

## Ecological Studies on *Bulinus truncatus* Snail the Intermediate Host of *Schistosoma haematobium*, in White Nile State, Sudan

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**Abstract :** This study was conducted in four villages, namely: Jadeed, Alandraba, Um Gaar, and EL Shetabe in the White Nile State Sudan, to determine the ecological factors; water vegetations, physical and chemical properties of the water in Snails habitat. *Bulinus truncatus*, which act as an intermediate host for *S. haematobium*, were collected from water bodies adjacent to study villages where the residents were suspected to swim, and humans get in contact with water for various purposes. Water samples from the stretches were collected and then measured for parameters that are indicative of the quality of water and sustaining the survival of snails and would confirm even further if the contact between humans and water had taken place. The parameters measured included water conductivity, pH, dissolved oxygen, calcium, and magnesium content. Also, a single water sample from each contact site was collected for microbiological tests. The result revealed that the *B. truncatus* showed that these animals were fewer and free of infection and their sites of the collection were dense with different plant species making them suitable to harbor snails. Moreover, the results of microbial tests showed that there was higher bacterial contamination. Also, physical and chemical analysis of water sample of contact sites revealed that there were significant differences ( $p < 0.05$ ) in water pH, calcium, and magnesium content between sites of study villages, and these were discussed in relation to factors suitable for the intermediate hosts and thus for the transmission of the *S. haematobium* disease.

**Keywords :** health, parasitology, *Schistosoma*, snails

**Conference Title :** ICEEID 2023 : International Conference on Evolution and Ecology of Infectious Diseases

**Conference Location :** Montreal, Canada

**Conference Dates :** June 15-16, 2023