



Determination of the gonadosomatic index between *Prochilodus lineatus* (Curimatá) and *Colossoma macropomum* (Tambaqui) in the middle River Tocantins, Imperatriz, Maranhão

*Determinação do índice gonadossomático entre *Prochilodus lineatus* (Curimatá) e *Colossoma macropomum* (Tambaqui) no médio rio Tocantins, Imperatriz, Maranhão*

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The micro-region of the city of Imperatriz Maranhão is located in there gion of the middle River Tocantins where fishingis an abundant activity by the local population. However, this activity when done without the knowledge of the reproductive cycle of the species can generate environmental problems such as the decrease of the population of some fishes. The gonadosomatic index (IGS) is a parameter used to determine the breeding period of the species. The IGS is established by the weight of the gonads (Wg) divided by the total weight of the animal (Wt), multiplied by a hundred. The aim of this study was to evaluate the reproductive period of the Curimatá and Tambaqui. The study was performed through the determination of the IGS. Specimens of Curimatá and tambaqui were collected in the middle River Tocantins through six collections with five samples totaling thirty samples for both dry and rainy season. Weighing and extraction of gonads of Curimatá and Tambaqui of indeterminate age was performed. The Curimatá measured about 33 cm long; total weight was 586 g and the weight of the gonads was 3.646 g. The IGS was 0.624. The Tambaqui measured about 41 cm long; total weight was 1.336 kg and the weight of the gonads was 6.520 g. The IGS was 0.488. So far, it has been demonstrated that Tambaqui presented IGS higher than Curimatá, however, it was not possible to define the breeding period of each species. The continuation of the study will make it possible to extract more data on the reproductive cycle of these species.

Keywords: gonadossomatic index, curimatá, Tambaqui.

Palavras-chave: índice gonadossomático, curimatá, Tambaqui.