected heterozygosity were 0.500-0.892 and 0.521-0.910, respectively. Significant deviations from Hardy-Weinberg equilibrium were detected at two loci. To the best of our knowledge, these were the first microsatellite loci characterized from the Synanceiidae; they can be used for estimating genetic diversity, population structure studies, parentage analysis, genetic linkage map construction, germplasm classification and identification, gene identification, quantitative trait loci mapping, and marker-assisted selection in breeding of *I. japonicus* and other species of this family.

**Key words:** *Inimicus japonicus*; Devil stinger; Microsatellite DNA; Genetic diversity