

## **ABSTRACT**

In this study, the experimental results of the concentration of Salmonella species in water exposed to magnetic flux density are presented. Water samples were collected from River Njoro, Nakuru County, Kenya. The initial Salmonella species counts for the samples were obtained using Membrane Filtration techniques. The samples were then exposed to different magnetic flux densities (2mT, 6mT and 10mT) at time intervals of 6 hours and 18 hours for each magnetic flux. Membrane filtration was also done after magnetic treatment of the samples. The data obtained was photographed and presented in tables and bar graphs. The maximum disinfection efficiency was 77 % for bacteria exposed to a magnetic flux of 10 mT for 6 hours. This study proved that magnetic field can be used as inhibitory factor against the Salmonella species.

Keywords:

salmonella magnetic flux densities membrane filtration magnetic field