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Genetic differences between strains of *Biomphalaria glabrata* (Planorbidae) that are susceptible and unsusceptible to schistosomiasis

A.L.D. Oliveira[1,4,5], D. Da Silva[2], B.C. Manzano[2], A.Z. Abdel-Hamid[6], M.Y. Marcelino[4], E.M. Zanotti-Magalhães[3], L.A. Magalhães[3] and J.T. Ribeiro-Paes[2]

[1]Interunidades em Biotecnologia,
Universidade de São Paulo, São Paulo, SP, Brasil
[2]Departamento de Ciências Biológicas,
Universidade Estadual Paulista, Assis, SP, Brasil
[3]Departamento de Parasitologia, Instituto de Biologia,
Universidade Estadual de Campinas, Campinas, SP, Brasil
[4]Departamento de Saúde, ADR-Biomavale, Assis, SP, Brasil
[5]Departamento de Ciências da Saúde,
Universidade Paulista, Assis, SP, Brasil
[6]Medicinal Chemistry Department, National Research Centre,
Dokki, Cairo, Egypt

Corresponding author: J.T. Ribeiro-Paes
E-mail: jtrpaes@yahoo.com.br / olivaldo3@yahoo.com.br

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ABSTRACT. Despite the implementation control programs, schistosomiasis continues to spread throughout the world. Among modern control strategies, vector control is currently being emphasized. Within this context, analysis of the genetic variability of intermediate host snails (*Biomphalaria* spp) is important because it allows identification of specific sequences of the genome of this mollusk related to suscep-

tibility/resistance to *Schistosoma mansoni* infection. We investigated Brazilian albino (non-pigmented) and pigmented (wild type) strains of *Biomphalaria glabrata*; these strains differ in their susceptibility to *S. mansoni* infection. Genetic variability was studied by RAPD-PCR using different random primers. The electrophoretic patterns resulting from amplification showed specific polymorphic markers for the albino and pigmented strains of *B. glabrata*. This information will help in the identification and isolation of genes specifically related to susceptibility, demonstrating that RAPD-PCR is an appropriate and efficient methodological approach for analysis of the genetic variability of schistosomiasis vectors.

Key words: *Schistosoma mansoni*; *Biomphalaria*; Polymorphism; Genetic variability; RAPD-PCR

