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Development and characterization of microsatellite loci in a threatened marine fish, *Cheilinus undulatus* (humphead wrasse)

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ABSTRACT. *Cheilinus undulatus* (humphead wrasse) is a marine fish distributed widely throughout the tropical Indo-Pacific. It has been listed as vulnerable in the IUCN Red Data Book and in CITES Appendix II four times. Fifteen microsatellite loci were isolated and characterized for this species. The number of alleles ranged from 3 to 15 per locus, and the observed and expected heterozygosity ranged between 0.0323-0.7742 and 0.2597-0.8773, respectively. The polymorphism information content ranged from 0.2353-0.8520. Four microsatellite loci deviated significantly from Hardy-Weinberg expectations. No significant linkage disequilibrium was found among any of the loci. These microsatellite loci will be useful for future investigations of genetic variation in the wrasse population.

Key words: Humphead wrasse; *Cheilinus undulatus*; Microsatellite; DNA

