



Possible origins of B chromosomes in *Rineloricaria pentamaculata* (Loricariidae, Siluriformes) from the Paran River basin

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ABSTRACT. We made a cytogenetic study of *Rineloricaria pentamaculata* from the Tau Stream, in the Pirap River sub-basin in Paran State, Brazil, focused on the occurrence and origins of the B chromosomes. The diploid number varied from $2n = 56$ to $2n = 59$, due to the presence of 0 to 3 B microchromosomes of the acrocentric type, which were observed in 92.3% of the specimens ($N = 12$). These chromosomes were totally heterochromatic, with the C banding technique, and there were inter- and intraindividual numerical differences. Meiotic cells in metaphase I had 28 bivalent chromosomes and 0 to 3 univalent chromosomes. We suggest that the B microchromosomes are centric fragments originated from chromosome rearrangements.

Key words: Heterochromatin; Loricariinae; B microchromosome; Meiosis; *Rineloricaria pentamaculata*; Univalent