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SOBRE CULTIVO DE PECES NATIVOS 2022**

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**First record of an *in vivo* collection of semen from pirarucu
Arapaima gigas (Schinz, 1822)**

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In this study we report novel information on the opening position of the spermatic duct of *Arapaima gigas*, and method to collect semen in live broodstocks. To do so, one male *A. gigas* weighting 41.8 kg and measuring 1.66 m in Total Length has been sacrificed after a brain concussion. Then, the region encompassing the gonopore, testis and internal organs was sliced and fixed in 10% formaldehyde for three days. Following piece was air dried and gonopore and anus were injected with 400 ml of 100% acetone, aiming to dry the internal canals. Two solutions of Arazyn Resin diluted with 10 % styrene monomer were stained with blue and red ink, then added with 1% catalyser (Butanox M50) and injected into the gonopore (blue) and anus (red) of the sliced fish. The resin was then allowed to air dry for 76 hours, and then the whole piece was immersed in 20% hydrochloric acid for 10 days. The remaining piece was washed and dissected to clean the resin, organ-shaped piece. The resin piece was then photographed and studied to better understand the position of the spermatic duct in *A. gigas*, described as being at the end of the gonopore opening. In addition, eight male broodstock of *A. gigas* (>5 years of age) held at the facilities of Embrapa Fisheries and Aquaculture (Palmas-TO, Brazil), measuring 152.56 ± 7.93 cm in total length, and weighing 32.96 ± 5.11 kg were fasted for 24 hours, and handled for semen collection. Samples were then collected after stripping male left side and stored in 1.5ml cryovials, then observed under a light microscope. This is the report of the feasibility of stripping live *A. gigas*

male broodstocks. Further investigations are made necessary to enable cannulation after the knowledge obtained with determination of spermiduct opening position in gonopore.

Key-words: Osteoglossidae, pirarucu, reproduction, spermatozoa, spermiduct.

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