

EVALUATION OF TOXIC AND MUTAGENIC POTENCIAL OF WATER SAMPLES OF TIETÊ RIVER (SUZANO, SP, BRAZIL) IN *Biomphalaria glabrata* (SAY, 1818)

Lenita de Freitas Tallarico^{1,2}; Vanessa Siqueira Grazeffe¹; Kayo Okazaki²; Fernanda Pires Ohlweiler³; Toshie Kawano¹; Carlos Alberto de Bragança Pereira⁴; Eliana Nakano¹

¹Laboratório de Parasitologia/Malacologia, Instituto Butantan, Avenida Vital Brasil, 1500, CEP 05503-900, SP, Brazil, letallarico2@butantan.gov.br. ²Centro de Biologia Molecular, IPEN-CNEN/SP, Brazil. ³Laboratório de Malacologia, SUCEN, SP, Brazil. ⁴Departamento de Estatística, IME-USP, SP, Brazil

A wide range of industrial and domestic wastes are discharged in the River Tietê in the region of Suzano and the biological treatment of effluents is carried out by Wastewater Treatment Plant of SABESP (WWTP Suzano). The samples were collected and transported by SABESP (Companhia de Saneamento Básico do Estado de São Paulo). The following points were chosen: P0 – Ponte Nova Dam, P1 – 200 meters upstream to the plant-, P2— the affluent of plant, P3 – the effluent treated by plant before discharge in the river and P4 – 200 meters from the discharge in the river.—The samples were evaluated by analyzing acute toxicity and dominant lethal test was performed for detection of germ cell mutations in freshwater snails *Biomphalaria glabrata*. Acute toxicity assays were conducted in adult specimens and embryo at blastulae, gastrulae, trocophore and veliger stages. Four samplings were performed. In samples at august 2006 and august 2008, the station affluent was toxic for embryos and adults. The results were similar, with LC50 values; 43,04%, 41,56%, 57,16% and 60,06% for embryos at blastulae, gastrulae, trocophore and veliger stages respectively and 100% for adult snails in first sample and 48,24%, 43,71%, 55,43% and 62,64% for embryos at blastulae, gastrulae, trocophore and veliger stages respectively and 84,16% for adult snails in august 2008. Sampling at february 2007 was toxic only for adult snails, with a LC₅₀ value of 41,25% and sampling at february 2008 was not toxic for adults and embryos. In all samplings, after discharge into the river, treated effluents were not toxic for *B. glabrata* adults and embryos. There was no mutagenicity in all samples. In these study, the potential impact of effluent discharge to the biota of Tietê River was showed. These results show the importance of the WWTP biological treatment of effluents in reducing acute toxicity.

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INTRODUCCIÓN A UN ENFOQUE METAPOBLACIONAL PARA LA CONSERVACIÓN DE *Polymesoda solida* (BIVALVIA: CORBICULIDAE) EN EL PARQUE NATURAL ISLA DE SALAMANCA (COLOMBIA)

María Virginia De La Hoz Aristizábal

Instituto Latinoamericano de Ciencias Marinas y del Ambiente (ILCMA) 5430 SW 92 Ave. Miami, FL 33165.USA.
mvdelahez@hotmail.com

Como aporte a la conservación de la almeja *Polymesoda solida* en el parque natural Isla de Salamanca, se presenta una primera aproximación al estado actual de su pesquería desde un enfoque metapoblacional. Resultados del análisis de diferentes variables, entre ellas densidades, tallas, aspectos morfológicos y reproductivos, hacen factible que esta especie se organice a modo de metapoblaciones, en un humedal conformado por lagunas interconectadas cuyo régimen hídrico dependiente de influencia del río Magdalena y del Mar Caribe, estaría condicionando una alta conectividad entre subpoblaciones.

Luego de la observación de los diversos rasgos de *P. solida* en diferentes lagunas de la zona, se discute sobre el carácter de fuente o sumidero de éstas; lagunas con mayor densidad de individuos y mayor variedad de tallas, pueden estar comportándose como poblaciones fuente (Ej. Poza Verde, El Torno), mientras que otras con individuos de edades avanzadas y baja densidad, pueden estar haciéndolo como sumideros (Ej. Tronconera). Se evidencia la relevancia del

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