الملخص: ما زالت العلاقة بين التفاعلات التي تحدث بين العائل والطفيل عند الاصابة بمرض لبلهارسيا تحتاج لمزيد من الفهم والدراسة. وفي هذا البحث تمت دراسة التركيب الجيني لقواقع البيوموفلاريا الكسندرينا المقاومة والغير مقاومة للاصابة والاستفادة من ذلك في مقاومة العائل الوسيط للمرض وذلك بطريقة امنة وغير تقليدية. وقد لوحظ من الدراسة وجود اختلاف جيني واضح بين النوعين.

In schistosomiasis, the host /parasite interaction remains not completely understood. . In this work, the susceptibility/resistance to Schistosoma mansoni infection within Biomophalaria alexandrina snails were studied staring one month post infection and continuing thereafter weekly up to 10 weeks after miracidia exposure. Genetic variations between susceptible and resistant strains to Schistosoma infection within B. alexandrina snails using random amplified polymorphic DNA analysis technique were also carried out. The result showed that 39.8% of the examined field snails were resistant, while 60. 2% of these snails showed il strains there were high infection rates. In the resistant genotype snails, OPA-02 primer produced a major low molecular weight marker 430 bp. Among the two snail strains there were interpopulational variations, while the individual specimens from the same snail strain, either susceptible or resistant, and record semi-identical genetic bonds. Also, the resistant character was ascendant in contrast to a decline in the susceptibility of snails from one generation to the next