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**USE OF CRAYFISH AS A BIOLOGICAL CONTROL OF  
SCHISTOMIASIS TRANSMITTING SNAILS**

**A THESIS**

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## ABSTRACT

Snail-transmitted trematode parasites such as schistosomes and liver flukes assume considerable medical and veterinary significance in Tropical Africa. During snails sampling in Machakos and Kitui district in Kenya, it has been found that, in ponds where there are crayfish, there were no pulmonate snails that act as intermediate host of schistosomiasis. In ponds where there were no crayfish, pulmonate snails such as *Bulinus* and *Biomphalaria* were found to be numerous (unpublished data). Crayfish was introduced in Kenya at around 1970 and since then they have dispersed into almost all drainage system in Kenya and they are particularly abundant in ponds in Central Kenya. From the experimental study that was carried out in the laboratory to determine whether there was a strong negative association between *Bulinus* and *Biomphalaria* snail species, it was confirmed to be true as crayfish readily consumed these two snail species. It is likely that crayfish (*P. Clarkii*) will continue to spread naturally in Kenya and that schistosomes transmitting snails will be excluded or reduced in number where crayfish are present. Crayfish (*P. Clarkii*) may represent an alternative, biological means of snail control at Tala-Kangundo area in Kenya.