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Rapid and inexpensive analysis of genetic variability in *Arapaima gigas* by PCR multiplex panel of eight microsatellites

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ABSTRACT. The aim of the present study was the development of a multiplex genotyping panel of eight microsatellite markers of *Arapaima gigas*, previously described. Specific primer pairs were developed, each one of them marked with either FAM-6, HEX or NED. The amplification conditions using the new primers were standardized for a single reaction. The results obtained demonstrate high heterozygosity (average of 0.69) in a Lower Amazon population. The multiplex system described can thus be considered a fast, efficient and inexpensive method for the investigation of genetic variability in *Arapaima* populations.

Key words: *Arapaima gigas*; Pirarucu; Microsatellites; Multiplex polymerase chain reaction; Conservation genetics; Lower Amazon

