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Schistosome/mollusk: genetic compatibility

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ABSTRACT. Schistosomiasis remains one of the most prevalent parasitic infections and has significant economic and public health consequences in many developing countries. Economic development and improvement in standard of living in these countries are dependent on the elimination of this odious disease. For the control of Schistosomiasis, understanding the host/parasite association is important, since the host parasite relationship is often complex and since questions remain concerning the susceptibility of snails to infection by respective trematodes and their specificity and suitability as hosts for continued parasite development. Thus, the long term aim of this research is to learn more about the genetic basis of the snail/parasite relationship with the hope of finding novel ways to disrupt the transmission of this disease. In the current research, genetic variability among susceptible and resistant strains within and between *Biomphalaria glabrata* and *B. tenagophila* was investigated using RAPD-PCR. The results indicate great genetic variations within the two snail species using three different primers

(intrapopulational variations), while specimens from the same snail species showed few individual differences between the susceptible and resistant strains (interpopulational variation).

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

