



Population divergence and peculiar karyoevolutionary trends in the loricariid fish *Hypostomus* aff. *unae* from northeastern Brazil

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ABSTRACT. Loricariidae (Siluriformes, Hypostominae) is one of the most diverse catfish families. In spite of the wide distribution of loricariids in South America, cytogenetic reports are available for only a few species, mostly from southern and southeastern Brazil. We made the first chromosomal analysis of *Hypostomus* aff. *unae* from the Contas River basin in northeastern Brazil. Four populations isolated by short distances but from distinct landscapes were studied based on conventional staining, C-banding, argyrophilic nucleolar organizer regions (Ag-NOR), CMA₃/DAPI fluorochrome staining, and fluorescent *in situ* hybridization with 18S rDNA probes. Although sharing the same diploid number (2n = 76) and NOR locations, each population presented exclusive karyotype formulae and specific patterns of heterochromatic and AT-rich regions. The derived karyotypes of *H.* aff. *unae* (2n >54; high number of acrocentrics bearing AT-rich interstitial heterochromatin) indicated a divergent karyoevolution, mostly driven by centric fissions, pericentric inversions and particular

heterochromatin dispersion models. This finding of distinct evolutionary units in *H. aff. unae* will be useful for understanding the natural history of loricariids from relatively unexplored coastal basins in South America.

Key words: Cytogenetics; Biodiversity; Heterochromatin; Fluorochromes; Loricariidae