



# Isolation and characterization of polymorphic microsatellite markers in *Bagarius yarrelli* using RNA-Seq

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**ABSTRACT.** The yellow sisorid catfish (*Bagarius yarrelli*) is a vulnerable fish species. In this study, seven polymorphic microsatellite DNA markers for yellow sisorid catfish were described, using RNA-Seq methodology. In *B. yarrelli* (N = 44) from a Hekou wild population, allelic frequency, and observed and expected heterozygosities per locus varied from two to six, 0.0333 to 0.6793, and 0.0333 to 0.6004, respectively. One locus (Baya153) denoted notable separation from the Hardy-Weinberg equilibrium, after sequential Bonferroni correction ( $P < 0.05$ ). The microsatellite markers described here will be useful for investigating population structure and genetic resource of *B. yarrelli* from different geographical locations.

**Key words:** Microsatellite markers; *Bagarius yarrelli*; Catfish; RNA-Seq