

Evaluation of four DNA extraction methods seeking for successful amplification of *S. haematobium* genomic materials in urine samples from infected cases.

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**ABSTRACT:**

Schistosomiasis demands a reliable diagnostic tool which is sensitive enough to detect low worm burden. Molecular techniques based on polymerase chain reaction (PCR) are now recommended as an alternative for diagnostic purposes.

Reliable unbiased extraction of nucleic acid is a key issue in the sensitivity and usefulness of biological analyses for diagnosis of parasitic diseases. This study compared the relative efficacy of extraction of *Schistosoma* nucleic acid from urine using four simple and feasible DNA extraction techniques.

The measurements of DNA yield and purity exhibited variations between the four methods tested in this study. Our results revealed that magnetic beads method displayed the best quality and highest quantity of DNA compared to the other methods assessed with the most efficient amplification reaction which allows the diagnosis of *S. haematobium* disease in easily obtainable urine samples.

**Keywords:** *S. haematobium*, DNA extraction, urine, magnetic beads method, DNA amplification.