

## Karyotypic variability in *Iheringichthys labrosus* (Teleostei, Pimelodidae) from the Tibagi River basin (Paraná State, Brazil)

L.B. Ribeiro<sup>1</sup>, D.A. Matoso<sup>2</sup>, M.C. Almeida<sup>3</sup>, M.R. Vicari<sup>3</sup>, A. Moraes-Neto<sup>3</sup>, M.C.C.M. Svidnicki<sup>3</sup> and R.F. Artoni<sup>3</sup>

<sup>1</sup>Programa de Pós-Graduação em Genética, Conservação e Biologia Evolutiva, Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brasil
<sup>2</sup>Programa de Pós-Graduação em Genética, Centro Politécnico, Universidade Federal do Paraná, Curitiba, PR, Brasil
<sup>3</sup>Departamento de Biologia Estrutural, Molecular e Genética, Universidade Estadual de Ponta Grossa, Campus de Uvaranas, Ponta Grossa, PR, Brasil

Corresponding author: R.F. Artoni E-mail: rfartoni@pesquisador.cnpq.br

Genet. Mol. Res. 7 (3): 718-724 (2008) Received May 2, 2008 Accepted July 2, 2008 Published August 14, 2008

**ABSTRACT.** Cytogenetic analyses were carried out in a populational sample of *Iheringichthys labrosus* from the Guaraúna River (Upper Tibagi River; Paraná State, Brazil) in order to provide a karyotypic comparison with another previously studied population from the Lower Tibagi River, characterized by the presence of 32m + 8sm + 6st + 10a (2n = 56, FN = 102) and occurrence of supernumerary chromosomes (80% of individuals). The 17 specimens of *I. labrosus* (6 females, 10 males and 1 of unknown sex) from the Upper Tibagi River showed 2n = 56 chromosomes, a karyotype formula of 14m + 32sm + 4st + 6a (FN = 106), without evidence of sex chromosome heteromorphism or supernumerary chromosomes. The heterochromatin was detected

Genetics and Molecular Research 7 (3): 718-724 (2008)

at telomeric and centromeric positions in several chromosomal pairs. The Ag-nucleolar organizer regions were heteromorphic and located at terminal position on short arms of the 16th chromosomal pair, suggesting a positive association with heterochromatic regions. The inter-populational karyotypic differentiation reported indicates distinct evolutionary pathways within *I. labrosus* in the Tibagi River basin.

**Key words:** Karyotypic evolution; Cytotaxonomy; Heterochromatin; Ag-nucleolar organizer regions

Genetics and Molecular Research 7 (3): 718-724 (2008)